He is Ph.D. in Computer Science & Engineering in the Faculty of Engineering & Technology, MTech (Computers), P.G. Dip. (Computers), M.Phil. and M.Sc. He is having 31 years of teaching and 23 years of R&D experience in the field of Computers & IT.

He is an author of the books

- "The Hidden Treasure of C", BPB Publications
- "Funding Techniques of World Renowned Universities", Shroff Publishers
- "Strategy to Develop the World Class Universities", Shroff Publishers
- "Technology-Storms Redefining World Class Universities", Shroff Publishers
- "113 Difficulties in Developing World Class Universities", Shroff Publishers
- "Washington Accord & Multi-Objective Integrated Model for Developing WCU", Shroff
- "Innovation Growth Engine for Nation Nice Buzzword but Often Misunderstood", Shroff Publishers
- "Secrets of Success of IIIT Model Can Rejuvenate & Ignite Engineering Education in India", Shroff Publishers

He has more than 330 research papers to his credit. He has guided 9 PhD scholars, 35 MTech scholars and more than 10 PhD research scholars are working on various subjects like Digital Forensics / Cyber Security, Software / Usability Engineering, HCI, Mobile Computing, E-Commerce, E-Learning etc. He has delivered numerous Keynote addresses at international conferences and serves on several International advisory boards. He is on editorial or review board of prestigious International Journals and worked as a Reviewer for dozens of International Conferences and journals. His details are available at http://www.dharaskar.com





Roadmap, Risk,

Intricacies

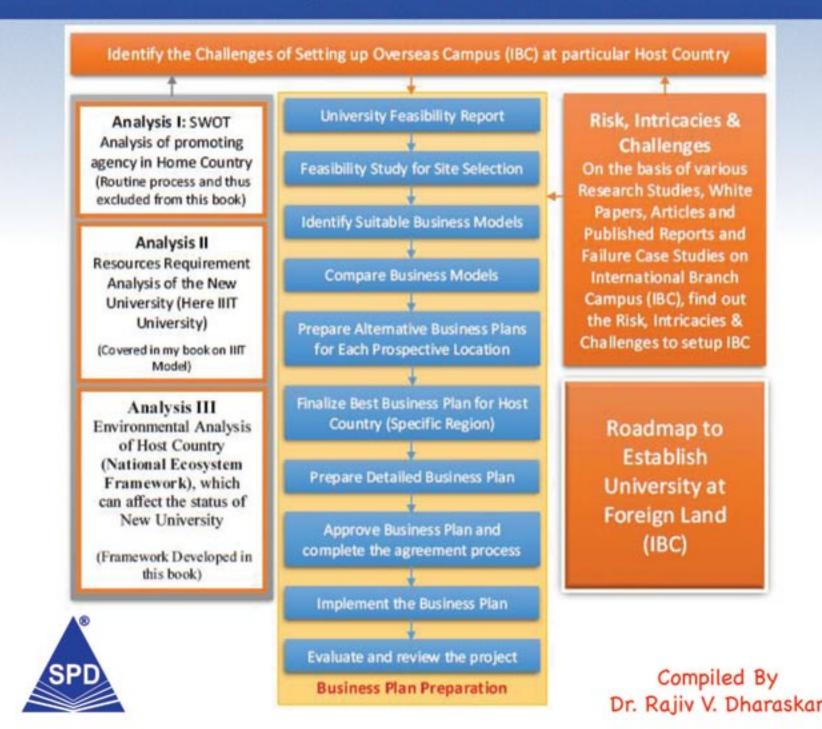
Challenges of Setting up Overseas Campus

Dr. Rajiv V. Dharaskar

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Roadmap, Risk, Intricacies & Challenges of Setting up Overseas Campus

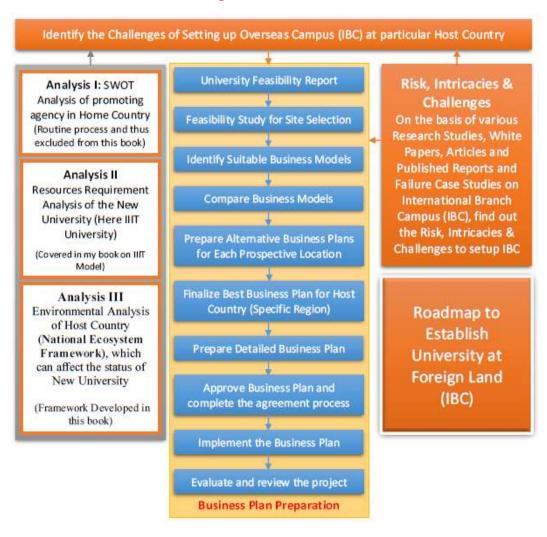
Revealed Commercial Secrets of establishing International Branch Campuses (IBC) Included IBC Case Studies of Myanmar, Qatar, UAE (Ras al-Khaimah, Dubai), Singapore, 11 Case Studies of IBC Failure, all Education Hubs across the globe and discussed intricacies of establishing IBC with the help of hundreds of counter examples from all over the world.





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Compíled By Dr. Rajív Dharaskar

Roadmap, Risk, Intricacies & Challenges of Setting up Overseas Campus

By Dr. Rajiv V. Dharaskar

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MIIT Myanmar Project is strongly supported by

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MIIT Myanmar IBC of IIIT-Banglore and Government of India

Initiative from Private Sector

Hon. Ramdas M. Pai Chancellor of Manipal University





Malaysia

Hon. Kumar Mangalam Birla

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BITS Pilani Dubai Campus

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1



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2



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(500 pages, 444 References) Date of Release: 15 Aug 2013

3



Technology-Storms Redefining World Class Universities

(412 pages, 523 References) Date of Release: 15 Oct 2013

4



113 Difficulties in Developing World Class Universities

(319 pages, 345 References)
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5



Washington Accord & Multi-Objective Integrated Model for Developing WCU

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6



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7



Secrets of Success of IIIT Model

Can Rejuvenate & Ignite Engineering Education in India (209 pages, 222 References) Date of Release: 26 Jan 2016 This book is available for FREE download at

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Selected Comments of Renowned Academicians and High Profile Authorities on Series of Books on World Class Universities and Innovation

I would like to quote few **Comments of Renowned Academicians** for series of books on world class universities and Innovation. For more comments please visit free download links of my 3 books: http://dharaskar.com/world-class-university-book-4.html, http://dharaskar.com/world-class-university-book-4.html, http://dharaskar.com/world-class-university-book-6.html

SN	High Profile Authorities	Comments
1.	Hon. President of India, President's Secretariat,	Thanks for your mail and also for sharing inputs on a
2.	Rashtrapati Bhavan, New Delhi Dr. Arun Nigavekar, Raja Ramanna Fellow, Former Chairman UGC , Former VC Pune University, Founder Director NAAC, Senior Advisor Science & Technology Park Pune	very important subject. Thanks for your mail and details on two interesting books
3.	Professor R. Natarajan, Former Chairman AICTE, Former Director, IIT Madras	Hearty Congratulations, not only for writing these Books, but also for making the last Book available free to Academics.
4.	Dr. Anil Sahasrabudhe, Chairman AICTE , Former Director, COEP, Pune,	Thank you for a wonderful book which open eyes of many in India!!
5.	Dr. (Mrs.) Prachee. Prakash Javadekar, Wife of Cabinet Minister , Government of India, New Delhi	I have gone through the other books and they are really good bible for institutes aiming to become "World Class Universities". I am sure this book will also enlighten the readers with an integrated model for developing WCUs.
6.	Padma Bhushan Prof. Dr. S. B. Mujumdar, Founder and President Symbiosis International University Pune	It is indeed very interesting and informative
7.	Dr. R.K. Singh, Director/Vice Chancellor, Indian Veterinary Research Institute (Deemed University), Izatnagar	Its wonderful book Lots of hard work which will benefit hundreds of readers.
8.	Dr. VD Abraham, Vice-chancellor, Oriental University, Indore	It's really an eye opener and energizes many channel of thoughts.
9.	Prof. Ramesh K. Goyal, Former Vice Chancellor, M. S. University of Baroda	This is your true devotion for education. Otherwise one is interested to see that how can one sell the copies. Hats off to you Sir! When I was the Vice Chancellor at the M. S. University of Baroda, I used to study as to why we do not have any of our universities in ranking. In Gujarat, not a single university has the 'A' grade. There have been meetings and discussions but only in a three years span one cannot do to bring it to an 'A' Grade. Your books are certainly a clear guidelines to plan for this purpose. I am sure Government will also take a note of your contribution.
10.	Dr. Kirti Dixit, Vice Chancellor , Gondwana University, Gadchiroli	You deserve compliments for the innovative way making your contributions in acedemics. It not only require practice but in Indian words "junun".
11.	Dr. H S Gupta, Director & Vice Chancellor , IARI PUSA, New Delhi	My compliments to you for having conceived the idea of writing a series of books on improving educational institutions/Universities in India. It's a great service to

- 12. Brig (Dr) VD Abraham, SM (Retd.), **Vice Chancellor**, Oriental University, Indore
- Prof. (Dr.) & Col. A. K. Gahlot,
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- 14. Dr. Vilas M. Salokhe, Vice Chancellor, Kaziranga University, Assam
- Dr. Vijay Khole,
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- 21. Dr. Bharat Patel, **Provost** (Vice-Chancellor) Charotar University of Science & Technology, Anand, Gujarat, India
- 22. Prof HV Tiwary, Former **Vice Chancellor**, Barkatullah University Bhopal
- 23. Prof. S. N Kulkarni, Vice Chancellor Dhauladhar Hills University, Himachal Pradesh, Vice President (India) International Accreditation Organization (IAO), Former Vice Chancellor Mangalayatan University, Uttar Pradesh, Former Vice Chancellor Noida International University, Uttar Pradesh, Former Director & CEO -Indus International University, Himachal Pradesh.
- 24. Dr. Uday K. Misra Pro Vice Chancellor & Acting Vice-Chancellor Aryabhatta Knowledge University, Patna
- Prof (Col) Ramesh Kasetwar, Former Pro Vice Chancellor, Mewar University
- Dr. A. R. Chauhan, Formeer Pro Vice Chancellor, Indus International University

the teachers as well as researchers, who need to read it to take the country to new heights in Education.

A word of sincere appreciation for your dedicated and selfless endeavor, novel idea to propagate these excellent writings and noble cause and effort for making it free e-download. Wish you and team more laurels..

Congratulations for bringing out such a nice publication on how to make WCU. It really provides certain clues which can be followed by many existing universities to upgrade themselves...

Thanks for sharing this important information.

I have been noticing the speed with which you have been publishing books in areas of Higher Education...

Hearty congratulations for publishing 5th Book in contest to developing WCU within no time. Addition in context to Washington Accord in detail will be very much useful to graduating engineering students those who wish to move out of India, particularly in signatory countries under W/A.

It appears from your thought process, we might have some common goals in future.

Thanks and congrats for writing such a wonderful book

It is really pleasing to see your dedication and interest in Higher Education, which enabled you to produce quality books on the subject. I am sure it will be of immense help to all those who are talking of quality in H. E.

I congratulate you for excellent efforts made by you in National interest. I am fascinated by your achievements and work.

Really it is a nice book. Whole CHARUSAT fraternity joins with me to appreciate your scholarly work and good will gesture for making it available online.

Nice efforts to enlighten Private institutes, thanks a lot

My complements for this effort. Thanking You, With best Regards,

Thank you for taking so much of pains for making the book available to me. I am going through your good work. Such a compilation fills in a big void.

Thanks for all the details related to higher education. You must have really put in immense efforts for the publication of the books.

Accept my congratulations for the wonderful work you have produced. This effort on your part will prove

- Dr. Ved Vyas J. Dwivedi, Pro Vice Chancellor, C U Shah University, Gujarat
- Dr. Snehal Donde, Former Principal & Hon. Secretary Association of Non-Government Colleges (Mumbai)
- Dr. M. U. Deshpande, Former Director VNIT Nagpur, Former Professor IIT Mumbai, Former Director IGNOU, Former Advisor AICTE
- Maj Gen S C Jain, VSM, Director, Army Institute of Management, Kolkata
- Dr. N. Sathyamurthy, Director, IISER Mohali (on deputation from IITK)
- Dr. G. B. Dhanokar, Joint Director Technical Education, Regional Office Bandra (East), Mumbai
- Dr. A.K. Srivastava, Director, National Dairy Research Institute (Deemed University) Karnal, Banglore, Karnataka
- Mr. Jagdish Shukla, President, Vadodara Innovation Council
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- Er. R. K. Gupta, Member, Board of Management, IGNOU, Former Engineer-in-Chief, Doordarshan, Immediate Past President IETE, Member, Media Advisory Committee, IGNOU
- 38. M N Murthy, Principal Director National Power Training Institute (Govt. of India, Ministry Of Power) Bangalore
- Prof. Kalitkar Kishan Rao, Former Principal REC Warangal, Presently Technical Adviser Vaagdevi Group of Technical Institutions, Warangal & Hyderabad.
- 40. Dr. R B Chavan, Former Professor, IIT Delhi
- 41. Dr. Hardev Singh Virk Professor Emeritus, Eternal University, Former Dean Academic Affairs & Students Welfare & Dean Science Faculty, Visiting Professor at Yangon University, Myanmar; Former Director Research, DAVIET

very useful for Researchers. Educators and Policy Makers. My felicitations again.

I downloaded and got is printed and bound, read it... This is a foundation book for upcoming universities. Your work is unique and excellently compiled.

You are indeed a prolific writer and good editor of readable material. Your day will come, I hope, soon.

Our thanks and gratitude for writing such books which are the present need of our Nation. We all salute you. Thank you for your mail and letting me download a soft copy....I appreciate your efforts in putting such a document together.

Excellent work done by you! My heartiest congratulations!

My heartiest congratulations and compliments to you for having conceived new topic for writing series of books. I am sure, it will be read by every academician, researcher and policy makers to bring the Indian education system at new peak.

..for writing this book on very important subject in today's context.

I am sure this new book of yours will benefit the research community as whole. I found the case studies really inspiring.

The provided information shall be extremely useful to all the associated Executives and Academicians in Education Sector. We congratulate you for putting the best possible efforts.

Your book is indeed devoted to nation building so far as Higher Technical Education is concerned.

It is quite exhaustive and interesting. It is useful for us to find out ways and means to make our Institutes world class.

Thank you for providing such a informative document about the Higher Education in our Country and making it available free of cost. Every academician should read this .You have done tremendous and scholarly work, which deserves better publicity. Please accept my congratulations.

I wish you could publish some the information through important new papers like Times of India, Indian Express or Hindu under the heading of higher education in India. This would help to reach out your ideas to a wider section educationists and policy makers.

I always write WHAT I FEEL FOR U in my heart. If there is an Indian Nobel Prize for writing Books, I MUST RECOMMEND it for Rajiv Dharaskar.

- 42. Dr. Satya P. Gupta, Ex-Professor BITS, Pilani, Ex-Distinguished Professor MIET Meerut, Professor (NITTTR) Bhopal
- 43. Prof. P. Guha, IIT Kharagpur
- 44. Dr. Yashwant V. Joshi, Former Director, Walchand College of Engineering, Sangli.
- 45. Dr. V. R. Singh, Fellow- IEEE, Chair-IEEE IMS/EMBS Delhi, Former Scientist G (directorgrade), NPL, New Delhi
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- 47. Dr. R.K. Sharma, Scientist-G, Ministry of Earth Sciences
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- Dr. Sasipalli VS Rao, Center for Excellence in Computer Technology, Hiroshima University, Japan
- 57. Dr. Durgesh Bailoor, Faculty of Dentistry, University of Taif, **Saudi Arabia**

It is really painstaking job. I am very much impressed with your "Innovation".

Congratulations for such a huge work.

I congratulate you on publishing books on a very important topic of concern to all educationists, Principals, and educational administrators.

Excellent work done by you! My heartiest congratulations!

Your endeavors would pave the way putting Developing World Academic Excellence to the fore page of World Academia :Thanks for sharing it with doyens of Indian Education Excellence Are the difficulties insurmountable? Lot of Academicians who probably constitute part of the policy / planning in their institutions have profusely appreciated the work. Certain correctives may be initiated by them.

You have done a wonderful job. I appreciate.

You have done tremendous and scholarly work, which deserves better publicity.

It is nice to see a good initiative and it must continue for better prospect in Indian context.

First of all, accept my congratulations on your stupendous work of writing so important books after some Herculean efforts.... By the way, who suggested you to contact me? I must thank that gentleman for offering this opportunity to go through your book/s, at least the 4th one.

Thanks for sharing such a nice book....It is a very interesting compilation of the challenges faced by today's institutes of higher learning. Congratulations for the great response that you got for it.

We applause the efforts taken and delivered an wonderful information in the book form. On-behalf of our nation i salute you sir.

It is a wonderful book very well written.

Congratulations to you for your new book and thank you very much for sharing it to me. I would certainly circulate it with my colleague.

You have brought very important information in the form of a book. I went through the book and impressed with the contents.

I have just started reading your book 'Innovation' as usual your genius shows thorough. You are a wonderful and prolific writer. Keep the engine going, I sincerely hope that the policy makers in India are taking a deep interest in your writings. God bless you in your future endeavors. May you be recognized and heard in the right platforms.

58.	Dr. Umer Asgher, National University of sciences
	and Technology (NUST), Islamabad, Pakistan

- 59. Prof. Ajith Abraham, Director of Machine Intelligence Research Labs, Professor, Technical University of Czech Republic, Chair of IEEE Systems Man and Cybernetics Society, editorial board of over 50 International journals, Visiting professor at more than 20 universities at various countries, Norway
- 60. Prof. Dr. H. M. Srivastava, Professor Emeritus, Department of Mathematics and Statistics, University of Victoria, **Canada**
- 61. Dr. Kalluri Subba Rao, PhD.,D.Sc (IISc), Former Dean School of Life Science University of Hyderabad, Fulbright Professor at Seattle USA, INSA Senior Scientist
- Dr. M.C. Paul, Professor, School of Social Sciences, Jawaharlal Nehru University, New Delhi
- 63. Dr. Partha S Mallick, Professor and Dean, School of Electrical Engineering, VIT University, Vellore
- 64. Prof. Dr. P. K. Yadava, Former Dean School of Life Sciences, JNU, Delhi
- 65. Prof. Dr. H. S. Yathirajan, University of Mysore, Fellow of the Royal Society of Chemistry
- 66. Souvik Banerjee, IIT, Bombay
- 67. Mr. Sanjay Mohapatra, Chairman, DIV-IV, Computer society of India
- 68. Dr. M P Vithal, Indian Institute Of Plantation Management, Professor (Finance and Strategy), Delhi School of Economics, University of Delhi.

Thank you for your email and i must congratulate you on a well written and excellent content book on INNOVATION, its really amazing and i hope its a big contribution to the science and technology Looks like a great job. Congratulations

Kindly accept my congratulations and felicitations for your academic and scholarly achievements and accomplishments.

Congratulations for taking such interest and difficulties thereof in bringing out these books. They will be extremely useful for many developing countries and even other countries... It is indeed an enigma to me why Science and Technology and other things are not taking off. It is a great riddle.

I am sure it will catch the imagination of the new generation who believe in innovation and progress.

It is my pleasure to Congratulate You for your outstanding work and contributions. As the Coordinator of "World Ranking" Committee of our University, I have been working/studying on this area since the last 2-3 years. I ready many articles, reports of India and abroad, this is a wonderful compilation and creation.

I appreciate the effort put in by you in compiling the probable difficulties in creating world class University in India. The subject merits full blast discussion and policy formulation. Our students do so well in the world's best institutions. We need to change our attitudes of self-aggrandization and glorification at the cost of institution building.

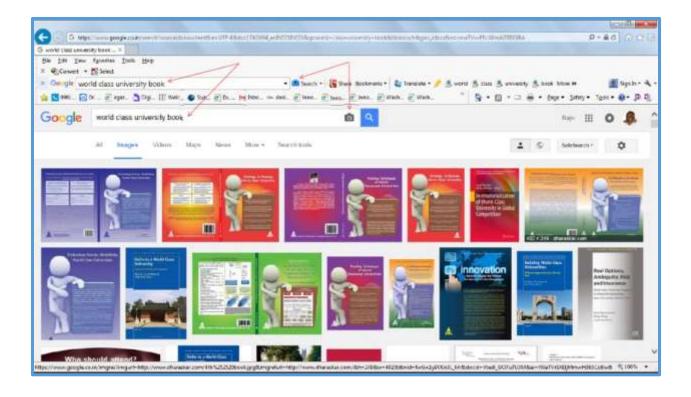
We needed this very badly!! Expect many more from you!!

It looks as great effort for academic research. Thanking you in appreciation.

Congrats on this new publication. Wish you all the best.

Thanks for Catching the CATS by their Whiskers. Every true academic should read. We only can follow our example.

Search the string "World Class University Book" through Google Image Search. The Google Search Engine will display my books in initial two rows, which indicates the magnitude of reader's response from all over the world for my series of books on world class universities.

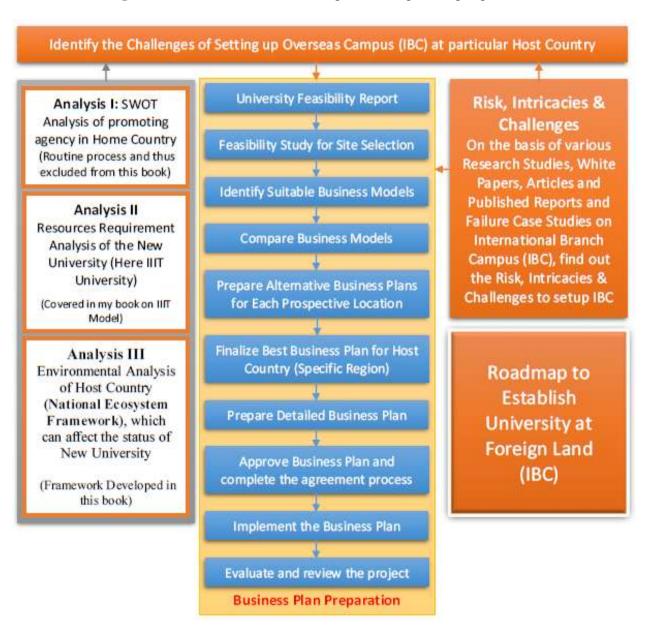


Preface

To establish University at foreign land (overseas campus) is a very challenging job. Hundreds of interdependent factors of Home and Host country are involved in decision making processes. This task involves various analysis like

- Resources Requirement Analysis of the New University,
- SWOT Analysis of promoting agency in Home Country and
- Environmental Analysis of Host Country, which can affect the status of New University.

In a process of establishing Overseas Campus, we need to develop Business Plan, which I have discussed in **Chapter 2** of this book. The following block diagram highlights this issue.



Stephen Wilkins proposed a framework that the strategic decision makers of higher education institutions can refer to when evaluating opportunities to develop branch campuses in foreign countries. The **framework** derives from **empirical evidence** that was the **product of a rigorous search of the literature** and other secondary sources, which include **trade journals**, **institutional publications**, and the **published data** of government and specialist research organizations. In particular, the literature search attempted to ascertain the **reasons for the failure** of individual campuses, as perceived by the institutions concerned, host country media, professional analysts, and researchers. I have used similar approach to develop the plan to establish IBC. [276]

In **Chapter 3**, the basic reasons for failure of IBC and 12 case studies of IBC Closure (or major problems faced) have been discussed.

In **Chapter 4**, various Risk associated with establishing IBC have been highlighted. In **Chapter 5**, I have discussed the Intricacies and Challenges of establishing Overseas Campus. I have covered almost every complexity, which one should know before establishing IBC. Almost every aspect is explained with the help of counter example. This knowledge base consisting of Risk, Intricacies and Challenges will be of a great help for IBC leaders across the world. I have taken maximum care, so that, the IBC leader shouldn't face any surprise or altogether new situation while establishing IBC.

The Risk, Challenges and Intricacies can be identified with the help of three analysis shown in above diagram. I have already done Resource-Requirement Analysis for IIITs in my book "Secrets of Success of IIIT Model". Thus in this book, I have considered the case of establishing specialized technical University "IIIT University" at Host Country (overseas campus). Later on it can be extended for any type of University. The SWOT analysis of promoting agency Home Country is an easy job. Thus it is not covered in this book.

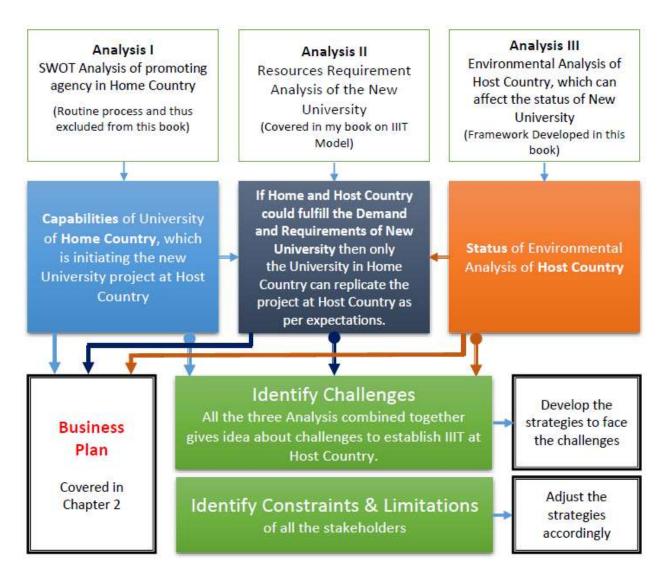
I have explained the third analysis namely Environmental Analysis (i.e. National Ecosystem Framework) in **Chapter 6**. While doing the Environmental analysis of Host Country we need to focus on Economy, Political Stability, Geography and Climatic Conditions, Law and Order Status, Legal Framework, Industrial Growth, Higher Education Status, Culture, Traditions, Customs, Demographics, Ecosystem and Business Cluster at Specific Location of New University, Relationship of Host and Home Countries, Role and Involvement of Home Country in economic developments of Host country etc. In addition to this, we need to focus on specific region of the Host Country, where we are establishing new University. As per IIIT Model, the location of the IIIT should be either in Metro City or Industrial Hub i.e. inside Innovation Cluster. The concept of Innovation Cluster have been explained in my book "Innovation - Growth Engine for Nation - Nice Buzzword but Often Misunderstood". For Environmental Analysis of Host Country, I developed the National Ecosystem Framework, which consists of Host Country specific parameters and Innovation Cluster specific parameters, which is shown in following diagram.

Media	Transportation	Relationship between Home and Host Countrie
Energy	Communication	Geographical Location of Host Country
VC Fund	Manufacturing	Internal Problems of Host Country
Market	Marketing	Climatic Conditions of Host Country
research	Connectivity	Law and Order Situation of Host Country
Bank Funding	Government R&D Labs	Customs, Traditions, Language Spoken, Cost of Leaving, Culture, Demographics of Host Country
Supply chain	Industrial R&D Labs	Foreign Relations of Host Country and Influence of other nations on Host Country
Sales	Human & other Resources	Economical Status of Host Country
FDI	Tech. Parks	Government Policies of Host Country
MNC R&D Labs	NGO R&D Labs	Role of Home Country in Development of Host Country
SEZ	University & HEI	Higher Education Standard of Host Country
Innov	ation Cluster	Parameters of Host Country

Using these three analysis, it is easy to identify the Risk, Intricacies and Challenges of establishing overseas campus, which is covered in **Chapter 7** of this book.

This information can help us to understand the role of different stakeholders, their constraints, and limitations. Once you know these complexities through three different analysis, it is easy to identify the issues and real challenges of establishing the premier institute at foreign land with respect to various aspects of the new institutes like constraints for Financial model, Support from Home and Host Countries, Administrative structure, Organizing structure, Obstacles to attract global talent, Faculty Recruitment pattern, Hurdles for developing industry interface, Problems for establishing culture of innovation, Academic freedom, Collaborative framework, Restrictions from regulatory mechanism, International laws, Political interference etc. Once the challenges are identified, to meet these challenges, the strategies can be formulated.

With the help of National Ecosystem Framework, the environmental analysis has been done for the Host Country namely Myanmar, which has been discussed in **Chapter 8**. On the basis of Environmental Analysis of Myanmar, the Challenges of establishing IIIT has been discussed in **Chapter 9**.



In **Chapter 10**, I have given the brief information about all the Education Hubs or dream destinations all over the world namely Singapore, UAE, Malaysia, Qatar, Bahrain, Hong Kong, Jeju (South Korea), Panama, Colombo (Sri Lanka), Botswana (Africa), Mauritius (Africa) and South Africa.

In **Chapter 11**, covers the Successful IBC Case Study of Texas A&M (USA) at Qatar. This wonderful research work and findings justify every process, logical framework and aspect mentioned in this book.

In **Chapter 12**, Failure IBC Case Studies have been discussed namely American IBC George Mason University at UAE, Australian IBC University of New South Walse Singapore, American IBC New York University's Tisch School at Singapore and American IBC Michigan State University Dubai. All these research studies by different authors all over the world justify the framework presented in this book.

In **Chapter 13**, Final Words, I have shown that "India Can Become Top Most Player for Hosting IBCs in near future, if Indian private players could come forward and grab the opportunities". They can follow the Manipal University as well as SP Jain Mumbai Australia as a Role Model."

The literature on managing International Branch Campus (IBC) or Overseas Campus is limited and tends to be restricted to the 'grey literature'. There are probably at least three reasons for this. First, the phenomenon of the IBC is relatively new. Second, the operation of IBCs is shrouded in **commercial secrecy**. Third, the campuses are remote and most of the faculty are locally hired, so that there is not the usual interchange of information through informal networks. To write a book on such a complex and challenging topic of national interest is a tough task. I have spent months together for searching appropriate references and authentic information. I could complete this task just because of constant encouragement of my millions of readers across the world. [199]

I have compiled this information in the form of book in the national interest. How to improve the university or higher education institute is always a major challenge faced by all the academicians. For helping them to find this information at one place, I have put these efforts and published series of eight books. The credit of each point mentioned here goes to respective authors mentioned in the references. I am amazed to see their enormous contribution in the field of higher education. I could refer only few articles written by them and could include very few points in this book. For detailed information regarding any issue, please refer their original articles and if needed search their other articles on the Internet. This is not just 400 pages compiled work but pointers to articles of thousands of pages, contributed by authors, who have spent their lives for the cause of education of mankind. I am thankful to them.

I had introduced hundreds of problems, suggestions, remedies and best practices through my series of 8 books on World Class Universities, Innovation and IBC, with more than **3000** pages and **3200** references. I have referred thousands of documents from around 70 countries and gone through beyond **11 Lakh pages**. With GOD's grace, I could reach to more than **20 Lakh academicians** across the world and could ignite the minds of young faculty, researchers and students across the world. In this pretty long journey, I was not alone. Thousands of academicians were constantly encouraging me to compete this gigantic task. I am thankful to them. The valuable comments of high profile readers are available at my website.

I have taken maximum care to give the authentic information but in case at some place, if you find some discrepancies then forgive me and help me to correct it in the next edition of this book. I am sure; the readers will like and welcome my sincere efforts to enhance standards of higher education system of India and rest of the world. I hope this book will act as catalyst and will help in improving the overall Indian Higher Education System, which can compete with the rest of the world.

Jai Hind. Dr. Rajiv Dharaskar www.dharaskar.com

About Author



He is Director, MPGI Group of Institutions Integrated Campus, Nanded and Former Director, Disha Education Society (DIMAT - Disha Technical Campus), Raipur, C. He is former Professor and Head, PG Department of Computer Science and Engineering, G H Raisoni College of Engineering, TEQIP II beneficiary Autonomous Institute, Nagpur. He had started his career at MIET, Gondia (1984-2008).

He is Ph.D. in Computer Science & Engineering in the Faculty of Engineering & Technology, MTech (Computers), P.G. Dip. (Computers), M.Phil. and M.Sc. He is having 31 years of teaching and 23 years of R&D experience in the field of Computers & IT.

He is an author of the books

- "The Hidden Treasure of C", BPB Publications
- "Funding Techniques of World Renowned Universities", Shroff Publishers
- "Strategy to Develop the World Class Universities", Shroff Publishers
- "Technology-Storms Redefining World Class Universities", Shroff Publishers
- "113 Difficulties in Developing World Class Universities", Shroff Publishers
- "Washington Accord & Multi-Objective Integrated Model for Developing WCU", Shroff Publishers
- "Innovation Growth Engine for Nation Nice Buzzword but Often Misunderstood", Shroff Publishers
- "Secrets of Success of IIIT Model Can Rejuvenate & Ignite Engineering Education in India", Shroff Publishers

He has more than 336 research papers to his credit. He has guided 11 PhD scholars, 35 MTech scholars and more than 6 PhD research scholars are working on various subjects like Digital Forensics / Cyber Security, Software / Usability Engineering, HCI, Mobile Computing, E-Commerce, E-Learning etc. He has delivered numerous Keynote addresses at international conferences and serves on several International advisory boards. He is on editorial or review board of prestigious International Journals and worked as a Reviewer for dozens of International Conferences and journals. His details are available at http://www.dharaskar.com

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Dr. Rajiv V. Dharaskar

Ph.D. (Computer Science & Engineering), M.Tech. (Computers),

M.Phil. (Maths), M.Sc. (Maths), PB Dip. (Computer Science & Applications)

Director, MPGI Group of Institute Integrated Campus, Nanded,

Former Director, Disha Education Society (DIMAT - Disha Technical Campus), Raipur, CG,

Former Professor and Head, Department of Computer Science & Engineering, GHRCE, TEQIP II beneficiary Autonomous Institute, Nagpur

Email: rajiv.dharaskar@gmail.com,

Website: www.dharaskar.com

Address for Correspondence:

Prof. Dr. Rajiv V. Dharaskar,

Dharaskar Nursing Home,

Railtoly, Gondia, Maharashtra, India 441614

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Chapter 1: In the Era of Globalization Expanding the Horizon: Overseas Campus

International higher education is a big business. Estimates vary, but annual global revenue exceeds \$500 billion and is projected to substantially increase in the future. [208]

Anand Sudarshan, CEO of Manipal Global, told that "Manipal Global now earns roughly two-thirds of its revenue from international branch campuses". [251]

The University of Nottingham (Ningbo, China) has an annual turnover of approximately £29 million (Rs. 277 Crore). [288]

1.1. International Branch Campus

An IBC is a foreign satellite campus, which delivers and awards the degrees of the university. Lane and Kinser stated that "Getting a clear-cut definition is 'a fairly slippery subject', as IBCs vary from full-blown satellite campuses like the University of Nottingham Ningbo to small executive education training centres like Chicago Booth School of Business in Singapore. [293]

1.2. Growth of International Branch Campuses

Until late in the twentieth century, higher education was generally considered a public good, but since the 1980s many universities and governments in developed Western countries seem to have adopted the view that higher education is a tradable commodity to be sold for commercial gain. Thus, the marketization of higher education has become very much part of the normative frame, supported by neoliberal ideology that favors free trade, which has been driven by initiatives of the World Trade Organization (WTO), such as the General Agreement on Trade in Services (GATS)... As Transnational Higher Education (TNE) (or Cross-Border or Offshore Education) often flows from more developed to less developed nations, the establishment of international branch campuses can be regarded as a new form of colonialism. [207]

The growth of international branch campuses (part of Transnational Education TNE) set up by universities in other countries is the most concrete evidence of how higher education has become a global business. As of August 2015, there were **229 international branch campuses around the world** with another 22 in development, according to the Cross-Border Education Research Team (C-BERT) at SUNY Albany, which monitors their spread. The US and the UK are the largest "exporters" of international branch campuses, with 50 and 27 respectively. But Russia, with 13 campuses in countries such as Belarus, Albania and Azerbaijan, has now overtaken Australia's 11.

Home Country	No. of IBCs	Host Country	No. of IBCs
USA	85	UAE	34
UK	25	China	24
Australia	16	Singapore	15
France	12	Qatar	10
India	9	Canada	7
Russia	8	France	6
Germany	6	Malaysia	6
Malaysia	6	UK	5
Netherlands	6	Greece	4
Other	28	Other	90
Total	201	Total	201
Source: C-BERT	1	1	

Table 1.1: International Branch Campuses (IBC) (March 2014) [71] [193] [194] [231] [229]

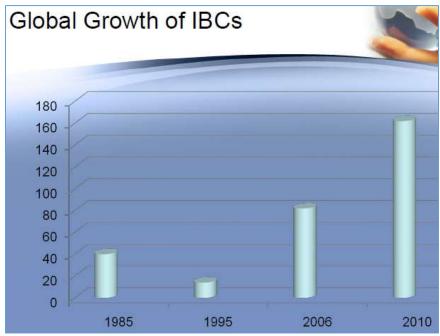


Fig. 1.1: Global growth of IBC (1985-2010) [221]

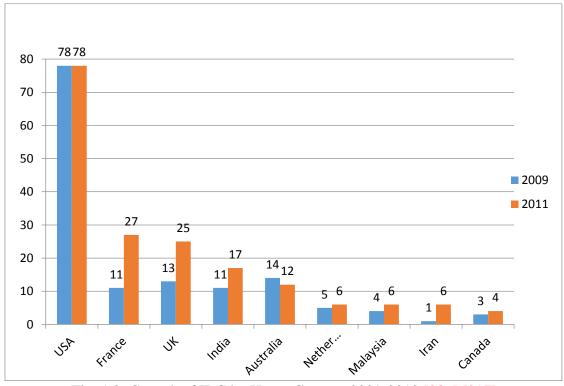


Fig. 1.2: Growth of IBC by Home Country 2009-2012 [286] [297]

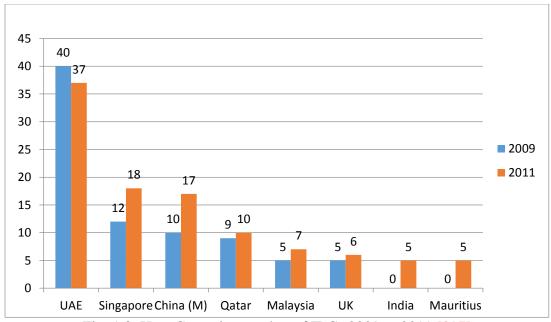


Fig. 1.3: Host Countries number of IBCs 2009 to 2011 [297]

Some developing countries, notably India, have also entered the market – **SP Jain** has campuses in Dubai, Singapore and Sydney – while **Malaysia's Limkokwing University** has opened in London. [69]

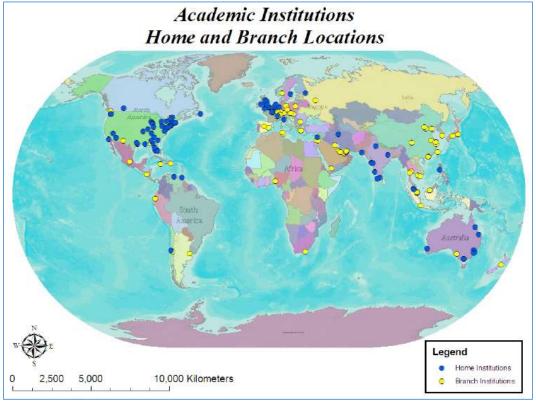


Fig. 1.4: Locations of Parent University at Home Country (Blue) and IBC location at Host Country (Yellow) [221]

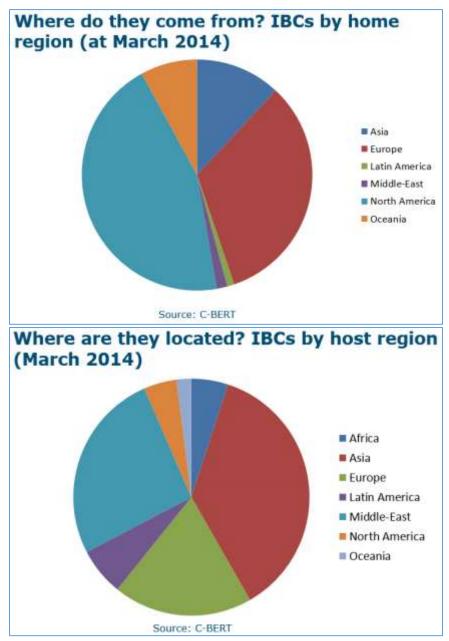


Fig 1.5: International Branch Campuses (IBC): Home and Host regions [194]

Universities with strong international campuses are

- The University of Nottingham whose Ningbo campus has **5,500** students and whose Malaysia campus has **4,500** students.
- The University of Liverpool whose joint campus with Xi'an Jiaotong University has **7,400** students.
- RMIT University whose Vietnam campus has **6,838** students.
- Monash University whose Malaysia campus has **6,757** students.

Each of these universities has a high proportion of international students enrolled at their home campus and has had a long, deep, broad and well-informed internationalization strategy. [224]

Foreign universities have already served over 30,000 students in the Arab Gulf states and are expected to provide much of the new capacity to achieve Singapore's goal of 150,000 international students by 2015. [225]



Fig. 1.6: Students strength at various IBCs [298]

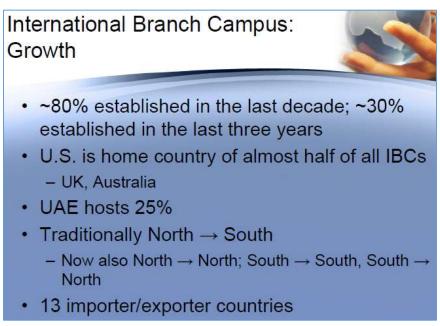


Fig. 1.7: IBC Growth [221]

The following diagram shows the Australian preference for establishing IBCs across the globe.

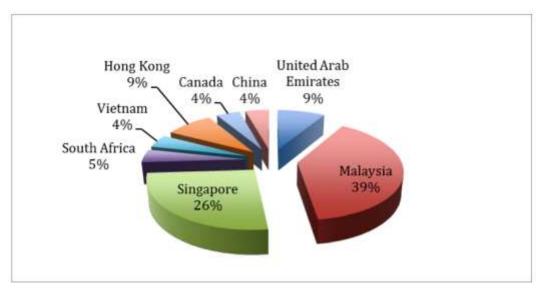


Fig. 1.8: Australian IBCs across the globe [308]

Some additional trends identified are:

- Although the United Arab Emirates (UAE) still host the largest number of branch campuses, the **center of gravity is shifting from the Middle East to Asia** where China is now the fastest growing destination country, followed by Singapore. Malaysia and South Korea are also contenders in the branch campus race. [225]
- The United States is still the number one originating country for international branch campuses but **France and the U.K. are increasing** their branch campuses at a much **faster rate**.
- The so-called "South-South" branch campuses, those built by non-traditional providers of international education such as India, Malaysia and Iran are also on the increase, with **India leading the way**. **They constitute about 20 percent of all new branch campuses**. The Islamic Azad University from Iran has set up campuses in Afghanistan, Armenia, Lebanon, Tanzania and Dubai. Malaysian and Chinese universities are also expanding into Africa in a big way. [225]
- At the Annual Conference of the Association of International Education Administrators (AIEA), the point was driven home that the stand-alone model, where the originating university fully owns and operates the branch campus, is increasingly being replaced by joint ownership and operation in collaboration with a host country university. China, in particular, has made it clear that that will be the preferred model for branch campuses in the future; already, NYU Shanghai is jointly run with East China Normal University (ECNU). The advantage of this model is the mitigation of financial risk for the originating university. Host governments are often willing to cover a significant share of the costs because of national economic and educational strategies. [225]

The entire TNE Sector (Overseas Campus, Franchise, Distance learning etc.) is growing very fast. Let's see examples of UK and Australia in the following diagrams.

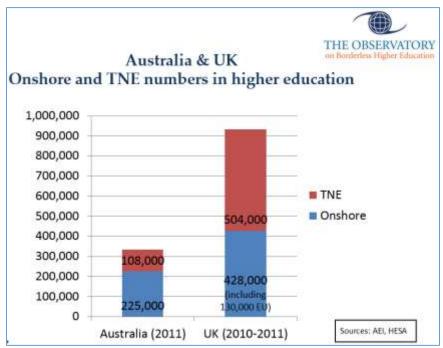


Fig. 1.9: Australia and UK – Onshore and TNE numbers in Higher Education (2012) [297]

In fact, the TNE sector has already surpassed the international student or offshore sector.

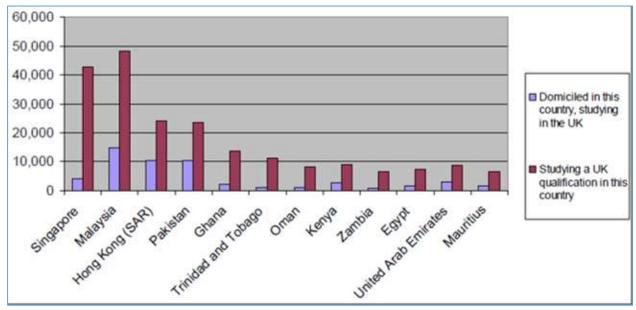


Fig. 1.10: Study in UK vs TNE [297]

1.3. IBC and Multinational Corporations

1.3.1. IBC is Different from Foreign Subsidiaries of Multinational Corporations

IBCs are different from foreign subsidiaries of multinational corporations because...

- Universities are not multinational corporations
 - Public or not-for-profit
- Small, nationally-focused organizations centre of gravity is the home campus
- Run by academics, not global career executives
- Traditional, arcane governance structures
- Higher education is not a competitive, unregulated market
 - Higher education is a public good mostly subsidized, regulated
 - Quasi-command economy, not free market
- Information asymmetries government control over quality assurance

Fig. 1.11: IBCs are different from foreign subsidiaries of multinational corporations [194]

The IBCs are different from foreign subsidiaries of multinational corporations. The intricacies and challenges of establishing IBC are altogether different than subsidiaries of multinational corporations. The industry products can be replicated but it's difficult to replicate Higher Education Services. The higher education 'industry' is interesting as its services are **difficult to replicate in different countries**, in terms of **curriculum**, **staff delivering the curriculum**, **physical surroundings**, **resources and equipment**, **and social and recreational offerings**. Furthermore, HEIs have ambiguous goals and are noteworthy for divergent professional interests. In other words, it is essential for HEIs to achieve both internal and external legitimacy in developing such initiatives. [193] [194] [207]

Unlike MNCs, the universities are not huge corporations with HR and finance departments familiarized to dealing with transfer pricing, international tax issues and managing internationally mobile staff. They are passive organizations with a public sector philosophy and a tradition of being managed by academics, rather than professional career managers. They are characterized by mysterious governance structures, internal politics and cold decision-making... Another difference between MNCs' subsidiaries and IBCs is that, despite the advent of GATS, higher education remains a highly regulated sector. [229]

Universities differ from for-profit corporations in various ways.

- Universities provide both private and public goods. Their two main products are **knowledge creation and knowledge dissemination through research and teaching**. Research results are freely available to most members of society and help stimulate economic growth. Knowledge dissemination increases human capital, and the benefits can be direct to those who receive higher education, or indirect to those who benefit from the economic growth attributable to the development and accumulation of human capital through higher education. [250]
- Governance of universities is more complicated than governance of corporations. Unlike private enterprises with residual claim holders (stockholders), nonprofit universities have multiple stakeholders without a clearly defined pecking order, which leads to multiple objectives without well-defined priorities. [250]

- Unlike corporations, universities have **strong incentives to be selective in choosing customers** because the quality of output—student academic performance, job placement, and lifetime achievement—depends on the quality of input—student quality and effort. That is, universities employ a customer- input technology. Furthermore, peer effects of fellow students generate externalities to the quality of output; for example, having good students helps to improve the academic performance of fellow students. This is one of the reasons universities subsidize their customers (students) with financial aid and maintain certain admission standards. [250]
- Universities need physical assets (e.g., classrooms and equipment) and human capital (e.g., faculty and staff) to establish overseas programs. However, compared to manufacturing firms, universities require fewer physical assets. Although this may help keep fixed costs relatively low, variable costs tend to be higher than domestic programs because faculty often garner extra compensation for teaching in overseas programs. For example,
 - o Carnegie Mellon University gives their US- based faculty teaching on its Qatar campus a 25 percent salary increase and provides them with amenities.
 - o The Global MBA Program at the University of Michigan pays its faculty an additional 18.75 percent of their base salary plus an overseas trip inconvenience fee of 2.5 percent to teach a ten- day, 2.25 credit- hour course in Asia. [250]

1.3.2. IBC: All stakeholders are Multinational and Behave like Multinational Corporation

Universities **behave** much like multinational corporations when they make overseas investments and operate overseas programs. But they are different from foreign subsidiaries. [250] [194]

The corporations internationalized in stages. The internationalization initiated with export, then licensing and at last adopted FDI route. Once the ownership, workforce, customer base, R&D and production become globalized they have transformed Trans-National (TN) organization into Multinational Corporations.

Parallels with international business

- Corporations internationalised in stages from exporting to licensing to foreign direct investment
- But as their ownership, workforce, customer base, R&D and production globalised, they transformed from transnational into multinational corporations

Fig. 1.12: Corporation Internationalized in stages [292]

In IBC, already the Owners, Employees (staff), Customers (students), Regulators, Employers, Society, Research have become multinational. Thus the Trans-National Education organizations (TNE) or IBCs are following the same route of Multinational Corporation.

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National	Multinational
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	√

Fig. 1.13. TNE or IBC: following route of Multinational Corporation [292]

1.4. Universities at Foreign Land



Fig. 1.14: LAS collaboration with Georgetown University & Texas A&M University Qatar [77]



Fig. 1.15: Weill Cornell Medicine USA: Medical College, Qatar [78] [81]



Fig. 1.16: Carnegie Mellon University & Texas A & M University US: Campuses at Qatar [79] [80]



Fig. 1.17: Nottingham University UK: Malaysia Campus [69] [73] [89]





Fig. 1.18: Heriot-Watt University UK: Branch Campuses at Dubai and Malaysia [90] [93]



Fig. 1.19: New York University USA: Abu Dhabi Campus [91]



Fig. 1.20: Monash University Malaysia Campus [94]



Fig. 1.21: Swinburne University of Technology, Melbourne, Australia: Malaysia [95]



Fig. 1.22: Incheon Global Campus South Korea [96]



Fig. 1.23: George Mason University USA: South Korea Campus [97]



Fig. 1.24: University of Nottingham Ningbo, China [200]

1.5. IBC: Analysis of UK Universities

1.5.1. Strong UK Government Support and Encouragement

The British government **encouraged** the concept of entrepreneurship in HEIs, which has resulted in them become increasingly autonomous and business-like institutions. Governments also offer **recognition and awards** for transnational entrepreneurship. For example, Middlesex University, with overseas campuses in Dubai and Mauritius, has received the Queen's Award for Enterprise twice, in recognition of its contribution to international trade. HEIs in the UK are able to set their own strategic objectives with regard to the number of international students they recruit and the tuition fees they charge to non-EU students. [207]

1.5.2. Generate Little Surplus

A report on the value of transnational education estimated that in 2012-13 the total gross revenue for UK international branch campuses was approximately £140 million (**US\$219 million**). This was roughly only 3% of universities' revenue from all international education. The report said only relatively small sums are remitted to UK universities from their international branch campuses. This may be because these campuses **generate little surplus**, are established with **partners that**

absorb much of any surplus, or because of host governments' restrictions on repatriating profits. [224]

1.5.3. Top Host Countries for IBC (2011-12): Role of UK Universities

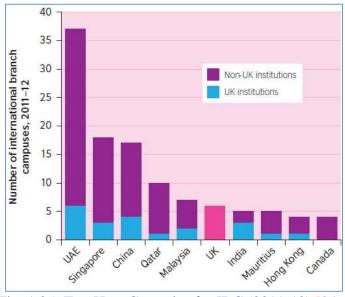


Fig. 1.25: Top Host Countries for IBC (2011-12) [246]

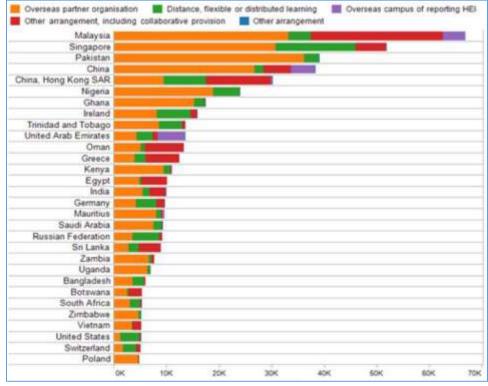


Fig. 1.26: UK TNE provision by type in the top 30 countries, 2011-12 [312]

The above Figure shows that in only a few cases – **Malaysia**, **China**, and **UAE** – a noticeable proportion (in purple) of the total TNE number is comprised of students at **UK branch campuses**. In almost all other markets, the number of UK campus-based students is small or zero (the purple bar is barely discernible for Mauritius, but Middlesex and Wolverhampton universities operate campuses there). [312]

1.5.4. In 2011-12: More Students at IBC than On UK Campuses

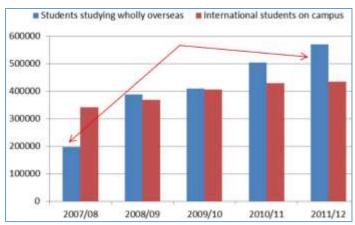


Fig. 1.27: UK: International Student's on-campus vs studying wholly overseas [200]

The UK data provides an indicative guide to what is happening more widely in TNE. Following Figure shows that the number of students studying wholly overseas with UK higher education institutions has **grown by 190% in just five years**, to 571,010 by 2011-12. **International (non-UK) enrollments on campus also grew by 27% over the same period**, to reach 435,230 by 2011-12. The faster growth of TNE numbers meant that, since 2009-10, there have been more students studying for UK degrees wholly overseas than on UK campuses. [200]

1.5.5. Overall UK TNE Scenario

7,120	9,885	11 110		2011/12
	2,000	11,410	12,305	15,140
100,345	112,345	114,985	113,065	116,520
59,895	68,595	74,360	86,630	96,060
29,240	197,185	207,790	291,575	342,910
70	35	50	125	345
196,670	388,045	408,595	503,700	570,925
	29,240	29,240 197,185 70 35	29,240 197,185 207,790 70 35 50	29,240 197,185 207,790 291,575

Table 1.2: UK Universities TNE Market and number of students at Overseas Campus [73] [200]

1.5.6. More than 90% Enrolment at 3 Universities

More than 90% of all UK branch campus enrolments in 2012-13 were contained within three British universities:

- University of Nottingham (Malaysia and China)
- Middlesex University (Dubai and Mauritius)
- Heriot-Watt University in Dubai (and now Malaysia as well). [204]

It looked at 11 British branch campuses operating in the United Arab Emirates and found that only two of them met the definition of a "campus": "Only two providers, Heriot-Watt and Middlesex, are readily recognizable as branch campuses [offering] the range of facilities a student would expect of a campus in the UK." [204]

Higher education institution	HE aggregate offshore students at overseas campus of reporting HEI		
University of Nottingham	9,220		
Heriot-Watt University	3,735		
Middlesex University	3,050		
University College Birmingham	320		
University of Kent	280		
London Business School	275		
University of Newcastle	250		
University College London	220		
University of Exeter	70		
University of Wales Trinity Saint David	45		
University of Wolverhampton	30		
University of Southampton	20		
University of Chichester	10		
Total	17,525		

Table 1.3: Enrolments at UK international branch campuses by institution (2012-13) [229]

1.5.7. Cheaper Option than UK Campus

However, in some cases branch campuses are actually a **cheaper option**. At the University of Nottingham's UK campus, international students studying computer science are currently charged about US\$23,660 per year. This is **almost twice the amount charged to international students taking the same subject at the university's Malaysia campus.** As of 2012-13, when UK students will be charged UK£9,000 at Nottingham (about US\$14,225), **travelling** to study in Malaysia will also be a cheaper option for UK nationals – particularly when you factor in Malaysia's **lower cost of living**. [205]

1.6. Indian IBC

1.6.1. 5th Largest Player with 20% Market Share

There are 17 Indian IBCs in the world. **All 17 are located in Asia** and primarily in countries where there is a large Indian expatriate population. The **United Arab Emirates is home to ten Indiabranch campuses**, Mauritius hosts four, and there is one each in Malaysia, Nepal and Singapore. According to the OBHE report (2012), two more are planned to open in 2012—one in Australia which is worthy of more research, and another in Sri Lanka. [231]

Source Countries	2009	2011
US	78	78
Australia	14	12
UK	13	25
France	11	27
ndia	11	17

Table 1.4: International Branch Campuses (IBC) [71] [193] [194] [231]

To generate additional source of revenue many Indian universities are opening their universities at foreign land without compromising quality of education and brand name.

- Manipal University: The Manipal Education is starting Manipal International Multidisciplinary University of global standards, at Kuala Lumpur, Malaysia. Manipal University is planning to open its overseas campus in China. The university is in talks with two Chinese universities— Tianjin University and Shanghai's Tongji University. The campus would be China's first all-English educational institution that will provide training in Information Technology (IT) and health sciences. Manipal University has ventured into Malaysia, Antigua, Nepal and the UAE. [74] [75]
- Birla Institute of Technology and Science (BITS) Pilani opened an engineering campus in the UAE. [75]
- Management education specialist, IMT Ghaziabad, has a presence in the UAE. [75]
- SP Jain Centre of Management Mumbai has campuses in the UAE, Singapore and Australia.
- IIT-Bombay to set up campus in New York: The Indian Institute of Technology-Bombay (IIT-B), along with five other universities, will establish a center for urban science and progress (CUSP) in Brooklyn, New York (NY). New York will be the laboratory as the six institutes develop solutions for 'regenerating' the city's infrastructure the buildings and services dating back to the 17th century. The consortium, comprising IIT-B, New York University (NYU), City University, NY, Warwick University, UK, Toronto University and Carnegie Mellon, will set up an applied science institute offering a full-time master's programme, executive programmes and PhD, all in the area of urban science. [76]

- IIM Indore started two postgraduate programmes (out of rented premises) in Ras Al Khaimah (UAE) last year. One is a full-time postgraduate programme while the other is an alternate weekend post-graduate programme for working executives. [75]
- Bharati Vidyapeeth Deemed University has established it's first international campus in Ras Al Khaimah, one of the fast growing emirates of UAE known as the place, where the East meets the West. Situated about 75 kilometers which takes about 45 minutes from Dubai, RAK has the reputation of being known as the rapidly expanding industrial emirate close to Dubai, Sharjah and Abu Dhabi. [310]

Institutions	Туре	Host Country	Status
Sri Guru Granth Sahib World University	UG, PG. Business, Science, Sikhism	Kenya	Planned
Manipal International University	UG. Business, Engineering, Science	Malaysia	Active (from 2011)
Melaka Manipal Medical College	UG, PG. Medicine	Malaysia	Active (from 1997)
Amity Institute of Higher Education	UG, PG. Business, IT	Mauritius	Active (from 2010)
Dr. D Y Patil Medical College	UG, PG. Medicine	Mauritius	Active (from 2010)
IIT (Delhi) Research Academy	UG, PG. Engineering, IT	Mauritius	Planned
Manipal College of Medical Sciences	UG, PG. Medicine	Nepal	Active (from 1994)
Amity University	UG, PG. Architecture, Business, IT	UAE	Active (from 2011)
Bharati Vidyapeeth Deemed University	UG, PG. Business, Engineering, IT	UAE	Active (from 2009)
Birla Institute of Technology and Science	UG, PG. Architecture, Business, Engineering	UAE	Active (from 2000)
Institute of Management Technology	UG, PG. Business	UAE	Active (from 2006)
Manipal University Dubai	UG, PG. Architecture, Business, Engineering, IT, Media	UAE	Active (from 2000)

Table. 1.5: IBCs of Indian Higher Education Institutions (January 2015) [208]

Only nine out of 17 IBCs from India listed in the Observatory's 2012 report (53%) are still in existence or similarly classified as of January 2015. All are private institutions, with the exception of IIT Delhi, and all non-profit. Manipal aside, host countries are limited to Mauritius and UAE, suggesting the importance of diaspora communities. Indeed, the planned Sri Guru campus in Kenya will serve the county's Sikh population. None of the IBCs trumpet enrolment numbers, implying that most have no more than a few hundred students... The fact that only three new or newly conceived Indian IBCs; Manipal's non-medical campus in Malaysia, IIT-Delhi in Mauritius

and Sri Guru in Kenya, are listed following the Observatory's 2012 report points to dampened interest following stalled efforts and regulatory objections at home. [208]

Best Practices: Manipal University

Establishing a network of foreign campuses

Facing restricted growth at home – either as a result of declining student populations or regulatory hurdles – many higher education institutions have started to look overseas for new development opportunities. However, setting up a new school in a foreign jurisdiction requires significant planning, time and financial investment to ensure success.

Manipal University, a part of Manipal Education and Medical Group, is a leading university in India. Its medical school, Kasturba Medical College, with two campuses in Manipal and Mangalore, has been one of the leading medical schools in India for decades now. Despite its success, the university started to encounter a number of challenges that restricted its growth at home. For example, medical schools in India are often subject to regulations which stipulate high patient bed ratios, the restricted number of enrolled students (even if clinical beds and facilities are available), and the fees that can be charged. Adding to these challenges is the common practice of not allowing public hospital beds for clinical training.

As a result of these restrictions, any further growth within their national market would come at a high cost and with diminishing returns. Foreign expansion seemed to be the clear path forward for Manipal to grow both its revenues and its reputation.

Recognizing that they could reduce the complexity of expansion by focusing on familiar markets within geographical reach, Manipal Education and Medical Group, through its education-focused entity, Manipal Global Education (MaGE), entered into discussions with a number of neighboring countries and, in 1994, established its first foreign campus in affiliation with Kathmandu University in Nepal. Three years later, Manipal created Melaka-Manipal Medical College in Malaysia, the first Indo-Malaysian joint venture in private medical education.

Leveraging their experience, the university began to look for new opportunities outside their immediate geographic area through which they could increase revenues, enhance foreign capital and raise overall enrollment. Encouraged by an attractive tax regime and supportive government policy, MaGE expanded with a university campus at Dubai International Academic City in the UAE in 2000.

Set on breaking into the North American market, in 2004 Manipal initially invested in, and later in 2008 fully acquired, the American University of Antiqua (AUA) College of Medicine. In 2006, the New York State Education Department gave the university approval to allow their students to conduct clinical clerkships and residency training in the state, thereby enabling Manipal to offer students an opportunity to practice medicine in the United States. Similar approval was granted by the State of California in 2011.

By leveraging their leadership in medical education and their growing experience in the establishment of distinct foreign campuses, Manipal University is not only the largest private university in India – offering more than 300 courses spanning 14 different professional streams – but through MaGE, it now has campuses in Nepal, Malaysia, Dubai and Antigua, with more in the pipeline.

Manipal's medical school boasts more than 4,000 practicing doctors in the US and more than one in six doctors in Malaysia is an alumnus. Its programs are widely recognized by medical authorities around the world, including the Malaysian Medical Council, the Medical Councils of Nepal, Sri Lanka, Bangladesh and Mauritius, as well as the US Medical Association.

Manipal University [129]

Case Study: Interesting Case – S P Jain School of Management

The case of SP Jain School of Management, listed in the Observatory's 2012 report as an Indian institution with campuses in Singapore and UAE and plans in Australia, is a curious one. The School is now positioned as an Australian institution with campuses in Singapore and UAE, and a 'sister' school in India. Today, SP Jain is overseen by the Tertiary Education Quality & Standards Council (TEQSA), Australia's national quality assurance body, and it has a campus in Sydney. What is going on? In fact these are connected but separate institutions.

SP Jain India (Institute of Management & Research) was founded in 1981 by the grandfather of the founder of SP Jain Dubai - and now Australia and Singapore - in 2004 (School of Global Management). The Observatory spoke to Trent Pohlmann, Head of SP Jain's Sydney campus, who confirmed that his institution is in no sense a branch campus of SP Jain India. Indeed, Mr. Pohlmann noted that SP Jain Australia is soon to open a branch campus in Mumbai, its first campus in India and in the backyard of SP Jain India. Mr. Pohlmann said the two SP Jain's may cooperate in some areas but compete on others.

From an IBC perspective, we now have an institution with a founder from India, a first campus in Dubai, now headquartered in Australia, with a branch campus in Singapore, and now a soon-to-be branch campus in India itself. [208] [252]

Case Study: Status of Indian IBCs

JSS Mahavidyapeetha's campus in Mauritius, the JSS Academy of Technical Education, noted in the Observatory's 2012 report, **appears to be a distinct institution**, **affiliated with but not a branch campus of its Indian parent**. The JSS Education Foundation's presence in Dubai, also counted as an IBC in the Observatory's 2012 report, is judged a similarly distinct entity that appears to offer degrees from the UK's University of Teesside.

Madurai Kamaraj University, listed in the Observatory's 2012 report as having an IBC in the UAE now appears to have no more than a local affiliate for distance learning.

Today, Mahatma Gandhi University, another IBC entry in the 2012 report, records only a series of PO Box numbers in various Gulf locations.

University of Pune's IBC in Ras al Khaimah (RAK), United Arab Emirates, closed in 2011 after two years of operation. Leadership blamed RAK's less central location, compared to Dubai. Pune was the first example of an Indian state university attempting an IBC. [208]

1.6.2. Attraction of Global Ranking

India's universities and colleges have another reason to expand abroad: to get good marks in the most prominent international rankings, it is necessary to have a high proportion of foreign students, and opening campuses abroad makes that easier to achieve. **BITS-Pilani** is a rare case of a private Indian university to have **won a place in the Times Higher Education's global rankings**—though only in the lowly 600th-to-800th band.

1.6.3. Not Legal in India

Interestingly enough, **India is not a major player in terms of hosting international branch campuses**. As of 2012, they are formally **not legal in India**. Legislation to permit their establishment has been stalled in Parliament for more than two years. [231]

For the UGC in India, IBCs are seen as a distraction from bringing the vast higher education sector into better order; and a sideshow for a government trying to expand domestic capacity. Small foreign ventures, even if targeting Indians abroad, may suggest more risk than benefit. No doubt many Indian universities have been dissuaded from IBC ambitions by the UGC's tough words and media coverage of unapproved operations. [208]

There is a final strange twist to this tale. Ministry officials recently pointed out that **no IBC**, **approved or otherwise**, **may offer an Indian degree**. This is consistent with the fact that no Indian IBC known to the Observatory emphasizes any kind of formal standing in India, instead citing local approvals. Yet it is odd for India on the one hand to try to control IBC activity but on the other make it **impossible for any Indian institution to actually export an Indian degree**. Rather than as an annoying distraction, the Indian government might be better off viewing IBCs as valuable innovation, building new affinities for far flung Indian communities and developing precious cross-border expertise. If India actually encouraged IBCs, using a robust but clear regulatory framework, the gains might start to outweigh the risks. Such an approach might also

throw a different light on the potential benefits of IBCs in India itself. It will be interesting to see how India regulates the Mumbai campus of SP Jain Australia. [208]

1.7. Aggressive Strategy of China

The number of IBCs, or Sino-Foreign Joint Ventures in China, grew from **20 in 2013 to 28 in 2015**, making it the **second largest importer of branch campuses** after the United Arab Emirates, which had 32. The majority of these are niche institutions with relatively small enrolment. However, four are larger-scale IBCs

- Duke Kunshan University, established 2014
- New York Shanghai, established 2013
- Xian Jiaotong-Liverpool University, established 2006
- The University of Nottingham Ningbo China, established 2004 which seek to offer a range of disciplines at the undergraduate and postgraduate levels and to reflect the quality and experience of the institution's home campuses [272]

China is another country that has been keen to encourage transnational higher education. For example, Article 3 of the 2003 Regulations of the People's Republic of China on Chinese-Foreign Cooperation in Running Schools encourages Chinese higher education institutions to cooperate and form partnerships with high quality foreign institutions. In June 2015, a total of 64 transnational higher education institutions were operating in China, offering over 1,000 programmes. In terms of student enrolments, two of the most successful international branch campuses globally are located in China. According to the institutions' websites, in 2014-15, Xi'an Jiaotong-Liverpool University had over 8,000 registered students and the University of Nottingham Ningbo had over 6,000 students, including over 100 on doctoral programmes. At least a further 1,000 foreign institutions have some other kind of collaborative agreement in China. [198]

China so far has been on the receiving end of the globalization of education, with Western institutions rushing to China to set up shop. Now it's stepping out. In addition to the emerging Laos campus, there are plans for what may become one of the world's largest overseas branch campuses in Malaysia and an agreement by a Chinese university to explore a joint campus with a British university in London. "The Chinese government and its universities have been very ambitious in the reform and internationalization of Chinese higher education," said Mary Gallagher, director of the Center of Chinese Studies at University of Michigan. [72]

1.8. Changing Geography of the Global Knowledge Economy

The geography of the global knowledge economy has undergone a number of profound changes over recent decades; notably the monopoly of developed countries on research and innovation has been decreasing, while the participation of countries of the South has been increasing.

In 2000, for example, there were **no emerging countries among the top five** in terms of research and development expenditure; by 2010, **China and South Korea had replaced France and the United Kingdom**.

Driven by globalization and improved standards of living in emerging countries, the number of international students continues to grow. It is expected to increase from about 4 million today to more than 7.5 million in 2025. HE internationalization is **no longer confined to international student mobility: programmes and higher education institutions (HEIs) cross borders**; the information and communication technologies revolution offer new opportunities for using and sharing knowledge **beyond borders**; and international research collaborations are being promoted as hallmarks of excellence. If the centre of gravity of the knowledge economy remains in the North, the **competitive edge of developed countries is surely temporary**. The major destinations for internationally mobile students are **losing market share** and finding themselves **faced with increased competition** as a result of strategies designed to promote the specialization and clustering of the higher educational offering in **Asia and the Middle East**. Over the past decade, the growth in market share of international students achieved by the **BRICS countries has been twice as high** as that of the traditional host countries (United States, United Kingdom, France, Germany and Australia). [208]

1.9. Era of Globalization and Internationalization

Globalization, considered by many to be the inevitable wave of the future, **frequently confused** with internationalization, is in fact something totally different.

- Internationalization refers to the increasing importance of international trade, international relations, treaties, alliances, etc. Inter-national, of course, means between or among nations. The basic unit remains the nation, even as relations among nations become increasingly necessary and important.
- Globalization refers to global economic integration of many formerly national economies into one global economy, mainly by free trade and free capital mobility, but also by easy or uncontrolled migration. It is the effective erasure of national boundaries for economic purposes. International trade (governed by comparative advantage) becomes interregional trade (governed by absolute advantage). What was many becomes one. [149]

Globalization is an automatic and natural process, which can't be stopped. Whereas Internationalization can be controlled or restricted through laws of the region. The Globalization can replace the old regulatory mechanism by new world order or International regulatory mechanism.

Our world has become so quickly global and is **not slowing down**. The impact of globalization is invading each part of our daily lives in the home, workplace and society as a whole. Today is the era of globalization and internationalization. Changes at one corner of the world affect another corner. The Internet and Communication technologies played a major role in globalization. The competition has become global. Every industrialist is designing the product for international market and not for regional market. Let's see few examples.

- Stock Market shows the reflections of to global happenings, which includes political up and downs, wars, Economic fluctuations and natural calamities etc.
- Global Economy
- Variation of prices of electronics goods across the world
- Launch of new industrial product across the world for example Mobile, TV
- International Currency Exchange Rates
- Gold price
- Rate of Petroleum products fluctuate according to international conditions
- Automobile industry: design, manufacturing of part, assembling at different countries
- Film Industry: Releasing the film at a time across the world
- International Medical Tourism and International Sports
- Outsourcing of services: For example, the Apple has shipped the manufacturing of the iPhone and the iPad to China
- Fashion design and Food habits
- Chain of Retail Mega mart like Walmart, which is an American multinational retail corporation that runs chains of large discount department stores and warehouse stores across the world. It has over 11,000 stores in 27 countries. The company is the world's largest public corporation, according to the Fortune Global 500 list in 2014, the biggest private employer in the world with over 2.2 million employees. For the fiscal year ended January 2014, Walmart increased net sales by 1.4% to \$473 billion. [150-151]

1.9. Remarks

We may drive to work in a car designed in Italy, manufactured in Japan, assembled in India, electronics gadget from Korea, shipped by a Russian company, burn Middle Eastern oil and becoming one of the major cause for global warming.

Check your home appliances. Might be your TV is from Haier Group (China), Mobile from Samsung (South Korea), Air Conditioner from Hitachi (Japan), Tube lights from Philips (Netherlands), Audio System from Bosch (Germany), Washing Machines from LG (Japan), Fridge from Whirlpool (USA), Camera from Panasonic (Japan), Microwave Ovens from General Electric GE (USA), Laptop from Acer (Taiwan), Coffee from Nestle (Switzerland), Baby Products from Johnson & Johnson's (USA), Wi-Fi Router from D-Link (Taiwan), Watches from Rolex or Omega (Switzerland), Shoes from Reebok (Germany), Pen from Parker (UK)....You can't stop Globalization. It has already entered in your house and mind too.

What about University system? Can you resist globalization of education?

1.10. Impact of Globalization: Old Kingdoms Can Disappear

In 1982, Maruti Udyog Ltd. (MUL) came up as a government initiative in collaboration with Suzuki of Japan to establish volume production of contemporary models. It's a starting point of

Globalization of Automobile Industry in India. Prior to this only two companies dominated the Indian Automobile market namely Fiat and Ambassador. After the lifting of licensing in 1993, 17 new ventures have come up of which 16 are from manufacturing sector of cars. The Indian Auto Industry and the Auto component industry is suddenly exposed to the vast international market as an opportunity and to Global competition in large scale. The industry has worldwide business opportunity and the threats from Mega suppliers who are more equipped to compete. After 20 years the scenario of Indian Automobile industry has dramatically changed. Many world class automobile brands (Ford, Hyundai, Renault, Mitsubishi, BMW, Daimler, Caparo, Mini, Datsun, General Motors, Volkswagen, Skoda, Mercedes Benz, Land Rover, Jaguar Cars, Honda, Toyota and Chevrolet) are dominating Indian market and old kingdoms of Fiat and Ambassador had disappeared. This industry currently accounts for nearly 4% of the GNP and 17% of the indirect tax revenue. The Indian Automobile Industry has been one of the major contributors for Indian economy due to its revenue generation and employment potential. [152]

The history can repeat in case of Higher Education.

1.11. Effect of Globalization on Academics

The academics is not the exception. Throughout the world the Globalization has changed almost every aspect of Academics.



Fig. 1.28: Dirk Van Damme presentation at UNESCO Expert Meeting [155]

"The third and most significant megatrend is **globalization**. The startling revolution in transportation and communication technology has brought the world closer together than ever before. The effects of this revolution have been felt not only in the economic and political spheres but also in **academia**". [154]

In the presentation at UNESCO Expert Meeting, Dirk Van Damme discussed the impact of globalization on higher education (see following figure). [155]



Fig. 1.29: How Globalization affect universities? [156]

The emergence of a **global economy** due to increased trade, investment and mobility of people and, more recently, work across borders has forced nation states to adapt their systems of higher education to the changed global realities. Rather than continuing with their inward looking policies, several countries are reshaping their systems of higher education for making them globally competitive. Pragmatism, rather than ideology, is driving this change.

- The United States of America (USA) has major plans for investment in higher education.
- The United Kingdom (UK) has injected new dynamism in the higher education sector through competition and incentives. [157]

Director of TCS' Global Consulting Practice (GCP), Mr. Venguswamy Ramaswamy said that "The campus would see the same fate that branches and ATMs saw in banking". [153]

	Imperialism	Localisation	Globalisation
Management	✓	X	√
Staff	√	×	?
Ownership	√	X	?
Curriculum	√	X	✓
Quality Assurance	✓	✓	✓

Table 1.6: Difference between Imperialism, Localization and Globalization [196]

1.11. Remarks

The Overseas Campus Movement is the part of Globalization and Internationalization process. No one can stop it and No one can resist it. The Indian Universities should not neglect this aspect and must come forward in a big way. We have capabilities and we can do it.

The Globalization has affected the Learning Habits of students. I have covered this topic in Chapter 1 to 9 of my book "Technology-Storms Redefining World Class Universities".

1.12. Cost of Establishing IBC

The information about IBC is normally a commercial secret and very difficult to trace out. After hectic search, I could gather few traces related to IBC investment plans.

SN	Home University	Host Country	Investment				
Less	Less than Rs. 500 Crore						
1.	The University of Central	Thailand	£7.5m				
	Lancashire, UK		(Rs. 71 Crore)				
2.	IIIT-B, India and Govt. of India	Myanmar Institute of Information	US\$ 31 million				
		Technology (MIIT), Myanmar	(Rs. 214 Crore)				
3.	Jaipur National University, India	Perak EduCity, Education Hub,	£31m				
		Malaysia	(Rs. 296 Crore)				
4.	Duke University, USA	Kunshan, China	\$49 million				
			(Rs. 338 Crore)				
5.	Prist International University, India	Perak EduCity, Education Hub,	£42m				
		Malaysia	(Rs. 401 Crore)				
	een Rs. 500 to 1000 Crore						
6.	Xiamen University, China	Malaysia Campus	US\$127m				
			(Rs. 876 Crore)				
7.	Liverpool University	New South Campus in Suzhou for Xi'an	£80 million				
		Jiaotong-Liverpool University	(Rs. 763 Crore)				
	een Rs. 1000 Crore to 2000 Crore						
8.	Mount Austin International	Malaysia Campus	US\$ 184 million				
	University		(Rs. 1270 Crore)				
Abov	ve Rs. 2001 Crore						
9.	Sorbonne University, France	Abu Dhabi Campus	\$436 million				
			(Rs. 3008 Crore)				
10.	Kean University, USA	Wenzhou, China	\$236 million				
			(Rs. 1628 Crore)				
			Plus \$500 million from				
			China (Rs. 3450 Crore)				
11.	Texas A&M University (TAMU),	Qatar	\$960 million				
	USA		(Rs. 6624 Crore)				

Table 1.7: IBC Investment plans [209] [235] [237-245]

Ministry of Higher Education Director General Rujhan Mustafa told local media last month that the initial investment of setting up a branch campus in Malaysia is around RM20 million (US\$6.5

million) while operational costs could be up to RM100 million (US\$32 million) in the first year, rising to RM200 million (US\$64 million) for the second to fifth years. [240]

1.13. IBC are Generating Huge Revenue

In my opinion, in long run, the IBCs could generate substantial revenue for Home University. Anand Sudarshan, CEO of Manipal Global, told that "Manipal Global now earns roughly **two-thirds of its revenue from international branch campuses**". [251]

Country	Level	Subject	Course fee ¹	Course duration
Malaysia (1)	BA & BSc	Various	£6,300 - £8,600	4 years
Malaysia (2)	BA & BSc	Various	£6,100 - £8,200	4 years
Malaysia	Masters degrees	Various	£7,900 - £8,900	12 months
Malaysia	MBA	Business	£10,000 (full fee)	12 months FT (PT options available)
Dubai	BA & BSc	Various	£7,700 to £8,600	4 years
Dubai	MBA	Business	£13,000	12 months FT (PT options available)
Dubai	Masters degrees	Various	£10,900 to £13,300	12 months FT
China	MBA	Business	£30,000	24 months PT

Table 1.8: IBC: location of delivery, level and subject of study, fees and course duration full-time (FT) or part-time (PT) (2014) [288]





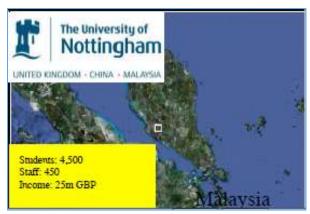


Fig. 1.30: Three Campuses of University of Nottingham at UK, China and Malaysia with number of Students, Staff and Income by Dr. Paul Greatrix, Registrar, University of Nottingham [298]

University of Nottingham UK currently charging about UK£9,000 per year at Malaysia campus. They have around 4,500 students at this IBC. Thus total **Annual Revenue** generated from tuition fees is **approximately** UK£ 40,500,000 (**Rs. 386 Crore** at current exchange rate) [205] [224]

The turnover of UK IBCs are as follows:

- The University of Nottingham (Ningbo, China) has an annual turnover of approximately £29 million (Rs. 277 Crore).
- The University of Nottingham Malaysia (UNM) has an annual turnover of approximately £25 million (Rs. 238 Crore). Additionally the Companies Commission of Malaysia Corporate Information suggests that the UNM operation recorded an operating surplus of approximately 2% at the end of 2011.
- The University of Liverpool reports in its 2012-13 Annual Accounts that the Xi'an Jiaotong Liverpool University (XJTLU) in China registered income of £19.6m (Rs. 187 Crore) and expenditure of £22m (Rs. 209 Crore).
- Heriot-Watt University Dubai reported a turnover of approximately £22 million (Rs. 209 Crore) in 2012/13.
- The University of Newcastle reported total fee income of £9.5 million (Rs. 91 Crore) in 2012/13 from its overseas campuses in its Annual Report of 2012/13.
- In addition, for Middlesex University Dubai, based on enrolment statistics and the published fees for undergraduate and postgraduate study, we estimate the gross fee income for 2012/13 to be in excess of £20 million. (Rs. 191 Crore) [288]

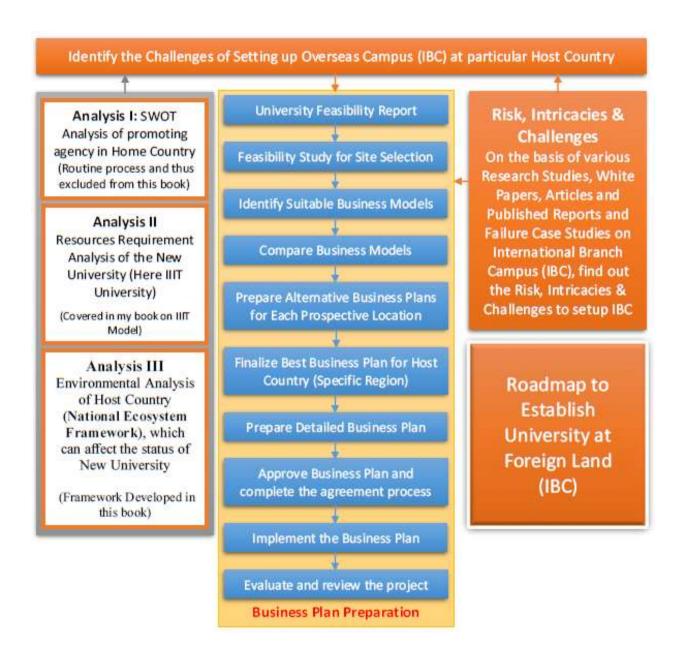
In India, normally the turnover of Engineering College is around Rs. 10 Crore to 25 Crore and turnover of Private Universities is in the range of Rs. 10 Crore to 80 Crore (with few exceptions). Thus IBCs are generating huge revenue as compare to private players in India.

Please note that, I have used two words, Home Country and Host Country very frequently in this book. Let's note the meaning of these words. If Indian agency is launching University at Dubai then India becomes Home Country and Dubai becomes Host Country.

In addition to this, remember that, in this book, I would like to consider the specific case of establishing IIIT University at Host Country. After that the same logic can be extended to establish any University at Host Country.

The process of establishing University at foreign land is very challenging phenomenon and involves hundreds of parameters. I would like to discuss this complex process in next chapter.

Chapter 2: Roadmap for Establishing University at Foreign Land



2.1. Commercial Secrets, Little Information Available

The literature on managing International Branch Campus (IBC) or Overseas Campus is limited and tends to be restricted to the 'grey literature'. There are probably at least three reasons for this. First, the phenomenon of the IBC is **relatively new**. Second, the operation of IBCs is shrouded in **commercial secrecy**. Third, the campuses are remote and most of the faculty are locally hired, so that there is **not the usual interchange of information** through informal networks. The demand from hundreds of readers and this peculiar situation encourage me to write the book on this very challenging topic. [199]

An international branch campus is one of the most risky and unexplored entry modes to international markets in higher education and the topic of interest around the globe, however **little knowledge** has been gathered about this internationalization mode. [206]

The international branch campus is a phenomenon on the rise, but we still have **limited knowledge** of the strategic choices underlying the start of these ventures. [207]

While previously many IBCs were established with little to no research, an increasing number of parent institutions are now conducting **research and feasibility studies** before they commit to the establishment of an IBC. Unfortunately, institutions conducting such studies often **do not share the results of their assessments due to their sensitive and proprietary nature** and decision makers at other institutions don't have the opportunity to benefit from the information uncovered in these studies. [234]

For example,

• Land-Grant University IBC Project: the study revealed the institution approached the opportunity to open an international branch campus differently than many other initiatives, in a nearly **confidential manner**... Over the several-year examination of the proposed project, publicity or open campus discussion appeared **non-existent**... More than one campus leader was **hesitant to talk** about the project at all during the interviews... One senior administrator remarked on the **confidential nature** of the project... The same administrator that discussed the **closed-door nature** of the project... Possibly, the energy and **secretive nature** of the project appeared to have occluded some of the concerns that were raised. [259]

2.2. Need of Evidence Based Framework

Stephen Wilkins proposed a framework that the strategic decision makers of higher education institutions can refer to when evaluating opportunities to develop branch campuses in foreign countries. The **framework** derives from **empirical evidence** that was the **product of a rigorous search of the literature** and other secondary sources, which include **trade journals**, **institutional publications**, and the **published data** of government and specialist research organizations. In particular, the literature search attempted to ascertain the **reasons for the failure** of individual campuses, as perceived by the institutions concerned, host country media, professional analysts, and researchers...However, it should be noted that the specific reasons for any particular branch

campus closure are often difficult to ascertain because universities are generally reluctant to state the reasons publicly. [276]

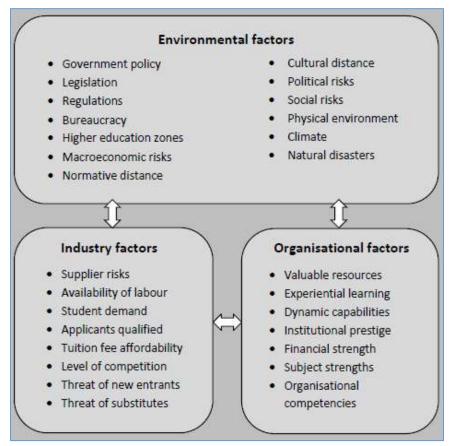


Fig. 2.1: Framework for assessing opportunities and risks associated with the establishment of international branch campuses [276]

In this book, I am introducing new framework using similar empirical evidences and failure case studies.

2.3. Need to Understand the Complex Phenomenon and Risk Involved

Establishing a branch campus is a high stakes, potentially risky endeavor for both the home campus and the host country. Both sides invest substantial resources (e.g., time, money, and staff) to help make new campuses succeed, thus the **consequences of failure can be significant**. [209]

The establishment of international branch campuses is particularly interesting, because such initiatives go far beyond typical decisions and change processes in higher education. HEIs are known to evolve slowly and the usual change strategy seems to be piecemeal engineering. On the contrary, **overseas expansion is a high-risk growth strategy** and unsuccessful ventures can result in huge financial losses and reputational consequences. [207]

As a result of their unique context, branch campuses can be exposed to a range of unique risks. A branch campus might be a private, profit earning venture; a partnership with a local institution; or entirely sponsored by a local government or corporate entity. Each of these contexts brings with it unique risk considerations. As such, **home campus risk management frameworks may fail to transplant successfully to the branch campus**. In establishing a branch campus, the home campus should gear risk management measures towards aligning the institution with its goals, values, and mission and meeting established benchmarks that underpin the progress of such an operation. In doing so, the home campus may also minimize the impact of any potential risk – risk that may be **reputational, strategic, financial, or regulatory** in nature. [222]

Writing in University World News, Daniel Kratochvil and Grace Karram add that: "Clearly implementing contingency plans, strategic linkages between the campuses, flexible frameworks of governance and realistic expectations for the new venture are essential to ensure an institution's viability... Clear harmonization of accreditation, faculty involvement, administrative processes and academic mission will solidify the branch campus' trajectory and **decrease its vulnerability** to changes in the host country." [193]

Setting up an IBC, however, is **not easy**. The **social, cultural, political, academic, and economic environments** often differ dramatically between parent and host nations, and higher education services are hardly ever easily replicable across borders. What works at the HEI's home campus, or "parent institution," may not be effective at the IBC. These circumstances **pose several challenges** for leaders at HEIs. [234]

HEI managers **need to understand the cultures and business practices** in the regions where they would like to operate. In countries such as China, Korea and Singapore, the Confucian model molds higher education systems. Although foreign HEIs might benefit from high levels of family commitment to investment in higher education, they need to be aware that **governments retain tight control** over policy, planning and funding. In some countries, **complex regulations** and high levels of bureaucracy can make it difficult for foreign organizations to establish operations and to conduct business. The use of social networking methods, such as 'guanxi' in China and 'wasta' in the Arab World, can be essential to foreign HEIs in order to 'get things done'. In many countries worldwide, finding a local partner or intermediaries with good connections and a strong knowledge of local business practice is often the first essential step for foreign HEIs intending to establish operations. The University of Reading explained that its decision to open a campus in Malaysia was driven by the university's existing links in the country, particularly its association with a local institution. [207]

The strategic choices of universities such as Cambridge, Pennsylvania, St Andrews, Warwick and Yale, which have decided **not to open overseas branch campuses**, to avoid loss of their elite status and to maintain legitimacy. Tufts University has considered several opportunities but each time concluded that the potential gains did not outweigh the risks...Bocconi, a leading business school in Italy, takes a **different attitude to risk**; it believes that the competitive advantages gained by establishing an early presence in India - by opening a branch in Mumbai - outweighs the risks. However, before establishing a campus in India, Bocconi had already been operating in the country for eleven years with partner institutions. The substantial knowledge and experience gained by

Bocconi during this period may have helped the institution to reduce the risks involved in opening a branch campus. [207]

Opening an IBC can be **risky** for the parent institution due to the large financial investment they require (Shams & Huisman, 2012). Because **the success of an IBC is at least partly dependent on** local conditions such as

- A stable host government
- Friendly relations among the host country, parent institution's country (the "parent country"), and parent institution
- A steady supply of willing students in the host country

The long-term success or failure of IBCs is difficult to predict. [234]

International branch campuses are **derivatives** of their home campuses, thus **some structural elements** of the branch naturally resemble the home campus; however, IBC strategies can differ quite significantly from the home campus, affecting their structures. [209]



Fig. 2.2: IBC: Lesson Learned [221]

2.4. Motivation of Home and Host Country and Reasons of Exponential Growth of IBC

Generally, branch campuses are seen as **revenue-generating activities** of entrepreneurial higher education institutions (HEIs), but we will argue that a much more varied set of motivations lie behind setting up such initiatives. [207]

All this begs the obvious question: why have so many universities opened campuses overseas? Making easy money is not the only motivation.

• In general, the growth has been driven by universities seeking to **build their global brands**, and so attracting international students and staff. But the more important player in the mix is the host government. [69]

- Higher education remains a highly regulated, politicized sector and international branch campuses exist because they serve the **interests of the host governments**.
 - o In some countries, notably the United Arab Emirates, branch campuses provide education to the children of a majority expatriate population barred from tuition-free Emirati universities.
 - In China, branch campuses transfer educational technology and teaching skills to the Chinese higher education system, which the government hopes will help to improve quality overall. [69]
- Seen in this light, branch campuses are not a manifestation of a relentless globalization of higher education, but a transitory alignment of motivations: universities seeking to build their brands by extending their global reach and host governments seeking to accelerate the development of their higher education systems. [69]
- The demand for higher education has increased dramatically in virtually every developed or developing nation globally, there are many **students who cannot go abroad** for higher education because of work, family, or social, religious or financial reasons, and for these people the international branch campus offers an alternative and viable route to a high quality Western education. Branch campuses can provide a higher education to students who might otherwise not be able to participate in higher education. [275]
- Governments around the world have seen the international branch campus as a means to **expand higher education capacity** at no, or relatively little, cost to the public budget. In host countries, governments and national economies benefit in a multitude of ways, such as:
 - o Increased participation in higher education due to the increased capacity provided by international branch campuses,.
 - o A reduction in currency outflows caused by nationals studying overseas.
 - An increase in demand and spending in the economy resulting from incoming foreign students.
 - o Improvements in skills levels of the labor force.
 - o Reductions in youth unemployment.
 - Attracting world-class universities to establish branch campuses can raise the profile and prestige of host countries and these institutions can contribute to innovation and the development of knowledge economies. [275]
- Countries such as Malaysia and Singapore have encouraged, even invited, foreign universities
 to establish branch campuses, as a solution to capacity shortages in higher education, skills
 shortages in the labor force, and to develop knowledge-based economies. The governments
 of these countries have also argued that increased competition among higher education
 providers will improve quality. [207]
- One clear regulatory imperative for setting up branch campuses is related to public funding. As state funding for higher education in countries such as the US, UK and Australia has increasingly failed to satisfy the needs of HEIs to achieve expansion and investment targets, it has become necessary for institutions to develop alternative sources of revenue.
 - One of the strategic aims of Monash University (Australia) set out in its development plan of 1999 was to become increasingly self-reliant and less dependent on government funding. Furthermore, the plan stated that income generation and entrepreneurial activity was an important aspect of the work of the university. To achieve its aims, Monash has established international branch campuses in Malaysia and South Africa. [207]

- Geo-political events and natural disasters will always have an impact on international student choices,
 - As seen in the United States after the 9/11 terrorist attacks, which caused an immediate decline in incoming international students. [275]
- However, instead of bringing foreign students to study within a country, nations are now
 allowing their institutions to set up shop abroad, taking the educational experience to other
 countries. These institutions provide an opportunity to demonstrate cultural ideals in
 locations where they may not have been permitted before. [230]

There are several motivators (for Home and Host countries and University) in deciding whether to set up and operate an off-shore or overseas or International Branch Campus.

Home Country Motivations:

- 1. Revenue generation
- 2. Increased international prestige
- 3. Recruiting excellent students for the home campuses' programmes
- 4. Genuine desire to serve the community in which an off-shore campus is being established
- 5. Desire to improve the internationalization of the home campus
- 6. Building on a prior relationship
- 7. Cultural diplomacy
- 8. To Increased innovation
- 9. To enhance Gross Domestic Product (GDP)
- 10. To increase the quality of education and research
- 11. To expand the scope of education and research activities
- 12. To overcome the rivals
- 13. To Position themselves internationally
- 14. To Diversify the income
- 15. To increase technology transfer
- 16. Opportunity to exploit the foreign markets
- 17. To diversify the education and research portfolios
- 18. To attract potential international students and staff
- 19. To gain access to new student markets
- 20. To increase or protect their student market share in regions where the parent institution already has a strong presence.
- 21. To pursue IBCs in countries where they could offer a type of education or degree program not currently offered by other local universities.
- 22. To reduce dependence on state funding
- 23. To increase national and international visibility
- 24. Leverage institutional strengths through strategic partnerships
- 25. Mobilize internal intellectual resources
- 26. To develop stronger research groups
- 27. To develop national university systems within a broader, global framework
- 28. To produce a skilled workforce with global awareness and multi-cultural competencies
- 29. To use public higher education funds to promote national participation in the global knowledge economy
- 30. To get benefits from trade in education services

- 31. Aligning internationalization with funding challenges
- 32. Linking internationalization with economic growth
- 33. To develop international research linkages
- 34. To develop opportunities for research abroad
- 35. To enable those students who might not otherwise have opportunities to live internationally to have an international experience.
- 36. Altruism: non-elite institutions with religious roots that considered bringing education to underserved areas a priority
- 37. Recruiting excellent students for the home campuses' programmes
- 38. Interest in diversifying and becoming less dependent on international student recruitment to the home campus.
- 39. To collaborate more easily with foreign academic institutions and industries.
- 40. To contribute to HE capacity building in countries with less developed HE sectors.
- 41. Post-9/11 environment—perception is it may be easier to take the education overseas than get the students into the US. [128] [198] [206] [207][234] [256]

Host Country Motivations (Excluding motivations which are common for home and host countries and mentioned in above list):

- 1. To improve skills levels among the labor force
- 2. To reduce brain drain
- 3. To lower unemployment
- 4. To reduce currency outflows, resulting from fewer nationals studying abroad.
- 5. To develop knowledge-based economies
- 6. To meet unmet demand for a certain type of education that is not otherwise available in the host country.

The Motivation, Goals and Objectives of the Home Country and University are the main factors which affect the IBC location selection process.

2.5. Benefits of IBC

2.5.1. Benefits for Parent institution

- Financial support from the host government
- Access to a part of the international student market that cannot afford to study abroad or does not wish to
- Revenues associated with that new market
- Prestige
- Increased understanding on the parent institution's campuses of other cultures
- New curricula
- Access to local governments and industries in the host country [234]

2.5.2. Faculty Benefits

- Teaching experience to foreign students
- Greater access to research opportunities
- New sources of data and experts
- Open up countless opportunities for international collaboration
- Development of new teaching methods [234]

2.5.3. Benefits for Host Country

- Promote economic development by serving as an additional revenue source for local and national economies.
- Competitive advantage in the global marketplace by producing the new 'smart' workers who will take up key positions in the knowledge economy.
- National prestige and increased influence abroad as they become a destination for world-class institutions.
- Country can minimize brain drain
- Increase in technology and knowledge transfer, collaborative research, and innovation
- Strengthen their own educational capacity and infrastructure.
- Local economies gain access to research facilities for economic development and income from students attracted from throughout the region. [234] [256]

2.5.4. Benefits for Students

- Additional educational opportunities available without leaving their home countries i.e. without foreign visa applications
- Financial savings for families because the tuition fees at IBCs are typically lower than fees at the parent institutions and students can live at home
- Wider choice in their education and are not limited by what their local education system offers [234]

2.6. Require Several Years for Study, Contemplation and Negotiation

The planning process require several years of study, contemplation and negotiation with authorities of host country. For example,

- Texas A&M University USA: After several years of contemplation and negotiation, Texas A&M University signed a contract with the Qatar Foundation for Education, Science and Community Development on May 25, 2003 to establish and operate an international branch campus in the tiny Gulf state of Qatar just outside the capital city of Doha in an education hub aptly named Education City. [209]
- Land-Grant University USA: The core project team worked over several years and developed what administrators characterized as an "elaborate plan," including an academic plan and a **20-year financial plan**. One dean remarked, "[LGU] really did its homework." Staff from a variety of units contributed to the planning process, and the project team researched and

benchmarked other branch campuses abroad. There was some degree of **risk analysis** done, including **negotiating a plan** to ensure that should the campus have to close for some reason, there would be a means for students there to complete their education at no additional cost to LGU. [259]

2.7. Need of Detailed Analysis

To establish University at foreign land or Host Country is a very challenging job. Hundreds of interdependent factors of Home and Host country are involved in decision making processes. To do this job successfully, three analysis are needed namely

- Analysis I: SWOT Analysis of Promoting Agency in Home Country: It's a routine process and thus excluded from this book.
- Analysis II: Resources Requirement Analysis of the New University: Already done in my book on IIIT Model.
- Analysis III: Environment Analysis of Host Country: It is needed to understand the Complexities of Selection of Host Country, which can affect the status of New University. I have developed National Ecosystem Framework for doing this job in this book. This step involves extensive analysis of Host Country with respect to
 - o Economy of the nation
 - Political Stability
 - o Geography and Climatic Conditions
 - Law and Order Status
 - Legal Framework
 - Industrial Growth
 - o Higher Education Status
 - o Culture, Traditions, Customs, Cost of Leaving, Language Spoken
 - Ecosystem of Host Country
 - o Business Cluster at Specific Location of New University etc.

On the basis of these three analysis, one can identify

- The Challenges of Establishing University at Foreign Land
- The Strategies to face these challenges

In addition to this, there is a need to extract exhaustive list of challenges from various Research studies, White papers, Reports, Articles etc., which I have done in Chapter 3 of this book.

Let's discuss the detailed process to finalize the Business Plan for establishing Overseas Campus with the help of feasibility report, Business Models and three analysis in next section.

2.8. Frame Work and Overall Planning to Identify the Best Business Plan

2.8.1. Phases

The task for identifying the best Business Plan can be divided in to three important phases

- Phase I University Feasibility Report: Examine the feasibility of establishing an University branch campus (or campuses) for international students
- Phase II Feasibility Study for Site Selection: Examine prospective sites for a University branch campus for international students and determine which site (or sites) are preferred in launching this initiative.
- Phase III Business Model and Business Plan: Select a site and business model, and develop a final business plan for establishing University's branch campus for international students. [147] [178]

Administrators and leaders did not move linearly through the process of establishing an IBC. Instead, while the overall momentum was forward, the process of establishing an IBC was characterized by significant back stepping, overlap, and repetition. Back stepping was especially evident in the first three stages in the process: consideration, identification of opportunities, and gathering support. Evidence revealed that the first step of establishing an IBC in many cases was the identification of a viable opportunity rather than an examination of the university's goals and a discussion about how an IBC may help the university achieve them (or not). As a result, some interviewees reported working backwards after the identification of a promising opportunity and retrofitting their institution's goals in order to justify or better contextualize the IBC within the institution's strategic vision. Many stages overlapped; they are not discrete. Leaders may take steps to demonstrate their support for the proposed IBC and increase stakeholder buy-in while administrators conduct more in-depth analysis to determine its feasibility. Since institutions often looked at more than one opportunity at once, moreover, institutions may be identifying new opportunities while simultaneously building support for or evaluating another opportunity. Leaders and administrators, likewise, must often repeat certain steps. Changes to the proposed IBC, such as the decision to offer additional subjects or the partner's decision to cover operating expenses for ten years instead of five, may require administrators to repeat steps that have already been done. [234]

Negotiations played a central role in the process of establishing an IBC. Leaders and administrators participated in negotiations to agree upon the services and resources each party would be expected to contribute to the IBC. [234]

2.8.2. Phase I: University Feasibility Report

This report is based on a year-long study and seeks to address two key questions:

- Should the University pursue the feasibility of developing a branch campus outside of Country, which would be dedicated primarily to serving a student body made up international students?
- Should the University pursue the development of such a campus (or campuses) with partner? [147]

2.8.2.1. Why establish an IBC?"

The first proposed stage in the process of developing an IBC is consideration. During this stage, institutions consider the question "Why establish an IBC?" The HEI's leaders (potentially the president, vice president, chancellor, senior administrators, deans, department heads, Board of

Governors, and Board of Regents), as well as faculty, staff, and students **explore the potential positive and negative consequences associated with establishing an IBC**. They articulate their institution's **goals** and discuss how IBCs might (or might not) be a means to achieving those goals. To this end, open, on-campus discussions may be held regarding the **needs**, **purposes**, **strategies**, **controversial issues**, **resource implications**, **and benefits** of IBCs. These discussions may be positive or negative with both supporters and dissenters. Understanding arguments both for and against IBCs is an important part of the discussion. [234]

2.8.2.2. Stakeholder Buy-In: Gathering Support to Establish an IBC

The second proposed stage in the process of developing an IBC is gathering support from stakeholders at the university to open an IBC. Stakeholders may include the president and other academic leaders, administrators, faculty, staff, and the Board of Governors or Board of Regents. The support of stakeholders may be evident in the activities, budgetary allocations, and even written policies of the institution. The literature suggests that

- The support of the president, other leaders, and administrators, both in expressed interest and written policy, is crucial to the successful establishment of an IBC.
- Support from the Board of Governors is also helpful in that it reinforces the legitimacy of the IBC and the university's commitment to increased internationalization.
- The support of a critical mass of faculty and staff also is important for an IBC to succeed. Without their support, it is difficult to carry out the activities associated with an IBC and to recruit faculty to teach at the IBC. [234]

2.8.3. Phase II: Feasibility Study for Site Selection

2.8.3.1. Business Literature and Internationalization

The decision-making frameworks described in the business literature depict the internationalization process as a series of multiple stages including

- Country identification
- Preliminary screening
- In-depth screening
- Selection.

Country identification: During the first stage, country identification, firms identify potential markets based on

- Population
- GNP
- Growth rate statistics, etc.

Preliminary screening: They then move selected countries to the preliminary screening stage and examine each country based on factors such as

- Political stability
- Geographic distance
- Economic development

• Costs associated with entering each market

In-depth screening: Next, firms complete an in-depth screening of the countries that are left.

- Industry and product market-specific data are collected and analyzed, market potential is estimated
- Growth rates are projected
- Competition is assessed
- The company's resource constraints are revisited.
- Country's political stability and level of economic development

Final selection: Finally, after much scrutiny, final selection of a country/market is made based on the company's objectives and projected profits. [234]

In the Feasibility Study, each of the following issues are examined by prospective location

- Market size and characteristics
- Competition
- Growth potential
- Maximum size of operation
- Availability and cost of student housing
- State and local licensing and accreditation requirements
- Impact on University's image and main campus operations (faculty, alumni, corporate sector, and current international and domestic students)
- Success in meeting the University's mission and major strategic objectives
- Financial implications (including real estate costs, labor costs, and other variables pertinent to each site) [147]

2.8.3.2. Country Identification

In Stage Three, institutions select several potential host countries that seem to be compatible with the institutions' goals, resources, and strategic plans. The institutions then conduct **preliminary analyses on these countries**. They need to know, for example,

- Whether there would be any significant barriers to entering a country to establish an IBC
- What the competition would be
- What the demand for higher education is
- General facts about the population such as age and whether it is growing
- GDP and other economic indicators. [234]

2.8.3.3. Screening IBC Opportunities

Typically, screening is completed in two stages: preliminary screening and in-depth screening.

Preliminary Screening: The main purpose of the preliminary screening of markets is to bring about an efficient reduction in the number of countries in need of an in-depth examination. During the screening stage, institutions examine more closely the countries/market opportunities they identified in Stage 3 and eliminate countries that do not meet their objectives. Preliminary

screening involves gathering general information about countries of interest and estimating the risk of establishing an IBC in those countries. Parent institutions look at basic factors such as

- The countries' political stability
- Geographic distance
- Economic development
- The costs of entering the higher education market.

The preliminary screening eliminates any countries that, after some initial vetting, do not appear to be easily accessed by the institution or otherwise suitable for an IBC.

In-depth screenings: In their in-depth screenings of the potential host countries that remain, institutions gather detailed data regarding

- The potential student market
- Student demand
- Willingness to pay
- Ability to pay
- Potential academic programs
- Higher-education market growth rates.
- They revisit the strengths and weaknesses of the competition
- Entry barriers
- The institution's resources and constraints.

The in-depth screening allows the institution to rank the remaining potential host country markets against a number of accepted decision criteria. Some institutions hire outside consulting firms to complete this task. [234]

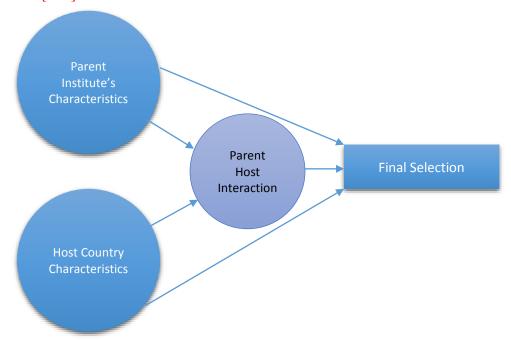


Fig. 2.3: Components of the IBC Screening Process [234]

As illustrated in above Figure, the factors that institutions consider in the screening stage can be organized into parent institution characteristics, host country characteristics, and factors arising

from the interaction of the two entities. As Knight explains, such variables can be further grouped into the following categories:

- Social/Cultural
- Political
- Economic, and
- Academic [234]

Parent institution characteristics include

- Social or cultural factors such as
 - The norms and values of the institution
 - Its mission
 - The level of commitment of its leaders to the establishment of an IBC
 - Political factors of interest
 - Country's foreign policies
 - Relationships with other nations
- o Economic factors include
 - An institution's need to generate additional income and grow
- Academic factors include
 - The parent institution's desire to bring an international dimension to research and teaching
 - Increase the institution's capacity for research and teaching
 - Enhance the institution's reputation
 - Enhance international presence
 - The availability of teaching and other staff for a new IBC
 - What the curriculum should be.
- **Host Country Characteristics**: Host country characteristics that institutions may consider when selecting a location for a potential IBC include
 - Social and cultural factors such as
 - The norms and values of the host country
 - Language spoken
 - Business practices
 - Geo-political factors of interest include national security, foreign policy, regulatory frameworks, safety, and stability. Potential freedom from certain regulations or barriers is also part of this category.
 - Economic factors include
 - Financial incentives that make setting up an IBC attractive to the parent institution
 - The local labor supply for filling staff and some teaching positions at the IBC
 - The country's level of economic development
 - A potential IBC's tax exempt status.
 - o Academic factors relevant to the potential host country include
 - Accreditation requirements
 - Research opportunities
 - Academic qualifications of students
 - Academic standards and norms.

- **Parent-Host Interaction**: Another important category of consideration is the interaction between the parent institution and host country.
 - o Institutional distance (how similar the two countries are in their norms and values) and institutional uncertainty (the political, financial, and economic risks of locating in a particular host country) are extremely important.
 - o A common language is useful.
 - Academic factors such as the ability of students in the potential host country to meet
 the academic standards set by the parent institution as well as local interest in and
 demand for the academic programs offered by the host institution are also important.
 - o Geo-political factors such as political relations, geographic distance, and mutual understanding between the host and home countries are also key.
 - Economic distance, or the level of economic disparity between the home and host countries may also be important for three main reasons. First, countries with similar levels of economic development often have consumer market segments able to consume similar types of goods and services, in this case, higher education. Second, countries with low economic distance also have similar physical infrastructure, such as transportation and telecommunications systems. Third, since institutions often develop competencies or knowledge-based resources related to the markets they serve, these resources are often best leveraged in countries with economic situations similar to their own. [234]

Assume that, after in-depth study, two prospective locations (say A1 and A2) of Host Country A and three prospective locations (say B1, B2 and B3) of Host Country B have been identified. In this process for identifying the Region and Host Country, the National Ecosystem Framework is very useful.

2.8.4. Phase III: Business Model and Business Plan

The first two phases of the Feasibility Study focused on the validity of establishing a branch campus for international students and the identification of prospective sites for such a campus. During these two phases, many questions were raised that can be answered best in this (the final) phase of the Feasibility Study, the preliminary and final objectives of which were as follows.

- Identify prospective business models for establishing the University's first branch campus for international students.
- Develop a preliminary business plan for each of the sites recommended in Phase II of the Feasibility Study.
- Determine, which of the two sites, is the preferred site to launch this initiative.
- Selection of a preferred business model.
- Development of a final business plan for the preferred site. [147] [178]

2.8.5. Five Business Models of Ownership for International Branch Campus (IBC)

In 2011, researchers from the Cross-Border Education Research Team (C-BERT) at the State University of New York at Albany conducted a survey of **International Branch Campus (IBC)** (i.e. overseas campus) initiatives worldwide. Subsequently published in the journal International Higher Education, the survey gathered information on 50 international branch campuses and found

that the responding universities adopted one of the following five models to establish an IBC's "physical plant":

- Wholly Owned (28%): In the most common arrangement, 28% (14 IBCs) operate in facilities that are wholly owned by the home campus.
- Partnership with Government (22%): In another often-cited arrangement, 22% (11 IBCs) had adopted a government partnership model whereby the local or national government subsidizes the cost of, and thereby owns, the local campus. Some governments have, for example, invested in facilities to attract foreign institutions and help foster local economic growth.
- **Private Partner** (20%): Meanwhile, 20% (10 IBCs) are owned by a private partner, typically an investment firm or property developer who builds the campus, and sometimes receives a stake in the IBC's revenues.
- **Space from Private Party** (18%): Another 18% (9 IBCs) rent their campus space from a private party. In Dubai Knowledge Village or Dubai International Academic City (DIAC), for instance, multiple IBCs rent space in the same or nearby buildings, creating a "shopping mall effect" that gives students a variety of academic options.
- Academic Partner (12%): Finally, 12% (6 IBCs) operate within a campus owned by an academic partner, but use its facilities to independently offer stand-alone academic programmes. [193]

As for whether or not any one particular ownership model is better than the other, the study authors note that each arrangement has its advantages and disadvantages. "Wholly owned endeavors provide some stability and freedom from external interference but also pose a financial risk, should the enrolments not meet projections or government hospitality lapse. Partnering reduces the financial risks, but could lead to outside interference in academic affairs". Some other Western universities are taking a different approach in China. The Sino-British College (SBC), for example, is "embedded" within a Chinese institution – the University of Shanghai for Science and Technology – and offers British degrees from nine UK universities. [193]

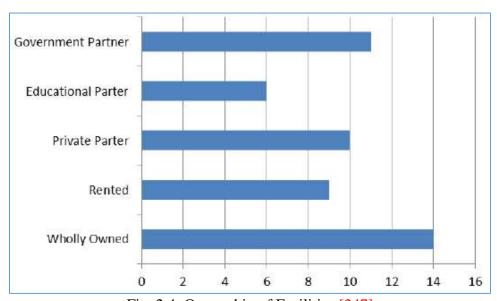


Fig. 2.4: Ownership of Facilities [247]

Institutional uncertainty in a host country Low High institutional difference in a host country Adapt Avoid Moderate risk, complexity, effort High risk, complexity, effort Establish international branch campus, but adapt Do not establish international branch campus in structures and processes to suit institutional context in this host country - the risks are too high host country Transfer Hedge Low risk, complexity, effort Moderate risk, complexity, effort Establish international branch campus but as a joint Establish international branch campus using the same structures and processes used at the home campus venture with a local partner or obtain funding and assurances from host country government

2.8.6. Scientific Way for Selecting Business Model: Institutional Theory

Fig. 2.5: Transnational strategies for a university based on institutional difference and institutional uncertainty [206]

Institutional distance suggests that cultural, regulatory, and other differences between two institutions or countries play an important role in the success of a proposed enterprise. The concept of institutional distance highlights the importance not only of individual factors related to the host and home countries but of the interactions between the two countries as well. [234]

Institutional uncertainty refers to the country-specific **political, financial, and economic** risks associated with locating in a particular host country that might impact the ability of an IBC to operate, attract students, and maintain solvency. **Political risks** could include, for example, the imposition of unfavorable taxes or political unrest. **Financial and economic risks** include recessions, currency crises, or unexpected inflation. [234]

It is illustrated in above Figure how a university could assess internationalization options for overseas expansion.

- **Left Bottom Corner**: If the institutional distance between a home and a host country is low, and the institutional uncertainty in the host country is low, then a university can transfer the operations to a branch **without major changes**; same processes can be adapted and the same programmes can be delivered.
 - This mode for instance is applicable for American HEIs having or about to have branch campuses in Western Europe. [206]
- **Left Upper Corner**: If institutional differences are high, but the uncertainty in a host country rather low, then the branch campus can be established, however certain obstacles arise because of the institutional differences and it is strongly recommended to execute a careful revision and adapt structures as well as processes to the institutional context of the receiving country. [206]
- **Right Bottom Corner**: The situation of low institutional differences, but respectively high uncertainty is likely in **developing countries**, because the institutions in a host country are less developed or evolving rapidly. In such setting risk reduction is accessible through a local

partnership – then, a university is able to convey an image of legitimacy, and when the strategy is seen to be successful, it is likely to be imitated by other universities.

- O An example of a respective strategy is well applied in branch campuses established in Malaysia between 1996 and 2007 between foreign HEIs and local companies, where the companies provided HEIs with market intelligence, capital and physical infrastructure, while HEIs took the lead in intellectual and educational components. [206]
- **Top Right Corner**: If both the institutional differences and uncertainty between home and host countries are high, then the institutional distance is high. Thus high uncertainty and difference results in a vast risks and the effort required might not be worth the possible benefits.
 - o In India, for instance, there is a huge undersupply of higher education, yet the complex regulatory frame makes the country **very unattractive to foreign universities** seeking overseas expansion. [206]

Country/region	Institutional difference ^a	Institutional uncertainty	Strategy	Number of internationa branch campuses ^b
Africa	High	High	Avoid	6
Australia	Low	Low	Transfer	4
China	High	Low ^c	Adapt	13
Hong Kong	Low	Low	Transfer	5
India	High	High	Avoid	0
Malaysia	Low	High ^d	Hedge	6
Singapore	Low	Low	Transfer	15
Rest of Asia	High	High	Avoid	11
Arab Gulf States ^e	High	Low	Adapt	50
Rest of Middle East	High	High	Avoid	3
Europe	Low	Low	Transfer	34
North America	Low	Low	Transfer	10
South America	Low	High	Hedge	4

^a Based on North American/European higher education model.

Table 2.1: Suggestions for IBC Strategy for different countries [207]

Analysis of the risk reduction strategies showed that when the **uncertainty is high, joint venture** with a local institution is recommended. For the universities that entered the education market later then their rivals, joint venture should be considered as less risky entry mode for HEI. [206]

^b Based on data compiled by C-BERT (2011).

^c Due to existence of clear regulatory framework.

d Uncertainty has fallen considerably in recent years implying a shift to the transfer strategy.

e Excluding Saudi Arabia.

2.8.7. Identify Suitable Business Models

For example the possible business models could be

- **Business Model 01**: University could develop a branch campus for international students without an investor or partner. This model would require a capital investment on the part of the University through either the use of existing endowment or annual operating funds, or a gift to the University that would be restricted to the development of such a campus. This option could be established as either a substantive pilot (a limited number of programs and students) or as a fully operational campus. [147]
- **Business Model 02**: University could secure an investor who, in return for an initial outlay of the capital investment, could receive a return on its investment in the form of interest and/or a share of the net revenue of the branch campus over a specified period of time. [147]
- **Business Model 03**: University could develop a branch campus for international students with an established local college or university. [147]

2.8.8. Compare Business Models

The comparison of the hypothetical Business Models are as follows.

SN	Prospective Business Model	Pros	Cons
1.	University Alone	 University retains all the net revenue. University has total control over the project. Minimal tax implications relative to other models 	 Requires more time University accepts all the risk. Reduction of the endowment or annual operating dollars for use in other University initiatives. University must provide/secure all required infrastructure. University must establish surplus provisions in its annual operating budget(s) to offset a potential loss of the investment. If the initiative fails, the actual loss may be higher than the original amount invested.
2.	University with investor	 Reduces financial risk to University by the amount of the investment. Minimizes need for surplus provisions in the annual operating budget(s). 	 University loses some control over the campus. University net revenue is reduced. Could have negative tax implications. If the initiative fails, the actual loss may be higher than the amount of the investment.
3.	University with Local College or Local University	 Minimizes start-up and operating expenses (inclusive of infrastructure). Reduces financial risk to University. Provides a local market and partner with name recognition. 	 Requires Host Country College or University and international approvals. University loses some control over the campus and programs. University must share the net revenue.

 Provides for joint degree opportunities and prospective student transfers to main campuses. Easier for students to get visas. Direct competition with other local 	
 Universities is minimized. More consistent with University's Global Education mission. Cost-of-living and operational expenses are lower than in the Home Country. 	

Table: 2.2: Comparison of Business Models [147]

2.8.9. Prepare Alternative Business Plans for Each Prospective Location

In previous sections, 3 Business Models and 5 prospective locations in two Host Countries have been identified (A1, A2, B1, B2 and B3). Thus $5 \times 3 = 15$ alternative Business Plans can be developed.

SN	Host Country	Region	Business Model
1.	A	A1	1
2.	A	A1	2
3.	A	A1	3
4.	A	A2	1
5.	A	A2	2
6.	A	A2	3
7.	В	B1	1
8.	В	B1	2
9.	В	B1	3
10.	В	B2	1
11.	В	B2	2
12.	В	B2	3
13.	В	В3	1
14.	В	В3	2
15.	В	В3	3

Table 2.3: Fifteen Alternative Business Plans

2.8.10. Finalize Best Business Plan for Specific Region and Specific Host Country

Once the alternative Business Plans are ready, one can finalize the Best Business Plan for Specific Region and Specific Host Country. After that, we need to prepare the Detailed Business Plan.

2.8.11. Prepare Detailed Business Plan

When considering a branch campus, the home institution must consider its desired level of control over the foreign institution in terms of

- Governance
- Administration
- Core business operations and
- Quality and content of course curricula

An institution may also be subject to currency risk and local laws and regulations, depending on the nature of the expansion. The delivery of a branch campus strategy can take significant time (five to 25-plus years), making it critical that institutions are clear regarding the strategic investment and return before entering into such arrangements. [129] [178]

It is essential to have a **well-articulated business plan** from the outset when establishing an offshore campus, especially to maintain sustainability. The business plan needs to take into account

- The complex nature of the **business** (i.e. cost recovery to revenue generating) and
- Be based on a comprehensive **environmental scan**, including an assessment of demand, price points, and competition.

A contingency plan is recommended to avoid bankruptcy. [128]

The business plan and financial aspects of establishing an off-shore campus are crucial, but not sufficient to ensure quality. Some of the key constituents of a sustained educational enterprise are

- Relevance of programmes
- Alignment with local needs
- Ways of proceeding (e.g. faculty and student recruitment)
- Appropriateness of teaching and learning practices [128]



Fig. 2.6: Business Plan of Branch Campus [129]

Developing Business Plan is a six steps process.

- Step 1: Outline the business case for expansion
- Step 2: Develop the full business plan
- Step 3: Conduct due diligence and negotiate the agreement

- Step 4: Approve and complete the agreement
- Step 5: Implement the business plan
- Step 6: Evaluate and review the project

2.8.11.1. Step 1: Outline the Business Case for Expansion

The institution must determine its specific needs and the objectives which it hopes to achieve through the transnational initiative. Building an outline business case is the critical first step upon which all future plans and evaluations will be based and will require institutional leaders to develop a clear vision of the initiative and its fit with the organization's transnational strategy. Key areas to consider:

- 1. **Goals**: outline the goals of the international expansion and consider how it will fit with, and contribute to, the academic and/or research strategies of the institution, its brand and other core values.
- 2. **Preliminary situational analysis**: Conduct a high-level risk, opportunity, financial and environmental analysis to identify any key deal-breakers and make the case to move to the next phase.
- 3. **Project plan**: Develop a preliminary project plan including an achievable schedule and appropriate contingency plan.
- 4. **Investment**: Identify the initial investment required to produce the detailed business plan and subsequent phases.
- 5. **Internal resources**: Assess the internal capacity to support the venture (from academic through to back-office support staff) and, if necessary, secure sufficient project management resources to ensure that the 'day job' does not suffer as a result of the expansion.
- 6. **Regulatory and governance approvals**: ensure that the business case identifies and factors in the necessary regulatory and institutional approvals.

2.8.11.2. Step 2: Develop the Full Business Plan

Step 2: Develop the full business plan

Having an approved outline case, the project team will have secured the necessary project funding to develop a robust business plan to see the project through to implementation.

A more <u>detailed analysis of the environment</u> should be undertaken to determine <u>what external forces will influence the expansion initiative</u>. This analysis should include, but not be limited to, a review of:

- political climate and stability, including government educational and research policies and priorities
- · legal and regulatory compliance requirements
- human resource (HR) matters, including labor laws and rights and immigration
- · financial regulations, accounting practices and requirements, including tax
- · local cultural educational norms.

Once the environmental analysis is complete, the institution can draft its detailed business plan, which should include, but not be limited to, the following:

Fig. 2.7: Need to do Environmental Analysis before Business Plan [129]

Once the environmental analysis is complete, the institution can draft its **detailed business plan**, which should include, but not be limited to, the following:

- 1. **Entry strategy**: Determine the best model to deliver transnational expansion based on the expansion objectives, success factors and situational analysis. Consider the optimal structure from tax, governance and legal perspectives and whether joining forces with a partner makes sense to share risk and costs and to facilitate market entry. In the case of a partnership, establish the type of agreement (such as a letter of memorandum or formal joint venture) up front and mutually agree on the goals and roles and responsibilities of each party. [129]
- 2. **Exit strategy**: establish appropriate exit strategies, particularly for any venture in which multiple stakeholders are involved. Consider whether the arrangement should build in natural break points, as well as general termination arrangements should the venture not meet its stated objectives and to mitigate reputational risk where possible. [129]
- 3. **Governance model**: Determine how governance of the foreign venture will be structured and managed at both the project and institutional levels. [129]
- 4. **Student plan (curriculum)**: Assess the learning expectations of the target market to determine the appropriate curriculum, including any practical certifications and degrees requiring specialized designations within the foreign jurisdiction. Determine whether core strengths such as specific degree programs or capabilities can be leveraged to enhance success in new markets. [129]
- 5. **Student plan (demand)**: Assess overall student demand for education in the foreign market. Maintaining adequate enrollment levels can be a challenge, so a robust marketing strategy and additional investments may be required. [129]
- 6. **Research strategy**: Align overseas research activities and opportunities with the home institution's research strategy, including research objectives and the organization's capacity to support. [129]
- 7. **Financial plan**: Determine overall budgetary requirements of the venture and assess its financial viability. Consider additional complications such as repatriation of funds whether revenues can be returned to the originating institution without triggering substantial withholding taxes and potential currency risks as a result of fluctuating exchange rates, and then develop appropriate strategies to mitigate and manage these effects. It is also critical to understand the cost of doing business in a new location, including potential compliance costs to fulfill local requirements. Ensure that appropriate contingency is built into the plan and that it covers a time period consistent with delivering the strategic aims of the project. [129]
- 8. **Tax structure**: Assess foreign tax requirements such as potential tax liabilities, the impact of potential withholding taxes or transfer taxes and tax registration and governance requirements. Assess whether there are any ways of structuring the operations which could legitimately reduce or mitigate the tax costs. Investigate whether academic and administrative personnel are required to submit local tax returns and/or pay local taxes. [129]
- 9. **HR plan**: Assess in-house capabilities and capacity to manage the expansion and comply with any foreign requirements to determine the appropriate staffing plan, which may include a combination of transferring employees from the home office abroad and hiring locally. Develop plans to address conflicting cultures, integration issues and ineffective communications. [129]
- 10. **Infrastructure plan**: Identify any location, facility and operational requirements based on the model proposed for entry into the foreign market. The campus location if applicable is critically important and can provide many benefits and/or risks to the home institution.

Understand associated capital costs for development, operations and maintenance and consider whether there are existing facilities that can be rented or leased in order to reduce expenses. [129]

11. **Technology plan**: Understand the impact of technology on the proposed operational model. [129]

2.8.12. Step 3: Conduct Due Diligence and Negotiate the Agreement

Due diligence is an investigation of a business or person prior to signing a contract, or an act with a certain standard of care. It can be a legal obligation, but the term will more commonly apply to voluntary investigations.

Conduct due diligence and negotiate the agreement. It is critical that the institution undertake robust due diligence to vet the plan and associated assumptions before negotiating with potential partners, if applicable. Note that this is not always a separate step and often occurs concurrently as the business plan is being developed and shaped. Due diligence helps identify significant issues and risk areas early in the process in relation to corporate structure and business activities, financial performance assets and liabilities, commitments and contingencies. It covers all areas in the business plan, notably:

- 1. Commercial, including any potential partners
- 2. Environmental factors
- 3. Intellectual property (IP) and patent protection
- 4. Integration and separation
- 5. Operational and cultural
- 6. Legal and regulatory
- 7. Tax and pensions
- 8. Accounting and financial
- 9. HR, information technology (IT) and other support services. [129]

Due diligence confirms that the selected market for expansion is a strategic fit and financially viable, that potential partners are compatible and that the market entry plan is operationally sound. Ultimately, it helps ensure that the higher education institution's brand will be protected as it pursues its transnational expansion objectives. [129]

Due diligence can be conducted internally or externally, depending on the institution's internal capabilities and the perceived risk of the venture. It is also often wise to partner with advisors who have a strong global reach. This provides the benefit of local project management complemented by global insight from teams who understand local transaction issues. [129]

2.8.13. Approve Agreement, Implement Business Plan & Evaluate and Review Project

Once all checks and balances are complete, the institution can confidently enter into partner negotiations in order to finalize the agreement and move into the implementation phase as mentioned in step 4 to 6.

- Step 4: Approve and complete the agreement
- Step 5: Implement the business plan

• Step 6: Evaluate and review the project For more details please refer the document "Extending the campus" by KPMG [129]

The Business Plan is most vital step in establishing Overseas Campus. Even smallest negligence is not acceptable. In next chapter, I would like to discuss many case studies and Intricacies of developing Overseas Campus.

Chapter 3: Why International Branch Campus Fail?

George Mason University-RAK's Vice President Zaid Ansari have summarized it best: "It's no joke. Anybody who wants to open up a campus here needs to take a reality check. We have learned three lessons – feasibility, feasibility, feasibility" [188]

3.1. Why International Branch Campus Fail?

There are known to have been **29 IBC closures** to date (since 1999). High profile closures include, Michigan State University in Dubai, George Mason University in Ras Al Khaimah, U.A.E., and the University of New South Wales in Singapore. Some of these are because student number targets were over-ambitious and the reality fell short. Kinser state as a 10 per cent failure rate since the mid-1990s. This failure rate is not particularly high in the context of international business start-ups...Often, these universities **do not appear to act like business organizations** when making decisions about international expansion. Rather than adopting a **systematic**, **data-driven approach**, it seems that many institutions have taken a rushed, opportunistic approach to international expansion. [202] [209] [276]

While branch campuses remain a popular facet of institutional international strategies, there have been a number of high profile closures. **It is worth highlighting that most of these closures were free-standing and primarily self-funded campuses**, in contrast to the new campuses, which are to be opened in conjunction with local partners... The basic reasons for failure are:

- Economic and political changes
- Falling enrolment numbers
- Changing government policy
- Withdrawal of financial support by the host government.
- Quality assurance
- Student demand, and
- Academic freedom [209] [227]



Fig. 3.1: Number of IBC closed from 1990 to 2010 [221]

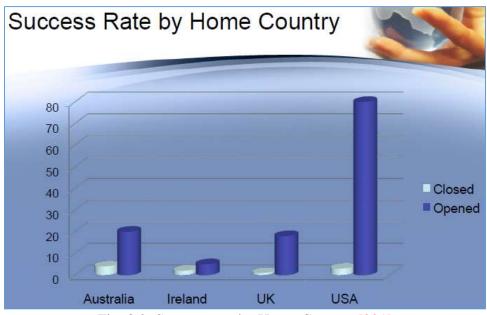


Fig. 3.2: Success rate by Home Country [221]

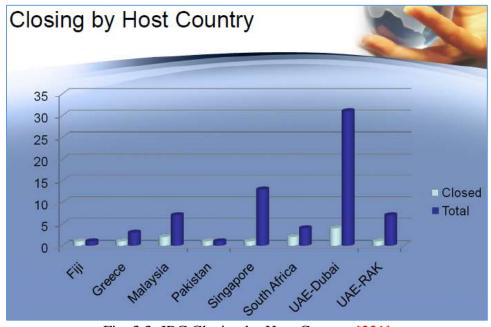


Fig. 3.3: IBC Closing by Host Country [221]

The overall number of international branch campuses continues to rise steadily. Despite this positive trend, however, **campus closures** still gain the most publicity, quelling the excitement of new ventures. This media spin tends to exaggerate the fragility of overseas operations, but it also sparks important questions of **why campuses fail**. As new universities attempt to play in the international field, they should **look less at their host country** and **more at the management and mission of the home institution** to strategically plan against failure. The key to branch campus success is **careful planning at the home campus**. Clear **harmonization of accreditation**, **faculty involvement**, **administrative processes** and **academic mission** will solidify the branch campus' trajectory and decrease its vulnerability to changes in the host country... Therefore, the **root of**

failure, even when external variables play a significant role, is the **initial planning of a campus**... Clearly implementing contingency plans, strategic linkages between the campuses, flexible frameworks of governance and realistic expectations for the new venture are essential to ensure an institution's viability. [180]

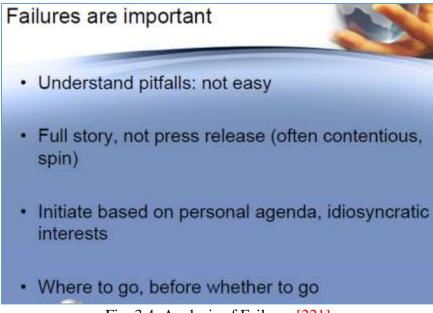


Fig. 3.4: Analysis of Failures [221]

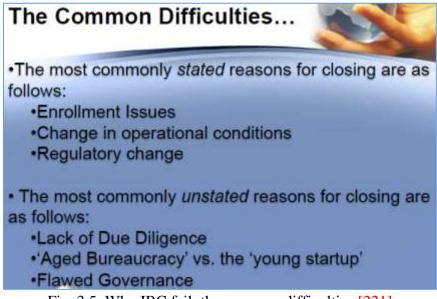


Fig. 3.5: Why IBC fail: the common difficulties [221]

However, at times the reasons for expansion **do not align with reality**, as the recent retreats of George Mason, Michigan State and the University of La Verne illustrate. These campuses, like the 26 others that C-BERT data report, closed because they **either encountered unexpected market and cultural conditions** or **lacked sufficient support from the home campus**. Unrealistic

projections of revenue and enrollment, regulatory conflicts, and incompatible partnerships are the hallmarks of a bungled branch. [236]

To understand the complexities of setting up overseas campus, I would like to quote few examples.

3.2. Brief Case Studies of IBC Failure or Serious Problems Faced by IBC

3.2.1. Newcastle University UK partnership with Singapore's Ngee Ann Polytechnic Singapore

Case Study:

Newcastle University UK partnership with Singapore's Ngee Ann Polytechnic Singapore

Setting up the contractual agreement was fairly straightforward. However, leaders at Newcastle University quickly began to encounter a number of unexpected challenges right from the start of the process.

- The university found that they now faced **additional tax implications** in Singapore, where withholding taxes were levied on the transfer of profits back to the UK. This required Newcastle's finance department to develop new projections for the venture that took into account the impact of withholding taxes on net profits. The need to factor these additional costs into their budget was a new experience for the university which had previously operated solely in the UK where tax relief is often available on income.
- Another challenge emerged when, in a number of cases, visiting Newcastle management and teaching staff found it necessary to **extend their stay** in Singapore, either to take on a second term or to complete an ongoing project. This created complexities around work visas and immigration, as well as tax implications for both the institution and the individuals involved. As a result, Newcastle University found itself with an operation that not only required significant time and effort to manage and sustain, its finance department had to develop new capabilities in tax that as a public institution it did not previously possess as a core competency. [129]

3.2.2. Michigan State University USA: Dubai IBC

Case Study: Michigan State University USA

In **2007**, **Michigan State University** launched a branch campus in Dubai, only to close all but one program three years later after low enrolment led to losses of \$4-million. [179]

Michigan State University (MSU) closed its doors in Dubai in 2010 because it failed to meet enrollment targets. As a state-funded university, the MSU home campus was unable to subsidize its branch counterpart. Following a business model, the branch could have increased local enrollment by adjusting admissions standards to matriculate less qualified students, but was unwilling to sacrifice the quality and reputation of its brand. Local competition was an additional factor as MSU's tuition ranged \$2,000-\$3,700 more than neighboring IBCs. [263]

3.2.3. George Mason University USA: UAE IBC

Case Study: George Mason's (USA) Branch Campus at UAE

George Mason's short stint in the Middle East may serve as one of the best examples of a failed international branch campus, as well as poor planning. The university's branch campus in the United Arab Emirates announced its closing just three short years after its official opening and without a single graduate to show for the time, money, and manpower invested. Having to pull the plug on the campus a mere three years after its founding clearly creates questions in the style, organization, funding, planning, and general consensus of an overseas campus.

The university's Provost Peter Stearns pointed to three issues as the basis of the university's failure.

- Slow enrollment growth
- Funding problems
- Disagreement with the UAE's government concerning funding Other areas presenting troubles were with
- Administration
- Academic standards
- School identity.

He also noted much of the problems associated with the branch campus could have been realized from the university's start, as opening a branch in the Middle East was much more complicated than originally thought. As early as 2006, and even before George Mason's branch campus was fully open, many American schools and educators had expressed concerns of the troubles and trustworthiness of creating complicated and involved ventures with foreign organizations, especially in the Persian Gulf and Middle East regions despite the appetizing benefits and funding. [188]

3.2.4. University of Waterloo Canada: Dubai IBC

Case Study: University of Waterloo Canada

The University of Waterloo is shuttering its branch campus in Dubai after only three years. University of Waterloo launched the campus in the fall of **2009** as part of an ambitious strategy to have hundreds of students complete two years of undergraduate engineering or mathematics in Dubai, followed by their final two years in Waterloo. But the campus, a partnership with the United Arab Emirates Higher Colleges of Technology, had only 140 students signed up this fall. To be sustainable, the business plan called for nearly 500 students. Efforts to establish global branch campuses have produced several cautionary tales, and University of Waterloo is not the only school struggling to find its footing. [129]

3.2.5. Webster University USA: Thailand IBC

Case Study: Webster University's (USA) campus in Thailand

An internal site review report released on Monday identifies a range of problems at Webster University's campus in Thailand, which the university promotes as offering American-style higher education. These include

- Substandard facilities
- Student safety issues
- Sorely "underdeveloped" student affairs apparatus
- Inadequacies in some academic support services and resources
- Inconsistency in communication or implementation of faculty policies and procedures, including those related to termination processes
- Seeming "inconsistencies" and "inaccuracies" in information included in accreditation reports
- A lack of direct communication to students as well as rank and file staff or faculty.
- Accreditation: In addition to being covered under Webster's American accreditation, the university's Thailand campus is also subject to the Thai government's quality assurance system. The task force found that "some apparently conflicting details" appear in the quality assurance reports and on the WUT website, and raises questions about whether Webster is in compliance with some Thai quality assurance requirements. (For example, the report notes, "Thai accreditation requires five full-time, research-active faculty for each program offered. The academic leadership of WUT and St. Louis must discuss how WUT can meet this requirement...") [183]

3.2.6. Malaysia Branch Campuses

Case Study: Malaysia Branch Campuses

Many of Malaysia's private universities, including **foreign branch campuses**, are facing financial and managerial problems and more than half will experience financial distress as a **result of recent changes to the national student loans scheme**, according to a new report. It says up to three quarters of foreign branch campuses and 70% of other private institutions could be affected in the coming year. More than half of the eight foreign branch campuses failed to make a profit in the period covered by the institute's analysis, which is based on company reports and a study of Ministry of Education data for 2013 – the latest available. [187]

3.2.7. University of Central Lancashire UK: Thailand IBC

Case Study: University of Central Lancashire UK

Last year (2013) was not a vintage year for the University of Central Lancashire's (UCLan) attempts to gain a foothold in overseas markets.

- In November it emerged that it will lose up to £3.2 million in the collapse of its planned **Thailand campus**. The university set up a joint venture company with the president of a Thai duty-free storage company that would own and run the campus, which was to open later this year. But the joint venture failed to complete the purchase of all the land needed after its partner's "circumstances changed".
- In the same month, UCLan won praise from UK foreign secretary William Hague over its plans for expansion into **Sri Lanka**, where the government has given the go-ahead for it to be the first overseas university to open a campus in South Asia. But Amnesty International UK told Times Higher Education that UCLan should "take note of the country's appalling human rights record".
- Both these episodes came just months after it emerged that UCLan's Cyprus campus was criticized as a security risk by the UN secretary general, Ban Ki-Moon, who was concerned by the campus' location in the buffer zone separating the island's Greek and Turkish communities. UCLan, which opened the campus in October 2012, has also been under pressure to prove that Cyprus is a fertile ground for student recruitment; the University of East London was forced to close its Cyprus campus in 2013 after recruiting just 17 students.

With UK universities increasingly looking to expand overseas, some believe that UCLan's dealings raise important questions for higher education as a whole. [192]

3.2.8. Failure of Off-Shore Campuses in Japan (1980)

Case Study: Failure of Off-Shore Campuses in Japan (1980)

History has proven that setting up off-shore campuses can be a **risky business**. In the 1980s, over **35 US colleges and universities** rushed to set up off-shore campuses in Japan hoping to take advantage of the growing Japanese economy and academic market. Recognition issues, coupled with the economic downturn, led all but two (Temple and Lakeland College) to withdraw. However, some of the oldest off-shore campuses – Johns Hopkins in Italy and Florida State in Panama – continue to operate more than fifty years after their opening. Yet over the last few years, many universities from different countries have been establishing off-shore campuses all over the world. There are relative success stories, as well as failures. [128]

During the **first wave**, most overseas programs were apt to be **supply driven** and **failed due to the lack of demand** in the host countries. For instance, more than thirty US universities established branch campuses in Japan during its economic boom in the late 1980s. These universities had low name recognition and almost all of these overseas programs were closed by the mid- 1990s due to low enrollment. **In contrast, the current wave is more demand driven**, and the main suppliers are large research universities with high visibility and strong reputations. [250]

There were several reasons for many foreign universities, especially US universities, to open campuses in Japan in the 1980s and 1990s. From the Japanese perspective, in light of increasing demand for higher education in the 1980s, there was an actual supply shortage of higher education services being offered by Japanese institutions; foreign suppliers filled this gap. For a Japanese student, studying at a foreign university campus in Japan was much cheaper than actually studying abroad and this became an attractive way to enjoy "foreign study." Some municipal and local governments in Japan were also keen to host foreign university campuses because this was considered an effective tool to attract members of the younger generation to rural areas. There were several reasons from the perspective of the export side as well. For example, the first reason was a huge trade imbalance between Japan and the US in the 1980s. Many US policymakers considered tertiary education services provided to the Japanese as a promising export items from the US to Japan. Secondly, the university-age population in the US stopped increasing in the 1980s and, as such, US universities tried to expand into international markets. In addition, a reduction of funding from individual state governments in the US gave impetus to the establishment of campuses in Japan. In short, foreign universities (US universities) came to Japan to make a profit. [267]

However, the majority of campuses in Japan established in the late 1980s and early 1990s had been closed down by the mid-1990s, before the government introduced its Japanese Campus of Foreign Universities system in 2004. It is striking that most campuses in Japan were closed down within 5 years. Foreign university campuses in Japan failed to attract the adequate number of students for several reasons. First, tuition fees were high compared with most Japanese universities. Second, foreign universities that opened campuses in Japan were not well-known schools and were not able to develop a good reputation locally. Most of them were state universities or community colleges in the US, not the more well-known Ivy League universities. As a result, competent Japanese students were more inclined to attend Japanese universities, while less qualified students chose to attend foreign universities in Japan. Third, the level of English language proficiency of most Japanese high school graduates was not high enough to study university-level courses taught in English. Fourth, the culture of US universities was not compatible with Japanese beliefs and customs. In particular, the low graduation rates at foreign universities are problematic, especially from the point of view of many Japanese. Finally, foreign campuses in Japan are not formally recognized as Japanese universities under the Japanese university system, and graduates are not regarded as university graduates in Japan. One consequence of this distinction was that graduates from campuses in Japan established by foreign universities were not qualified for postgraduate study. [267]

3.2.9. University of Connecticut (UCONN) USA: Dubai IBC

University of Connecticut



- Failed to open a branch campus in Dubai
 - December 2006 May 2007
 - Planned to offer programs in business, education, liberal arts, and engineering/computer science.
 - ·Encountered problems during the planning stages
- •Why did UCONN fail to open an international branch campus?
 - Cultural conflict involving Arab/Israeli relations
 - Criticism expressed by various university stakeholders
- UCONN is an example of how a geopolitical issue can derail an international branch campus opening.

UCONN: Geo-Political Issue - Reason for failed to open IBC [221]

3.2.10. University of Southern Queensland Australia: Dubai IBC

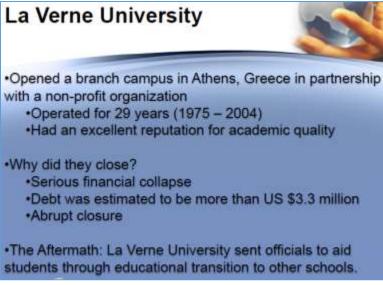
University of Southern Queensland



- Opened a branch campus in Dubai
 - •Open for one year (2004-2005)
- •Why did they close?
 - Absence of communication with senior administrators
 - ·Students lacked English language skills
 - ·Complaints by students and parents
- •The Aftermath: Over 100 students were left stranded.
 - •63 students transferred to the home institution
 - Others pursued distance education

University of Southern Queensland: Why did they close? [221]

3.2.11. La Verne University USA: Athens Greece IBC



La Verne University: Why did they close? [221]

3.2.12. Few More Examples



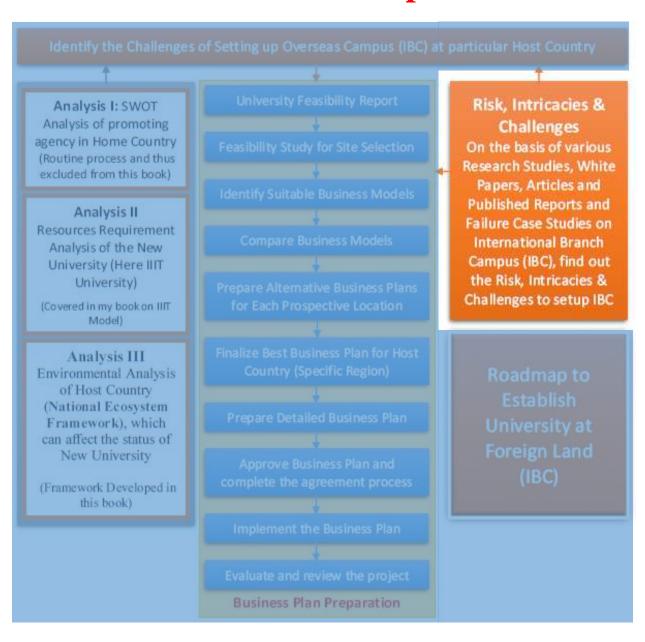
International branch campuses Things can go wrong

- RMIT in Malaysia: Malaysian partner's financial losses in Asian economic crisis (1997)
- Central Queensland University in Fiji: low enrolments & political instability (2007)
 - also closed campus in New Zealand in 2008
- University of Phoenix in Calgary and Vancouver: Unclear; possible relation to a lawsuit against parent company, Apollo Group of Arizona (2010)
- University of Northern Virginia in HK and Northern Cyrpus: accreditation revoked (2010?)

Fig. 3.6: Things can go wrong by OBHE 2012 [297]

The next chapter highlights the Risk involved in establishing University at Foreign land or International Branch Campus or Overseas Campus.

Chapter 4: Risks Involved in Establishing Overseas Campus



4.1. Legal Risks: Not Same Level of Legal Support at Host Country

Branch campuses may find themselves in a gray area in terms of regulatory risks. As part of the larger whole, they may have to conform to regulatory requirements of their countries of origin, while the capacity to address these requirements may not exist in their specific branch campus operational contexts. Branch campuses in countries whose legal systems differ significantly from that of the home campus may face risk simply because they may not be aware of how they are exposed. While the home campus might be able to enforce appropriate penalties regarding workplace **harassment**, **discrimination**, **or breach of copyright**, for instance, such issues may not have the same support of the legal system in the country of the branch campus.

• Despite the lack of equivalent legislative regulations in existence in Qatar, Northwestern University in Qatar has been asked by the Office of the General Counsel to produce proof of compliance with the Jeanne Clery Disclosure of Campus Security Policy and Campus Crime Statistics Act (Clery Act), Higher Education Opportunity Act (HEOA), Illinois Campus Security Act (CSEA), Family Educational Rights and Privacy Act (FERPA), and Health Insurance Portability and Accountability Act (HIPAA), to name a few. [222]

In most cases, the host country is the main authority of law for the IBCs whereas the home country is only a secondary source. This creates some interesting dynamics and complications for licensing and accreditation. The ACE in 2007 created a classification system of regulatory frameworks for IBCs on a scale of liberal to very restrictive in which they placed different countries according to their requirements for licensing and general functioning.

- Bahrain was identified as liberal
- Kuwait was identified as moderately liberal
- United Arab Emirates (UAE) was identified as very restrictive because of governmental control over universities' permission to operate within the country's borders. [228]

4.2. Risk of Sudden Changes in Government Policy

A particular challenge is that **government policy can change without warning**, in ways which adversely impact the viability of an IBC.

- IBCs are impacted by national legalization on immigration (for both staff and students), employment rights, taxation and planning. [199]
- The scale, speed and opacity of the government bureaucracy can also cause problems. [199]

For example:

- The decision of the Chinese government to revoke approval of 246 Sino-foreign joint programmes in December 2014. China's Ministry of Education is tightening legislation on Sino-foreign joint programmes and has revoked the approval of 246 existing programmes and institutions in a bid to better regulate joint ventures, motivated by concern over quality and reputation as the number of programmes has increased dramatically over the last decade. [199]
- In 2010, University College London (UCL) established a branch campus in Adelaide, as the South Australian regional government had a strategic plan to make the city a higher education hub. The government offered to provide US\$3.5 million in support to UCL over seven years. A change of leadership in the regional government brought a change in attitude to higher

- education funding and a reduced commitment to the higher education hub idea. Expecting no, or substantially less, financial support from the South Australian government after 2017, UCL considered the financial risks too high and it decided to close its campus in Adelaide. [264]
- In Qatar, the Qatar Foundation funded the establishment of eight international branch campuses at Education City, but since May 2011, these campuses have collectively become known as Hamad Bin Khalifa University. It is possible that at some time in the future, the Qatar Foundation might withdraw its financial support to the foreign institutions and instead nationalize and merge the campuses into one locally owned and controlled institution. [264]
- In 2013, Texas A&M University announced plans to open a campus in Nazareth, as the predominantly Arab population in this Israeli city is underrepresented in the nation's higher education. Texas A&M may have had good intentions in planning to establish this campus, but it was perhaps not ethical to announce its establishment before funds to build it had been secured, and given that Israel's legislation still effectively outlaws the branch campuses of foreign universities. At the end of 2015, it was still not clear whether this campus would ever be built. [264]

4.3. Risk of Social and Political Changes at Host Country

Although the key to long-term success lies mainly at home, few branch campuses are able to thrive when faced with dramatic social and political changes.

- Arab Spring refers to the democratic uprisings that arose independently and spread across the Arab world in 2011. The movement originated in Tunisia in December 2010 and quickly took hold in Egypt, Libya, Syria, Yemen, Bahrain, Saudi Arabia, and Jordan. The Arab Spring had lasting effects across the region as several institutions ceased their branch campus operations. Less volatile but of equal consequence are significant changes in government policy towards branch campuses. Fluctuations in government subsidies, initially designed to encourage investment, can make unprepared institutions vulnerable.....The 21st century is the age of globalization. It is also an era of political instability and the transformation of national policies and priorities in many parts of the world. Branch campuses operate in a national context. The current Arab Spring political and social unrest is an example of how drastically and unpredictably political circumstances change. It is impossible to know how the political and social transitions in the Middle East will affect branch campuses in the medium and long run. [180] [190]
- The current debate in **India** one of the world's largest potential student markets about government policies relating to branch campuses and other foreign higher education initiatives is yet another example of how unpredictable this environment can be. The terms and conditions of international involvement will be dramatically altered; and the practical aspects of how these policies will be implemented, in a country famous for opaque regulations, will only emerge over time. Branch campuses are vulnerable to changing and sometimes unstable environments. [190]
- It is important for IBC leaders to understand the need to adapt to local conditions, they also need to be aware of the stability or fragility of the local environment. Most IBCs are located in developing nations, where both governments and the higher education sectors may be in flux. Few institutions would make a decision to open an IBC in a country where they think the government may be overturned; however, the events of early 2011 in Egypt and some other

Arab countries show that it is **not always possible to predict the stability of a nation**. Even when a government is stable, most IBCs are operating in very fluid higher education sectors. Altbach has suggested that the **expansion of the local higher education sector** may prove to be one of the most significant threats to the sustainability of IBCs... These potential concerns reinforce the fact that even though some educational institutions are becoming multinational, education remains locally embedded. [230]

• Host governments and regulators have political agendas, which may change over time, impacting on the extent to which IBCs can, or cannot localize their staff base, curriculum and research. [229]

4.4. Risk of International Relationships of Home and Host Country

One must know the international relationship of Home and Host Country. It's a vital issue. It can create very embracing situation for home and host country. Sometimes it may lead to IBC closure.

- New York University Abu Dhabi (NYUAD): NYU administrators have been forced to acknowledge that local immigration laws regarding **Israeli citizens** may have an impact on hiring decisions. Since the U.A.E. does not have diplomatic relations with Israel, Israeli students and faculty cannot come into the country or be issued a visa. In fact, **non-Israeli students who have a stamp in their passports from a visit to Israel are similarly precluded from entry into the country**. [257]
- While establishing IBC of George Mason University USA at Korea, they have studied relationship of Korea and China. In addition to this they have also studied the problems like "Will Chinese students get USA visa for attending one semester at George Mason University USA?". [260]

The changes in foreign relationship can badly affect working and prospects of IBC at host country.

- a. <u>Do Chinese students need visas for studying in Korea?</u>
 Yes, they do need visas to study in Korea. According to MEST, there are 57,783
 Chinese students in Korean universities as of 2010. The procedure is similar to what American colleges do to issue student visa. Student visa type is D2 and students can apply to Korean Embassy with the required documents, which include 1) original letter of admission from University, 2) passport, 3) original educational document with photo copies, and 4) bank statement.
- b. Will these Chinese students have issues in gaining a visa to study in the U.S. in years 2 and 3?
 We are working with Christina Lehnertz at OIPS regarding a visa type to be issued for students from the Songdo branch campus. They will need either F-1 or J-1 visas but it is likely that Mason will issue the J-1 visa as it can require students to go back to the branch campus in Korea to complete their fourth year. Mason's China 1-2-1

Fig. 4.1: George Mason University USA gathered information about future Visa issues of Chinese Students at Korea before establishing IBC at Korea [260]

4.5. Reputational Risk: Maintaining Quality

Joanna Newman, director of the UK Higher Education International Unit stated that "However, there are also **major reputational risks** if it goes wrong – both for the institution involved and for the sector more generally". Where universities are one step removed from the teaching offered, it is much harder for them to monitor student experience, adds Bols. [73]

The management of academic quality at IBCs is widely researched area. This is because the key challenge for universities with transnational education is quality assurance. The reputations of individual universities are, in large part, based on the perceived quality of their academic awards. Providing education across borders exposes the UK universities to varying degrees of reputational risk. While IBCs are generally regarded as being towards the low risk end of the quality spectrum, maintaining quality control in IBCs may be more difficult because managers and staff operate in an alien culture far from the home campus. If many of the staff are locally hired, they may share different value sets from their managers and find it hard to apply academic regulations and procedures set far away in the home university. [199]

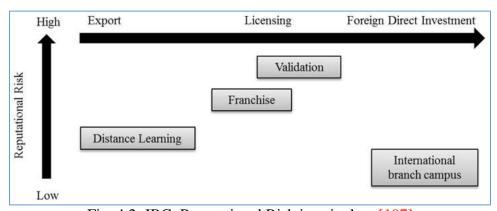


Fig. 4.2: IBC: Reputational Risk is quite low [197]

The lesser-known (particularly non-US) universities expanding abroad have less to lose and more to gain, whereas big-name US universities have a lot on the line in terms of their already-established international reputations/"brand names". [256]

4.6. Lack of Control of an Unfamiliar Environment May Pose a Significant Financial Risk

This lack of control of an unfamiliar environment may pose a significant financial risk as host countries or sponsors may prove to be unsympathetic. If a branch campus is under consideration as a joint or entirely sponsored venture, universities should carefully consider the risks or impacts of loss of financial support. Sponsors want to see their investment realized and will most likely have expectations and requirements that the branch campus must meet in order to continue their support. [222]

One example of the importance of meeting the host country's requirements is Johns Hopkins
University's medical program in Singapore. According to a University World News article,
the home campus shut down the program because the local authorities did not feel the

university was meeting expectations, failing to reach eight out of 13 performance benchmarks they originally set out. Johns Hopkins' administration believed this was an unfair judgment since the university had no control over the factors that led to its inability to meet those goals. [222]

4.7. Financial Risk: Exchange Rate, Interest Rates and Rate of Inflation

Macroeconomic uncertainties have the potential to greatly hurt organizational performance. There are many variables that managers should consider, and most are difficult to predict. These variables include

- Interest rates
- Rates of inflation
- Foreign exchange rates.

For example,

- the Indian rupee, which was on par with the US dollar in 1947 when India gained independence from the UK had in 2007 depreciated by more than 39 times, and since the global financial crisis of 2008, the rupee has continued to depreciate, and by 2013, one US dollar bought 65 rupees (The Economic Times, 2013). Thus, the price of an American degree delivered in India would have greatly increased in price over the last few decades. [276]
- Host Country Exchange Rates and Other Economic Issues Exchange rates and currency volatility were a factor in some cases. Extreme currency instability was noted as one of the reasons for turning down an opportunity to establish an IBC in South America. As one interviewee noted, "I know we did try to go into a Spanish-speaking country. We wanted to go to Mexico or Chile or somewhere else, but there were problems with currency issues and economics so they had trouble making that work." [234]
- Access to global Foreign Exchange (FX) risk management services and hedging tools can help reduce costs associated with managing the overseas enterprise and mitigate risks associated with fluctuations in foreign currency rates... Work closely with your financial partner to help identify, reduce and pre-empt FX risk by:
 - o Forecasting cash flows in varying currencies
 - o Utilizing all the prudent hedging tools, including forwards and options
 - o Determining the success of hedging activity on locking in your operating budget [262]

4.8. Risk of Quality: Replicating the Students

For a branch campus to provide an education equivalent to the form offered at the home university, the **student body must largely match the one at home in terms of selectivity and quality**. Especially for the more prestigious institutions—such as Cornell, Liverpool, Monash, and some others—this model will be difficult to sustain. For the many less-highly ranked institutions sponsoring branches, maintaining a branch campus will not be as problematic. It is questionable even now that **most branches accept only students who would be qualified at home**. These

problems will likely become more serious given the increased competition for the top students in the host countries. [211]

4.9. Risk Related to Unpredictable Future Market

In some cases, the pool of available students **may become unpredictable as more branches are developed**, and local institutions are inevitably improved. This particularly serious problem will likely infiltrate the Arabian Gulf region, where numerous branches have been established and the local and perhaps even the regional student population will have many other options over time. Some of the branches, established generally with funding from host governments or other agencies, are already facing enrollment problems, and many are operating under capacity. [211]

The local conditions make the **long-term outcomes of branch campuses unpredictable**. It is difficult to predict the future market for branch campuses as domestic institutions have become increasingly competitive and strategic in luring students..

- Branch campuses may be less attractive in **China** in the near future given the expanding local capacity at all levels.
- Likewise, a significant expansion of **India**'s domestic institutions is underway. The plan is to open these institutions to international students for the first time. [211] [266]

In addition, Wilkins and Huisman found that for Chinese and Indian students, a university's reputation was more important than the quality of its program. [266]

4.10. Risk of Resistance from Domestic Education Providers or Society

4.10.1. Resistance from Local Higher Education Sector

• In Greek Cyprus, the government's support of a branch of Harvard University's School of Public Health has prompted outcry from the local higher education sector, **particularly private universities**. Private colleges there have "long complained of second-class status" and are critical of the government's plan to "lavish millions on a prestigious foreign university rather than support domestic providers." [256]

4.10.2. Resistance from Local Population

• In Vietnam, government and international donor agency support of foreign institutions (Australia's RMIT and US's Roger Williams University [whose branch campus in Vietnam is called American Pacific University] has been **criticized by locals** who argue that "the funding should have been invested in bolstering the research capabilities of existing universities." In addition, critics say that the high tuition charged and only modest scholarship programs offered by the foreign institutions do not serve national objectives to educate more underprivileged students, nor are the 'Western-oriented' curricula, ESL, and US-based college prep courses relevant to Vietnam. [256]

4.10.3. Resistance from Government of Home Country

• The India Institute of Management-Bangalore (IIM-B) was initially thwarted initially the government of India in its effort to accept Singapore's invitation to establish an operation there. "India's Human Resource Development Ministry **did not express the necessary support** for the venture (the current charter for the institutions reportedly does not permit off-shore operations and would have to be amended) citing the need for all six IIMs to focus on meeting domestic demand for high quality education, rather than spending time and resources catering for students abroad." [256]

4.11. Partnership Risk

On partnership risk, one must read the entire research paper "Towards a risk-based typology for transnational education". It's a wonderful research work. I could not resist to include few important points from this research work. Many more important aspects have been discussed in this 31 pages research study. [270] [293]

4.11.1. Composition

Composition refers to the nature of the TNE partner. For the UK universities studied in the sample, there are a broad range of partners, including private companies, private for-profit education companies, public universities (autonomous and under state control) and government ministries. To illustrate this diversity, consider the following examples:

- Staffordshire University: partnership with autonomous public university (University of Madras).
- London Metropolitan University: partnership with state-controlled public university (Shanghai University of Traditional Chinese Medicine).
- London South Bank University: partnership with a public polytechnic (Nanyang Polytechnic) and a public health care provider (Singapore General Hospital).
- University of Wales: partnership with a not-for-profit theological college (TCA College, Singapore).
- University College Plymouth St Mark and St John: partnership with Malaysian Ministry of Education.
- University of the West of England: partnership with private, for profit education company (Brickfields Asia College). [270] [293]

1. Autonomous public university		1
2. State-controlled public university		
3. Public college		
4. Not-for-profit college	Increasing risk of	market failure
5. Government ministry		
6. Private university		
7. Private college		
8. Private company		Ļ

Table 4.1: Composition and risk of market failure [270] [293]

The risk of market failure is likely to increase the greater the divergence between the mission of the UK University and its partner. In partnerships between autonomous public universities, there is generally a shared mission in terms of achieving teaching and research excellence and enhancing international reputation. Public and not-for-profit colleges may have a broadly similar mission in terms of teaching, but place a lower weight on research and reputation. Government ministries have political goals, which may align with those of the UK university (e.g., promoting the quality of teaching), but are subject to change during the political cycle. For-profit private colleges have commercial objectives. [270] [293]

4.11.2. Structure

There are a number of ways that NTE partnerships are structured. Although the agreements are almost universally formal and contractual in nature, they can extend from a limited bilateral agreement to multilateral agreements. Similarly, the partnership agreement might be the only agreement that the university and the partner is involved with, whereas in other cases either or both have a multitude of other arrangements. For example:

- University of Warwick, Singapore Institute of Manufacturing Technology and Singapore Institute of Management: this is a multilateral agreement, involving the university and two partners, a public research institute and private, for-profit university.
- Bradford University and Institute for Integrated Learning in Management (IILM): this is a bilateral agreement, where the university has other agreements but the partner does not.
- University of London International Programmes and Singapore Institute of Management: this is a bilateral agreement, in which both parties have other agreements. [270] [293]

The risk of market failure is likely to increase with the complexity of the relationship. The lowest risk is where there is a straightforward bilateral arrangement between the university and the partner and neither party has any other arrangements. As the number of parties to the agreement increase, the complexity is bound to increase to accommodate the different objectives and circumstances of the additional partners. Similarly, the relationship becomes potentially harder for the university to manage when the partner has multiple other agreements, each of which may impose different obligations and constraints on the partner which may be in conflict. Finally, the more partnership agreements the university has, the greater the pressure on

management time of dealing with diverse agreements and the greater the risk that one fails. [270] [293]



Table 4.2: Structure and risk of market failure [270] [293]

4.11.3. Function

Function is concerned with the goals of the partnership (i.e., what it is intended to achieve). The literature review noted three broad goals for the development of TNE partnerships, namely to enhance the home university's global reputation (e.g., by building a global brand name or enhancing its research productivity by access to new academic talent and sources of research funding), to achieve a developmental objective in terms of capacity-building in the host market or to achieve commercial objectives. To illustrate

- University of Nottingham Ningbo: this partnership with the Wenli Education Group is intended to promote the University of Nottingham as a global organisation and to position it as research partner with the Chinese government. Its strategic objective is to create an 'international university...[in which] our three campus networks constitute a unique transnational teaching and learning environment hosting the largest number of international students of any British university'.
- Staffordshire University and the University of Madras: this is a capacity-building 'development partnership', aimed at knowledge transfer to allow the partner to develop expertise in the area of sustainable development.
- University of Wales and Fazley International College: this is a straightforward commercial partnership, in which the university validates the degrees of a private, for-profit college. [270] [293]

It is likely that the risk of market failure increases as the function of the partnership moves from reputational, when the activities of the partnership will tend to be limited (and aligned) to high quality teaching and research, through developmental to purely commercial, when decisions will primarily be taken in the interests of maximising short-term profits. This is because the **more commercially oriented the function, the greater the risk of short-termism** (especially if the entry and exit costs are low) and opportunism on the part of the partner. [270] [293]

Function and the risk of market failure			
1. Reputational goal			
2. Developmental (capacity-building) goal	Increasing risk of	market failure	
3. Commercial goal		ļ	

Table 4.3: Function and the risk of market failure [270] [293]

4.11.4. Scope

Scope refers to the range of activities covered by the partnership and the term of the agreement. In the partnerships studied, the scope varied from a component of a degree, typically the 'top-up' programme, through single degrees to a comprehensive range of undergraduate and postgraduate degrees. For example:

- London South Bank University, Nanyang Polytechnic and Singapore General Hospital: partnership involving the franchise of a single top-up degree from a polytechnic diploma.
- University of the West of England and Brickfields Asia College: partnership involving a single degree.
- Sheffield Hallam University and KBU International College: partnership involving a range of degrees from different faculties at the university.
- University of Liverpool and Xi'an Jiaotong University: partnership involving a comprehensive range of degrees from most faculties at undergraduate and postgraduate levels. [270]

It is likely that the **broader the scope of the partnership, the higher the risk of market failure**. This is because the difficulty of assuring quality and compliance with the agreement increases with the number and diversity of degrees covered by the partnership. [270]

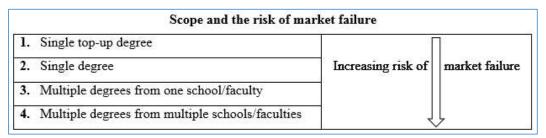


Table 4.4: Scope and the risk of market failure [270] [293]

4.11.5. Process

Process covers the means by which these goals are to be achieved, including the responsibilities and autonomy of each partner. In the partnerships studied, these varied from the partner being responsible only for 'back-office' support services to the partner designing, teaching and assessing a university's degree. For example:

• Durham University and Fudan University: Durham delivers a distance-learning degree, with teaching support and assessment provided by its own staff on a 'flying faculty' basis. Admissions are managed by the university. Fudan provides classrooms, administrative support, English language training and marketing.

- Harper Adams University and Beijing University of Agriculture: the degrees are jointly designed, the university provides quality assurance, but the partner undertakes the teaching and assessment.
- Open University and LASALLE College of the Arts: the partner designs, teaches and assesses the degree; the university provides only quality assurance. [270] [293]

It seems likely that the risk of market failure increases the more that key processes are contracted to the partner, in particularly admissions, teaching, assessment and curriculum design. Following Table suggests that the **risk is minimised if the university controls marketing** (i.e., marketing plus all the other processes below) and maximised if the university only controls quality assurance. [270] [293]

While following Table is consistent with a transactions cost approach to market failure, it implies that the more asymmetrical the power relationship between the home university and the partner, the lower the risk of market failure. As noted in the literature review, there is a counterview from organisational theory that the greater the power asymmetry between the partners, the less likely the partnership is to endure. One way of reconciling these alternative perspectives is that the risk of market failure associated with the process dimension may decline over time, as trust between the partners is built, so that sustainable partnerships tend to be associated with more symmetrical sharing of control. Nonetheless, at any given point in time, the greater the share of control retained by the home university, the lower the risk of market failure. [270] [293]



Table 4.5: Process and the risk of market failure [270] [293]

4.11.6. Outcome

In this context, the outcome of the partnership can be either a process or a product. In the case of TNE partnerships, the outcomes vary from building a sustainable, long-term partnership for the mutual benefit of both the university and the partner (process) to simply being the provision of an education service (or product). In practice, all TNE partnerships involve some degree of both outcomes. For example:

 University of Warwick, Singapore Institute of Manufacturing Technology and Singapore Institute of Management: while this partnership provides an education service (product), the primary outcome is the development of broader research collaboration between the university and the research partner (Singapore Institute of Manufacturing Technology).

- Queen Margaret University and International Institute of Hotel Management: this partnership also provides a product (a top-up degree), but the main outcome is to support the partner to become a leading hospitality management school (i.e., institutional capacity-building).
- University of Wales and TCA College: the primary outcome from this partnership is the education service. There is little scope to develop any wider form of cooperation between the university and the partner, with the former offering only a commercial validation service to the latter. [270] [293]

It is likely that the **greater the emphasis on process as an outcome, the greater the risk of market failure**. This is because the outcome is terms of product can be more easily specified and monitored, in terms of the number of students enrolled, the number of students graduating, the number of degrees offered within the partnership, etc. Broader collaboration in terms of joint research is much harder to achieve, success is harder to measure and so-called 'mission drift' an attendant risk the loftier and less-articulated the vision. [270] [293]

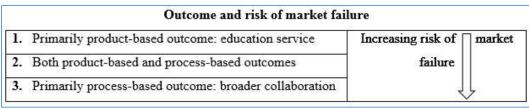


Table 4.6: Outcome and risk of market failure [270] [293]

4.12. Risk of Low Enrollment

Will branch campuses be able to enroll students of the same quality as their home-campus students over time? A number of problems in this respect are already evident.

- The University of New South Wales, for example, closed its branch campus in Singapore in 2007, after less than a year due to **low enrollments**. [190]
- Most of the American branches in the Gulf are reportedly under-enrolled. [190]
- The Indian University of Pune recently closed its doors due to low enrollment. [263]
- Michigan State University (MSU) closed its doors in Dubai in 2010 because it failed to meet enrollment targets as did George Mason University one year earlier when it closed its doors in the United Arab Emirates. [263]

A lack of qualified student applicants reportedly plagues many international branch campuses, although the literature is void of actual figures. The **ability to recruit** qualified and sufficient numbers of students clearly impacts institutional strategy.

- Several failed branch campuses such as the Michigan State University in Dubai blamed low enrollment as the primary issue leading to their closure.
- Qatar's Education City has struggled to attract qualified Qatari nationals. [209]
- While opening IBC of George Mason University USA at Korea, they have finalized the minimum student enrollment criteria as follows.

10-1. Minimum Enrollment

- a. What is the minimum enrollment that we must have to launch this program? We will be requiring no minimum enrollment of students during the first year of the Songdo campus. Because the government of Korea and IFEZA will be providing all needed funds in year one, there is no financial risk to GMU if our minimum enrollment numbers are lower than expected. In addition, when obtaining the approval to open our doors by MEST, we become subject to the regulation of preapproval from the Ministry of Education before dissolving our campus. Since the process of closing a campus could take several months, we will be open during the first year regardless of our enrollment numbers.
- b. By what point must we have this minimum enrollment?
 In principle, minimum enrollment will synchronize the loan amount we borrow.
 Based on the term sheet agreed with IFEZA, we will have a five year contract and are allowed to borrow the free interest loan up to \$10 million for first five years. This term can be extended to 10 years as we include this in our initial five year contract.
 According to our current enrollment projection and pro forma, we plan to borrow \$4.5 million to cover our operational deficit in the first three years. If we are unable to meet the target enrollment in the first three years, we may need to borrow more than \$4.5 million until we reach the maximum loan amount of \$10 million. The point we must have the minimum enrollment is contingent upon the loan amount we borrow rather than the fixed time period.

Fig. 4.3: Minimum Enrollment issue of IBC of George Mason University USA at Korea [260]

4.13. Saturation Point

• Laura E. Rumbley and, Philip G. Altbach suggested that "little to suggest that branch campus development has peaked, although it may have reached a "**saturation point**" in some places, such as **Singapore and Hong Kong**". [256]

There are, however, **limits to the growth of traditional export education**. Universities face capacity constraints. International students tend to be concentrated in subjects like business and engineering, which offer graduates the highest rate of return (in terms of higher lifetime earnings) on the costs of tuition and living while studying. International student numbers cannot, therefore, be expanded beyond a certain point without distorting the shape and academic character of a university. Perhaps more fundamentally, there is a limit to the number of students who are willing and able (financially and culturally) to study in a foreign country. While the total number of students in tertiary education has grown rapidly over the last 30 years, the percentage that study outside their own country (i.e. who are 'internationally-mobile') has remained fairly constant at around 2%. [289]

4.14. Different Boundaries: Can Risk the Sustainability of IBC

IBCs are filled with structural and cultural boundaries and successful IBC leaders must learn to overcome such boundaries. The liberalization of trade policies and improvement of technology have allowed for colleges and universities to overcome geographic boundaries and expand their global foot-print, but little attention has been given to how these changes have affected the operational aspects of these multinational educational organizations. In some ways the ease of expansion has created more boundaries within the administrative and academic operations.

When spanning boundaries, individuals are often associated with each group that the boundary divides. Unfortunately, the tendency is for neither group to claim the boundary spanner as one of its own. In fact, the boundary spanner will often be perceived as working on behalf of the other group and may encounter distrust from both groups. Despite these drawbacks, not learning to span the boundaries that are part of the IBC can risk the sustainability of the organization. The types of boundaries that exist within IBCs are briefly described next.

4.14.1. Campus Boundaries

The most **significant boundary that exists** is that between the home campus and the branch campus. No matter how the IBC is structured or how it is governed, those on the home campus usually view the IBC as part as something "different" or "apart" from the home campus. Coleman explains this phenomenon by suggesting that those on the home campus often consider the IBC within the institutional periphery and rarely consider it a part of the academic core. As such, it is often considered a low priority for many on the home campus.

- Lim's study of Australian IBCs illustrated the impact of such a boundary in finding that that there was a general lack of agreement between the home and branch in terms of what it meant to provide a comparable education to students.
- Lane's analysis of governance structures found that faculty and staff on the IBC often feel disenfranchised and disconnected as they have limited means for engaging in the institutional governance structures.
- Hefferman and Poole, in their study of Australian universities in Southeast Asia, found that
 disconnects between the campuses can lead to an absence of trust, commitment, and effective
 communication, which can in turn lead to a deterioration of the offshore enterprise. [230]

4.14.2. Vertical Boundaries

The creation of an IBC often merges, at least in terms of geographic proximity, several functions that operate distinctly from each other on the home campus. However, the vertical administrative silos that exist on the home campus can often be extended to the IBC. Many American IBCs in the Middle East use the same academic and administrative governance structures as exist at the home campus. These horizontal boundaries can make it difficult for those within the IBC to work as a team to operate the IBC. These vertical boundaries sometimes create further problems when the academic and professional staff report back to supervisors or departments on the home campus. This reporting structure may be intended to help integrate the IBC staff with counterparts on the home campus and to ensure compliance with home

campus policies and procedures. Unfortunately, this can reestablish the home campus silos at the IBC and may make it difficult for the IBC leader to coordinate the functions of the IBC. [230]

4.14.3. Temporal Boundaries: Time Zones

Many branch campuses are in a **different time zone** from the home campus, so establishing help desks in both the home and offshore campus would enable a university to offer students and staff support over extended hours. [224]

Many IBCs are located several time zones apart from the home campus. In many cases, there is very little overlap in the workdays of the two campuses, making it difficult to coordinate meetings and often extending the decision-making processes. This is particularly problematic when the IBC exists in a country when the workweeks runs from Sunday through Thursday, as is often the case in majority Muslim countries where Friday is a holy day. The temporal boundary makes it difficult for even simple issues to be quickly addressed when it involves staff on both campuses. The time differential can make it difficult for individuals to discuss an issue over the phone or to quickly exchange e-mails and when meetings are scheduled. Furthermore, those making time-sensitive decisions on the home campus do not often think about the impact of their decisions on the functions of the IBC. For example, it is not unusual for IT administrators to schedule updates to student-management software in the middle of the night so as to minimize the impact on users. However, what is the middle of the night at the home campus may be the middle of the workday at the IBC and thus cause a severe disruption in services. IBC leaders must recognize the effect of temporal boundaries and find ways for the staff at both campuses to compromise on their schedules and help the home campus staff to realize the potential implications for their decisions on the functions of the IBC. [230]

4.15. Risk of Critical Resource Availability

The ability to acquire books and equipment may have significant impact on the quality of teaching.

- Northwestern University faced resource acquisition challenges at the beginning of its establishment of a branch campus in Qatar. With degree offerings in communications and journalism studies, availability of media equipment was critical to course work. However, monopoly by a single vendor in the local marketplace meant that administration had to choose between spending 30 percent more to buy equipment locally or to ship it from known vendors overseas and risk a longer delivery time and likely delay by customs upon entry. [222]
- In conservative societies, customs officials may hold back educational materials containing nudity or political content. The host, sponsoring institution, or the appropriate governmental agency should seek support for the import of such materials prior to finalizing a branch campus agreement. [222]
- Provost, Peter Stearns, from George Mason University in 2006 said "a task as simple as ordering books can take months because of government censors." [261]

4.16. Increase in Cost of Leaving and Running Cost Can Affect Growth of IBC

In November last year, Tisch Asia, New York University's arts school, shut its Singapore branch, reportedly because of huge deficits due to **high running costs**. [215]

Singapore is now one of the most expensive countries globally to obtain an undergraduate degree once the high cost of living in the city state is taken into account. Foreign student numbers have fallen as fees have been rising – and at a much faster rate than those for locals. At Singapore's top-ranked public universities,

- Undergraduate fees for foreign students are around S\$15,300 (US\$12,000) for humanities and social science degrees, an increase over last year of more than 11%, compared with an 8.6% increase for Singaporeans.
- The cost of a business degree or management degree has risen in the past year by as much as 15% for foreign students to S\$31,200 (US\$24,500), compared with a 6% increase for Singaporeans that allows them to obtain the same degree for S\$9,250 (US\$7,200).
- Fees for undergraduate law degrees have risen by an eye-watering 17% in the past year compared with 8% for Singaporeans, according to official figures.

The fees rise coupled with high living costs has been exacerbated by a strengthening of the Singaporean currency, HSBC notes. [215]

4.17. Faculty Retention Risk

4.17.1. Stressful and Less Supportive Environment

Loss of staff naturally lends itself to the risks associated with loss of business continuity and institutional knowledge. In a startup environment of a branch campus, the likely chaotic and unstructured nature of operations may further increase this risk, as staff may encounter a stressful and less supportive environment than what they may encounter at more established higher education institutions. In setting up a branch campus, institutions should carefully manage employee expectations during recruitment and establish internal support systems. [222]

4.17.2. International Engagement: Not Valuable for Promotions and Reluctant to Leave Research

Frequently, institutions hope to have home campus faculty teaching at branch campuses, a model that is prevalent in Asia and the Middle East. However, recruitment and retention of such faculty is an ongoing issue of sustainability, particularly if international engagement is not recognized as valuable in tenure and promotion criteria. Moreover, senior faculty members are often reluctant to leave their work, alienate themselves from their colleagues, or lose momentum in their research. [222]

4.18. Risk to the Quality of Education and Local Accreditation

The branch campus should have responsibility of the control of academic programming content and standards. The lack of control in this regard may pose significant risk to the quality of education at the branch campus. In addition, branch campuses in the Middle and Far East may face issues of censorship, something beyond the control of branch campuses or their hosts and partners but with direct influence on academic freedom and the content of programming. [222]

Accreditation by educational bodies in the university's home country is an official recognition that the branch campus meets the goal of maintaining degree quality. Home campuses whose goals include accreditation of their branch campuses will need to consider the impact of accreditation requirements on their branch campus operations in terms of the time and effort required and make the ability to meet these requirements a key priority. George Mason University learned this **lesson** when, after almost four years of operation in the UAE, it was forced to close down in 2009 due to a 50 percent reduction in its subsidy and pressure from the university's sponsor, Edrak, that the branch campus academic dean report directly to Edrak instead of the university provost. The lack of resources and risk of losing accreditation due to the reporting structure forced the university to close its branch campus before it was able to produce a single graduate. George Mason University students could not transfer their credits to other Emirati institutions as the university was not yet locally accredited. The home campus should also take into account the accreditation requirements of the host country, if any such requirements do exist. While this might not influence the ability of a branch campus to meet its key goals or a sponsor's requirements, it may allow for better integration in the host country's higher education environment and gives students the opportunity to transfer from local institutions to the branch campus, opening another avenue for student recruitment. [222]

4.19. Risk of Misinterpretation: Lack of Common Terminology

IBC form of education has become increasingly important to students and both host countries and exporting nations, a lack of common terminology, data collection and regulation creates problems both for students and countries, according to a new report released by Going Global, the international education conference of the British Council and the German Academic Exchange Service. The report is based on an in-depth study of 10 countries where international campuses operate. The report studied TNE in Botswana, Egypt, Hong Kong, Jordan, Malaysia, Mauritius, Mexico, Turkey, United Arab Emirates (Dubai) and Vietnam. The report calls such campuses part of "transnational education" (TNE) and includes in that category both freestanding institutions and those that are branch campuses of universities elsewhere. There is "confusion within and among countries about what the different types or modes of TNE actually mean and involve," the report states. In some countries "the overall concept of TNE is not clearly understood at the national policy level, leading to confusion from the top down." [181-182]

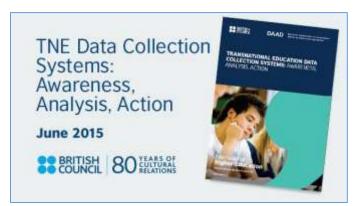


Fig. 4.4: Report on "Transnational Education Data Collection Systems" by British Council [181-182]

Where data are collected or policies are developed, the report says, there is inconsistency on what various terms mean. For example

- "Joint degrees" (theoretically those co-managed by a university in the host country and one outside) appear to mean many different things, with varying levels of involvement by the host institution.
- In Malaysia and China, building capacity means not just absorbing local excess demand, it also holds out the prospect of strengthening the quality of public universities through a 'demonstration effect' and, in the case of Malaysia, may also help attract more international students to the country. The objective of capacity building requires the IBCs to bring new pedagogies and teaching methods from their home universities.
- Terms very basic to effective quality control -- such as "**registration**," "**accreditation**" and "**quality assurance**" -- also appear to mean very different things in different countries, the report says. As a result, in many countries there is "chaos and confusion" over the institutions that have arrived and grown in recent years. In addition, the report says that the lack of data or a common language hinders good policy. [181-182] [229]

4.20. Risk of Not Getting Expected Internal Support from Home Country

Branch campuses may require a unique range of **support from both their home campuses and externally** to mitigate the effects of risks on the attainment of key goals. Branch campus issues should be high on the agendas at the home campus for the first few years, and the home campus should empower a **task force of committed internal stakeholders to provide support** during this time. Just a few of the internal partners of **Northwestern University's branch campus in Qatar** are listed in following Figure to illustrate the type of support that a home campus can provide. [222]

Illustrating the difficulties of trying to access support from the home university, one inexperienced manager explained that when he had been seconded to the Gulf, he had been **promised regular meetings** with the vice-chancellor and senior colleagues over **Skype to provide him ongoing support and mentoring**. In the event, 'in the UEA video conferencing is illegal'. The support became limited to occasional telephone conversations. [229]

	I: INTERNAL SUPPORT FOR BRANCH CAMPUSES		
HOME CAMPUS DEPARTMENT	EXAMPLES OF SUPPORT SERVICES		
Office of the General Counsel	Providing legal advice Reviewing contracts Reviewing waivers and indemnification documents Ensuring adherence to regulatory requirements		
Risk Management	 Reviewing and providing advice on insurance products Supporting the creation of a branch campus insurance framework Providing duty of care obligation advice Supporting international travel risk mitigation 		
Academic Deans of the schools represented at branch campus	Supporting academic programming content Assisting with home campus faculty recruitment		
Purchasing	 Leveraging home campus vendors for services in branch campus location Integrating purchase policies and procedures into branch campus environment 		
Student Affairs	 Helping create branch campus guidelines for student organizations Creating synergies and student collaborations between campuses 		

Table 4.7: Northwestern University's Internal Support from Home Country for IBC at Qatar [222]

4.21. Risk of Social Unrest

Academic staff and international students are less likely to want to go to countries that are considered unsafe or where the threat of social unrest is high; the same is true if the threat of war or military conflict with neighboring countries is high.

- In 2011, there was a sustained period of protests and rioting in Bahrain, which has recurred sporadically since on a smaller scale,.
- In 2014, there were large demonstrations and sit-in-the-road protests lasting several weeks in Hong Kong. Several institutions in Hong Kong cancelled classes during this period, either because of blocked access to campuses or because thousands of students boycotted lectures. [276]

4.22. Goal and Associated Risk

Goals	Advantages of IBC for Reaching Goals	Potential Risks
Enhancing parent institution's reputation	Enhances global influence and recognition	Failure of IBC and damage to the institution's reputation
	 Increases ability to recruit top quality students and faculty 	Greater financial cost relative to alternatives such as franchising or
	 Allows institution greater control over its brand and reputation relative to other forms of internationalization 	twinning arrangements
Creating research and academic opportunities	Develops international research linkages with faculty and research centers	 No great risks, but research opportunities are less important for
	Enhances the parent institution's ability to facilitate international academic experiences for students	teaching-oriented institutions
Gaining access to student markets	Protects or expands regional market share in areas that already have a high demand for the parent institution's services Serves excess demand Offers something better or different than local alternatives	High tuition fees that make it difficult for IBCs to compete with local alternatives
Altruism	Promotes religious ideals Serves underserved markets	Conflict between altruistic missions and the practical need for financial sustainability
Financial gain	Earns additional revenue through tuition and management fees Accesses new student markets that	 Failure of IBC with potential cost to institution of millions of dollars due to sunk costs related to building
	provide new sources of revenue	infrastructure, legal fees, program development, etc.
	 Indirectly benefits finances by improving reputation, which enhances institution's ability to recruit tuition- paying students 	*************************************

Table 4.8: IBC: Goals and Risk [234]

4.23. Risk of Lower Alumni Support

Donations and Financial Gifts from international alumni are, in general, lower than those from domestic alumni. This phenomenon is particularly relevant to American HEIs because, country to HEIs in most other countries, US institutions rely on alumni donations to find their activities. [232]

4.24. Risk of Climatic Conditions and Disaster Prone Areas

4.24.1. Frequency of Natural Disasters

In some countries, natural disasters occur frequently or regularly, such as typhoons in China and Hong Kong; monsoon floods in India; earthquakes in Indonesia and Japan; and droughts in parts of Africa. The potential for such disasters might make the financial risks in some countries too high for institutions; also, academic staff and international students are less likely to want to go to countries where natural disasters are common. Natural disasters have the potential to disrupt routine operations and to damage physical assets, such as campus infrastructure. [276]

4.24.2. Climatic Conditions

The physical and natural environments can also have significant effects on an institution's operations and attractiveness to potential students.

• International students might not want to go to the UAE because of the extremely high temperatures experienced during the summer months, which typically exceed 45 C. [276]

4.25. Hire Market Analyst and Lawyers

At Korea's Silicon Valley, Utah and Belgium's Ghent University are working together to start operations between September 2013 and March 2014. But the Utah University must complete ongoing feasibility studies. The school has hired **consultants** to do a **market analysis**, and its **lawyers** are exploring Korean labor laws. The goal is to determine whether the proposed campus fits with the university's mission and its economic viability, then present a recommendation to Utah University trustees by the end of this year. [255]

Despite the local support available there is always a need for independent research or support from **local lawyers** or **employment experts**. UCL, for example, has had to draw on external advice on both its Australian and Kazakh projects. There have also been small complications such as the requirement to translate employment contracts into Russian in Kazakhstan. [283]

4.26. Risk Management Framework, Risk Assessment Specialist & Insurance Consultant

A branch campus might be a private, profit earning venture; a partnership with a local institution; or entirely sponsored by a local government or corporate entity. Each of these contexts brings with it unique risk considerations. As such, home campus **risk management frameworks** may fail to transplant successfully to the branch campus. In establishing a branch campus, the home campus should gear risk management measures towards aligning the institution with its goals, values, and mission and meeting established benchmarks that underpin the progress of such an operation. In doing so, the home campus may also minimize the impact of any potential risk – risk that may be reputational, strategic, financial, or regulatory in nature. [222]

Ivana Chalmers has worked at Northwestern University in Qatar (NU-Q) since its inaugural year of 2008. NU-Q provides undergraduate degrees in journalism and communications. With a diverse employee community and students of 24 different nationalities, this unique environment results in a one of a kind operational context. Ms. Chalmers is the **risk assessment specialist for the branch campus**. At NU-Q, Ms. Chalmers' **portfolio encompasses a wide range of duties in a risk environment where precedents are rare, established policies may be unsuitable, and the context differs starkly from that of Northwestern's home campus**. Her role includes **assessment of risk exposures** and **evaluation of insurance needs** for the campus, while serving as a point of contact to **internal and external security, legal, and risk management** stakeholders. She is a key contact for and a member of several **security, safety, and emergency management** committees. [222]

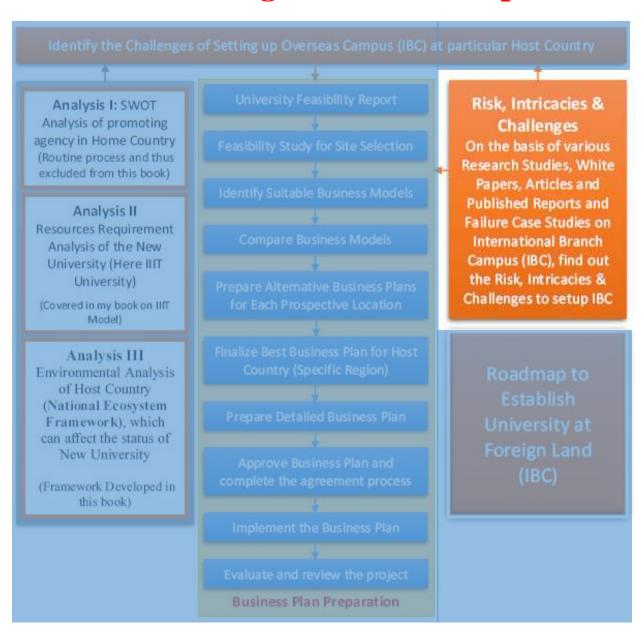
4.27. Texas A&M University USA: Use of ERM Software for Risk Management



Fig. 4.5: Texas A&M University: Enterprise Resource Management (ERM) for Risk Management [306]

In addition to the Risk involved, one must study the Intricacies and Challenges faced by existing IBCs all over the world. All the stakeholders must know these aspects to prepare the business plan, to establish the IBC and for smooth working of IBC. I would like to cover these aspects along with counter examples in the next chapter.

Chapter 5: Intricacies and Challenges of Establishing Overseas Campus



5.1. Environment & Culture

5.1.1. Key Differences between Home and Host Campuses

	Home campus	Host campus
Resourcing	Well-resourced teaching, library and student facilities.	Poor library resources and student recreational facilities.
Staffing	Well-qualified.	Perceived to be of lower quality compared to the home campus. Greater usage of part-time faculty. Staff teach greater hours per week
Research	Research active.	Very little research undertaken. Teaching focused.
Student performance	Higher student performance compared to overseas institutions.	Lower student performance. Possible causes: - Lower entry students - Varying learning styles - English language ability
Curriculum	Greater variety in programmes.	Less curriculum. Western dominated. May not always be applicable to market needs.

Table 5.1: Key differences between Home Campus and Overseas Campus [203]

Marguerite Dennis, a veteran international educator since 1967, who has worked on branch campus agreements, says:

"I don't think anybody should go into a country without understanding the economic and political situations, the marketing opportunities, the literacy rate, whether there is an upper middle class, and who your competitors are."

Fig. 5.1: Opinion of Marguerite Dennis, a veteran international educator [303]

5.1.2. Different Environment: Aligned Policies, Merge Culture, Fully Investigate

The **political**, **legal**, **and cultural environment** of the off-shore campus will not be the same as that of the home campus. **Many institutional leaders have tended to believe that the policies and practices of the home campus will work at the branch campus, but, often, they do not. Leaders of both the home and host governments need to be willing to make decisions quickly** and to respond to environments that are often different from what they are accustomed to. [128]

Of particular concern is "administrative protocols being controlled by managers on the home campus". In one case, for example, IBC admissions were handled centrally by the home campus under identical procedures and review processes. **Not adapting the recruitment and procedures to the host country environment** made it **difficult for admissions staff to recruit students** and led to students feeling frustrated by the process, ultimately to the detriment of IBC's success. [230]

One of the most difficult challenges faced by parent institution leaders and on-site managers of IBCs is the **need to merge different cultures and academic standards**.

• For instance, a degree program may take only **three years** in the United Kingdom, but Chinese academic standards dictate that it should be **four years**. These differences can affect the way curricula are developed and content fleshed out [234]

According to C-BERT data, most IBCs that have closed their doors have done so because they failed to adapt to the local environment or their business plans were flawed or based on inaccurate or unsubstantiated data. In both failed and successful IBCs, enrollment projections usually fall short and the academic preparation of students proves to be lower than what is initially assumed. Degrees desired by government or other local employers may not necessarily translate into student interest in those degree programs—a substantial dilemma for a tuition-driven financial model. Thus, IBCs need to be certain to offer degrees that local students have an interest in pursuing. In practice, this often means that an IBC's academic programs are mostly professionally oriented, such as business and engineering. [230]

Many host countries are much more conservative in nature than the home country, and it is important that the IBC leadership and staff understand different cultural traditions and expectations. For example,

- The regulations in countries like China mandate the teaching of certain courses (e.g. political economy, physical education) and **do not recognize distance-learning**. [229]
- It is a truism that people do not shop in the same way in all countries; the concept of the contract does not directly translate across cultures. In fact, many IBCs are located in places where deals are done with haggling and a handshake, not bidding and contracts. [230]
- The Malaysian Qualifications Agency sets minimum educational thresholds (normally a master's degree) for academic staff. [229]
- In many Islamic countries,
 - It is not appropriate (and in some places illegal) for unrelated men and women to reside together. Thus, it is important to have student residence halls with a clear demarcation between where male and female students live, even if the students are not Muslim.
 [230]

- Non-Muslims do not have to abide by all religious rules; however, in some nations, there are certain expectations about how all men and women should dress and how non-Muslims should act during religious holidays. [230]
- O Because the American University of Sharjah (AUS) is in Sharjah, it also follows some of Sharjah's strict decency laws. Men and women are housed in separate dormitories on different sides of the campus and women have a curfew that they have to follow or they are reported to their parents. In addition, tank tops and short skirts are banned from campus, as is any public display of affection between men and women. In the classroom itself, which often has members of the ruling families as students, faculty members do practice a certain amount of self-censorship. They do not criticize social and economic hierarchies in front of their students because they never know how influential or connected their students might be. While American universities exist in the Gulf, tenure, if available, is tied to US home universities, and jobs are bound to visas that can be revoked at any time for any reason. Classes at these universities teach Islamic cultural history and Gulf Studies, but they do not provide much information about expatriate communities or their histories in the Gulf. Professors also told me how divisive the classroom can become when they broach topics such as migration, so they tended to tread very lightly or avoid such topics altogether. [304]
- Non-Muslim students would not be expected to fast all day during Ramadan, which is the requirement of Islam. Many locations frown on anyone eating or drinking in public areas. Thus, during Ramadan, some campuses have designated certain rooms, usually without windows, as locations where non-Muslims can eat and drink during the day.
- In a strict Islamic country, female students may not be able to sit in classes with male students unless they are chaperoned; one-to-one tutorials between male academics and female students may be unthinkable. [229]

5.1.3. Don't Extrapolate Knowledge of Home Country to Host Country

IBC leaders need to be sure to engage in due diligence in advance of creating the IBC or of accepting the leadership position. In many cases, those making the decisions about whether to open an IBC in a particular country have relied primarily on a limited number of contacts in the host country. Ample evidence from the literature and C-BERT documentation suggests that academic leaders are not fully vetting their intended foreign partners or the information that they provide. Moreover, academic leaders seem to make decisions based on extrapolations of knowledge about the home institution environment without fully investigating host country environmental conditions. [230]

5.1.4. Must Respect Local Values and Should Know, Which Values Are Not Negotiable

Some of the Western HE providers have been accused of not respecting local values of non-Western host countries and trying to impose their cultural values and beliefs through their educational systems. This has been referred to as **cultural imperialism or a new way of colonization** and exploitation of developing countries that jeopardizes the sovereignty of the targeted countries. Such allegations are of course harmful to TNHEIs both in economic and reputational terms. [189]

Being very clear about **cultural differences is crucial**, says Farahi of Kean. "[Host governments] need to know which values are **not negotiable**," he says. "If there are differences in rules and laws, you have to find ways to solve those." [243]

5.1.5. Two Polarized & Conflicting Forces Pull IBCs in Opposite Directions

The extent of cultural distance dictates the necessary level of local adaptation. In other words, the closer the cultural distance among nations, the less adaptation is necessary; the further the cultural distance among nations, the more adaptation is required... Standardization and adaptation are two polarized forces pulling IBCs in opposite directions. The forces of standardization pressure IBCs to provide identical learning experiences and to uphold the quality and reputation of the home institution. Simultaneously, the forces of adaptation pressure the IBC to conform to the host country's regulatory framework, cultural values and local consumer demands. [263]

Major challenges inherent in IBCs encompass two conflicting forces pulling them in opposite directions.

- One set of forces is the need to replicate the home country environment by providing
 - Identical learning experiences
 - Maintaining quality standards
 - o Protecting the institution's reputation, and
 - o Complying with common academic policies and procedures.

These forces push the IBC toward global integration and standardization, which ultimately enable the IBC to confer degrees from the home HEI. To protect the HEI's reputation and uphold its degree appeal, HEIs may establish systems to ensure maintenance of quality, which often result in equivalent admissions standards.

- A second set of forces compels the IBC to adapt a locally responsive strategy. These forces include
 - o The need to conform to the host country's regulatory environment
 - o The need to adapt to local consumer demands in order to establish external legitimacy
 - o Prevent accusations of cultural imperialism.
 - Internationalized curricula. Internationalizing the curriculum requires teaching global concepts with localized examples. [263]

David J. Skorton, President of Cornell University said the global drive benefited the United States. "Higher education is the most important diplomatic asset we have," he said. "I believe these programs can actually reduce friction between countries and cultures." [280]

5.1.6. IBC: Not Controlled by Home Country but by Local Stakeholders of Host Country

Nigel M Healey stated that "In the three countries (China, Malaysia and UAE) covered by this study, the degree of governmental involvement in the higher education sector is more direct and explicit than in the UK". As one manager explained, "**universities here are not self-governing**. This is something in British higher education we just take for granted. Here we are directly accountable to the Ministry of Education." Managers of IBCs also have to deal with host

regulators. The regulatory bodies play a crucial role in constraining the degree of customization of the curriculum. [199]

The policies and regulations imposed by a host country government will have a great impact on the operation of an international branch campus, but a host country government may have a set of interests and values that are quite different from the institution's home country government, which has the **potential to create conflict, discomfort, and uncertainty**. [264]

Branch campuses overseas have been often derided as colonial outposts of the home university, representing the "McDonaldization of higher education". But the reality is that most campuses are legally established as private universities in the host countries, **controlled by local majority shareholders**. Most of the staff are employed by the local entity, not the home university, and are hired locally. The **campus functions under the watchful eye of the host ministry of education**, which can variously require the teaching of specific courses (such as cultural courses in China) and set tuition fees and enrolment quotas, such as in Malaysia. [69]

In some countries, the government places a great number of regulations, conditions, and checks on foreign institutions.

- At one extreme, the curriculum may have to be exactly the same as at the home university. One manager said bluntly, 'we are not permitted under the terms of our license to offer awards that we don't offer in the home university'. [199]
- At the other extreme, the host regulator may have requirements which are completely alien and require significant changes to the curriculum. The Chinese Ministry of Education mandates a range of 'patriotic education' courses. [199]
- In another research study, Nigel Martin Healey stated that "Here [in Malaysia] we are directly accountable to the Ministry of Education. For example,
 - o If we want to change our entry level requirement grades, we have to get their permission.
 - o If we want to change our fees, we have to get their permission.
 - o There are 48 different approvals we need.
 - o Every member of staff has to have a teaching permit
 - In the UAE, the managers of IBCs often have to deal with the ruling family directly to bypass bureaucratic obstacles. One recalled the importance of maintaining a close personal relationship with a crown prince: our 'relationship was good, so much so I have his mobile number.
 - o A particular challenge is that government policy can change without warning, in ways which adversely impact the viability of an IBC.
 - Several mangers stress both the difficulty of managing relations with the host regulators and the serious penalties of failing to satisfy them. Speaking about the difficulties of negotiating local regulations as an expatriate, one said, "There are rules for everything. You've got to know which ones you can disregard and which ones you must stick to. You can only do that if you're local". [229]
- In Malaysia, for example, entry qualifications and tuition fee levels must be approved by the Ministry of Higher Education, and programmes must be approved by the Malaysian Qualifications Agency, a rigorous process that took Newcastle University seven months for its Bachelor of Science programme. [264]

- In Laos, a single-party authoritarian state, it is mandatory for foreign institutions to deliver political classes that satisfy the government's requirements. [264]
- In Hong Kong, the Chinese government has interfered in senior appointment decisions, by opposing individuals who are not supportive of the Chinese government. [264]
- Apart from the host government, the managers of IBCs also have to deal with a number of host regulators. These include arm's length agencies which stand between the Ministry of Education and the higher education institutions.
 - Both the Dubai and Malaysia operate on this model, through the KHDA and MQA respectively. The main difference is that the KHDA regulates IBCs operating in free zones, while the MQA has oversight of all higher education institution in Malaysia.
 - o In contrast, China deals directly with IBCs via the Ministry of Education.

In addition to the arm's length agencies, IBCs may be subject to accreditation by local professional bodies in order for their graduates to join the local labor force.

- Examples include the Board of Engineers Malaysia (BEM) and the Malaysian Medical Council (MMC). [229]
- Only two IBCs operating in Japan received approval from the Ministry of Education in 2005 allowing Japanese universities to accept foreign provider credentials for transfer or admission to their graduate programs. Such approval may be vital to an IBC's longevity if part of the goal is to enable students in the host country to later pursue advanced degrees at local institutions and confer degrees that employers in government and other sectors recognize. [263]
- Campuses of foreign universities in Japan also faced certain disadvantages unless they obtained the status of a formal education institution established by a school juridical person. According to Torii, these include
 - o Unavailability of student visas for foreign students studying at campuses in Japan,
 - o Unavailability of student discounts for travel tickets for commuting to school,
 - o Taxation on tuition fees (consumer tax)
 - o Taxation on the profits earned by campuses in Japan
 - o Taxation on donations to campuses in Japan
 - o Taxation on the incomes of teachers working at campuses in Japan
 - Absence of the reduction in income tax for students
 - o Absence of a grace period for Japanese students in paying the national pension installment,
 - o Ineligibility for scholarships provided by local governments in Japan
 - Unqualified degrees with regard to proceeding to postgraduate programs at Japanese universities, and
 - O Unqualified credits for transferring to other (national or public) Japanese universities. Perhaps, one of the main reasons why foreign universities that have campuses in Japan have **not obtained formal university status from Japanese authorities** is that they value the additional flexibility in terms of education curricula and the number of credits required for graduation. However, it is unclear which of the requirements are specifically problematic... In 2004, the Japanese government introduced a new scheme known as Japanese Branches of Foreign Universities. Under this scheme, campuses in Japan established by foreign universities would be treated as formal Japanese universities in all matters except for taxation. [267]

5.1.7. Lack of Gender Equality

The lack of gender equality in Malaysia is a concern for International Branch Campuses providers. The Malaysian government requires that any programs implemented to support the advancement of women must be in line with Malaysia's values, religious beliefs, and cultural norms. These values and norms are often impediments to gender equality. However, Western faculties are not always familiar with the dual system of the laws (Muslim and Western) whereby **Malaysian women have fewer rights than women in Western countries**. This can put Western faculty in a delicate position if they teach courses or communicate ideas that are not considered appropriate for Malaysian women's courses, which, for example, teach that women are equal and deserve equal rights with men... Furthermore because of Malaysia's religious and cultural practices many Muslim women cannot pursue advanced studies or study for nontraditional careers such as engineering or business. The number of women continues to be disproportionally higher in services and clerical jobs and to be steeply under-represented in high-end professional jobs. [261]

5.1.8. In Few Countries Business Systems are Amalgamation of Institutions and Culture

The business systems of China and the Arab World are an amalgamation of institutions and culture. In China, business practice has been shaped by over five decades of communism and in the Arab World business practices are often molded by the influences of Islam and the rulers of individual states. Hutchings and Weir observe that it is often difficult to recognize the boundaries of institutional and cultural differences as they overlap and reinforce each other. [207]

5.1.9. Business Culture of the Host Country

Parent institutions favored countries that were more transparent, understandable, and uncomplicated. One must check the following factors:

- Complexity of foreign bureaucracies
- Different legal environment
- Different system of labor relations
- The regulatory framework
- Corruption level

5.1.10. Complex Marketplace: Same Country Involved in Hosting and Branching Activities

Anna Kosmützky, a sociologist at the University of Kassel in Germany stated that "the fact that some countries – India and China among them – that would have only hosted international campuses in the past are now also "branching out" to open their own campuses abroad. This is certainly an aspect of heightened competition but also of the more complex marketplace that continues to take shape for international education today. Demand for branch campuses is also changing as countries once considered source markets (e.g., China, South Korea, and Singapore) develop into attractive destinations for international students and begin to climb up world university rankings. [204]

5.2. Critical IBC Issues

5.2.1. Whether to Protect Interest of Home Country or Host Country

Worries have been raised about academic freedom at branch campuses. Although key leaders and relevant agreements guarantee academic freedom, many faculty are worried. **What happens, some say, if a faculty member at a Dubai branch invites an Israeli speaker**, or one in China invites the Dalai Lama or writes an op-ed highly critical of the authorities? How will authorities in countries without a stellar academic freedom record handle the branch campuses? [190]

Faculty and administrators from systems where academic freedom is a crucial characteristic of higher education such as the United States, United Kingdom, and Australia often attempt to establish **agreements** with host countries to guarantee academic freedom. However, governments of conservative countries **may be hesitant to sign** such agreements and, interestingly, IBCs seem to exist in a large number in conservative Muslim countries such as the United Arab Emirates, Qatar, and Malaysia. Furthermore, although IBCs might be able to negotiate academic freedom protection agreements through the host government, **faculty may self-censor academic material in deference to cultural norms**. [209]

- In one example, an "IBC changed the name of a course from U.S. Democracy to U.S. Government to avoid unwanted attention in a nondemocratic country". [209]
- The University of Warwick avoided the issue altogether by deciding not to establish a branch campus in Singapore due to concerns over academic freedom. [209]

5.2.2. Administration: Underestimated During the Planning Stages

Typically underestimated during the planning stages, the administrative work required at the home campus to accommodate the unique conditions of the branch campus can seem disproportional to its outcomes.

- Departments of human resources, campus libraries and training for instructional staff often become trapped in problem-solving for the relatively small operations at the branch campus.
- Particularly involved are institutional effectiveness or research departments that must expand their scope to include, at a minimum, coordination efforts with the international campus.
- More often, they are charged with developing a full new set of evaluation tools to be administered remotely, and monitoring the activities of the branch campus.
- As a group, the increased administrative duties at the home campus require high levels of coordination with and support for a branch campus that must be taken into account when planning an offshore branch campus. [180]

5.2.3. Don't Try to Replicate and Give Autonomy to Host Campus

Off-shore campuses are often granted limited autonomy from the home campus to create their own programmes. Home campuses have demonstrated little trust in the offshore campuses to uphold quality of programmes that are not approved or consistent with the home campuses. There are some fears that off-shore campuses will lower the quality and reputation of the home campus. Moreover, some host governments require the off-shore campus to only offer the same

programmes as available on the home campus. However, it may be difficult to make a programme in another country exactly equivalent to the home country. Cultural and environmental adaptation is important. The actual degree might seem the same, but cultural and pedagogical differences, or stronger self-censorship, may result in some issues not being discussed at the off-shore campus. Faculty should therefore be prompted to talk about the ways in which they think, research, discover and express themselves. [128]

5.2.4. 'Niche' Campuses or Inadequate Replication: Limited Programs, Curriculum & Facilities

In IBCs, the most popular programs offered are in business management and information technology—with fairly low setup costs and significant worldwide demand. [211]

Branch campuses need not house thousands of undergraduates studying a wide range of subjects, however. The OBHE report finds that there is a trend towards what it calls "niche" campuses, "which offer a limited range of courses within a single discipline and have more modest levels of financial and reputational risk"...As it is a research-intensive university, it would take an "enormous investment" to establish a teaching establishment overseas that had fully research-active staff...But niche campuses are not without vulnerabilities. Fielden, who stresses that he likes the UCL model "very much", points out that without a large undergraduate population such ventures could be dependent on research funding from local governments. "It's a nice strategy but if you get no local research funding you have completely lost the point of it." [70]

The IBCs often offer a limited range of academic programs, it is difficult for students to gain real educational experience that replicates that of home campuses. Inadequate replication of the home campus environment may negatively impact IBC's sustainability. [263] [266]

Branches typically offer a limited curriculum—generally in fields that attract large enrollments, require limited infrastructure, and are relatively inexpensive to teach. Branch campuses seldom reflect the home university in terms of facilities, the breadth of curriculum, or the experience of studying at the sponsoring institution. As governments, accreditors, overseas partners, and students become more savvy about their educational goals, they may demand the "real thing" in the branches. [211]

For example,

- University of Liverpool's joint-venture campus with Xi'an Jiao Tong University in China is another interesting case to review. Rather than being research-oriented and replicating its home institution in the UK, the China-based campus is teaching-intensive because research requires a more long-term investment. Mainly focused on teaching, Liverpool's Chinese partners have requested that the campus be research focused because Liverpool itself is a research-led university in the United Kingdom. It will be difficult for Liverpool to replicate this in China. Tensions arose when the Chinese partners requested that the teaching-focused branch restructure to replicate the home campus' focus on research. [211] [263] [266]
- The Michigan State Dubai Campus' failure to operate after two years was partly due to its limited capacity to provide an array of academic programs and student services. Although high tuition and Dubai's economic crisis were direct factors contributing to the close of the Dubai

Campus, the situation was exacerbated by the campus not being able to compete with several full branch campuses in the country. [266]

- With regard to the Johns Hopkins University's medical program in Singapore, the local authorities did not feel it was providing the promised goals, resulting in the cancellation of the program. [211] [263]
- A recent example is that of University College London Qatar, an outpost in Doha's Hamad bin Khalifa University. It opened in September 2011 and is **focusing on archaeology** and museum studies at postgraduate level. By 2015, it plans to have 150 students in place. [70]
- The EduCity Iskandar shared campus in Malaysia, where Newcastle University has a **medical school**, is a similar venture. In the case of UCL, the institution has previously eschewed overseas campuses of all kinds but in 2009 it decided to allow **research-focused niche developments**. [70]

5.2.5. Location: Most Vital but Difficult Decision

For higher education institutions that want to establish an international branch campus as part of their internationalization strategy, the **choice of country in which to locate is probably the most difficult decision** to make. Institutions need to choose countries in which they will be welcomed by the host country government; where there is sufficient student demand; where the required resources can be obtained; where they will be able to achieve their financial objectives; and where stakeholders in both home and host countries will support rather than oppose them. [264]

Few interesting examples are:

- The University of Central Lancashire's campus in Cyprus has been described by the United Nations as 'unauthorized' and 'a security worry', because it is constructed in the buffer zone that separates the Greek Cypriot and Turkish sides of the island. This has damaged the university's reputation and it has made it harder for the branch campus in Cyprus to gain legitimacy in the eyes of stakeholders. [264]
- Even within the UAE, the emirate of Ras Al Khaimah struggles to compete with Abu Dhabi, Dubai, and Sharjah because it is has a remote location and a less developed infrastructure. Ras Al Khaimah hosts mainly local and South Asian institutions, which are perceived by domestic students as being the low-cost, low-quality options. [276]

5.2.6. Location: Infrastructure, Transportation and Facilities

In case of IBC, the Parent institutions value locations in urban areas close to air and rail transportation. Three administrators with IBCs located over an hour from international airports noted that lack of transportation was a problem. One of these IBCs ultimately closed and another relocated its campus to the city. [234]

South Korea is ahead of them in terms of technological capabilities so technology infrastructure wouldn't be an issue. The same was true about infrastructure needs such as safe, clean water, plumbing, medical facilities, etc. No parent institutions even considered locations in places lacking in basic infrastructure as they were often not areas with a student body population and funding to support its operations. [234]

5.2.7. Location: How Universities in the United States Target Countries

Their location choice illustrates the important role economics plays in these programs. Two key determinants of the location choice are

- Real gross domestic product (GDP) per capita
- Tertiary school age population [250]

Universities in the United States target countries

- With large potential markets where the local population has the economic means to pay for their services.
- They also follow US multinational corporations' FDI flows and invest in business friendly countries with loose regulations.
- Universities in the United States also are more likely to have overseas programs in countries with business- friendly environments and weaker regulations. [250]

Asia and the Middle East are the most popular destinations for overseas programs, but for different reasons. Asia provides a large market with strong local demand for US- style education. Alternately, Middle Eastern countries are attractive because they grant substantial financial aid to sponsoring universities with their oil money. [250]

5.2.8. I-R Dimension: Global Integration Vs Local Responsiveness - Research, Staffing, Curriculum

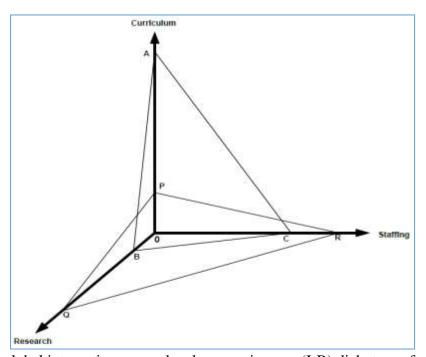


Fig 5.2: The global integration versus local responsiveness (I-R) dichotomy for three areas: research, staffing, and curriculum [194]

In above Figure, the **I-R dimension** is presented on three different axes: curriculum, research, and staffing. Each axis depicts the degree of localization of that element. **At the zero point, the branch campus is mirroring the home campus fully**. The degree of local adaptation of the offshore

branch campus in terms of each element can be visualized for each axis. This gives us three points on the three axes. The shape and position of the triangle, which appears as the result of linking the points, delineates the strategic orientation of the TNHEI in relation to the I-R paradigm. **Two examples** are presented in the figure.

- The ABC triangle represents a branch campus, which has a high degree of autonomy in localizing the teaching contents and the number of local academic staff are relatively higher than other staff. However, in terms of research, they have not noticeably concentrated on the locally related issues.
- The **PQR triangle** demonstrates a branch campus with high degrees of localization in terms of staffing and research, while the teaching material has been standardized to a great degree.

We realize that the **axes of the model are not fully independent**. For instance, a standardized universally packed curriculum can get a bit of flavor of local practices if taught by local staff. In other words, localization of staff has an impact on the localization of curriculum, bearing in mind that the relationship is not straightforward: it largely depends on how much control the local lecturers have been granted over the content of teaching materials. Another reflection is that the model is currently built around the themes we found in the literature (staffing, curriculum) or could not find in the literature but for which we put forward arguments to include (research). If other dimensions are recognized in the future, they can be added to the framework, although the visual presentation would become problematic.

Dimension	Perspective				
	Host Country	Competitors	Students	Joint Venture Partner	Home University
Staff	High	High	Moderate	High	Moderate
Curriculum	Low	Low	Low	Low	Low
Research	High	Low	Low	High	Low

Table 5.2: Degree of Location affected by various stakeholders [229]



Fig. 5.3: Stakeholder influence the degree of localization [197]

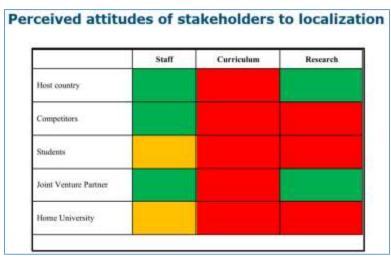


Fig. 5.4: Attitude of Stakeholders towards Localization (red is low, orange is moderate, green is high localization) [194]

5.2.9. Difficult to Define IBC: Example of University of Nottingham's Malaysia Campus

To illustrate the difficulty of defining an international branch campus, take the University of Nottingham's Malaysia Campus (UNMC) as an example. The "campus" is legally incorporated as a private Malaysian company, in which the two local partners have the majority stake. The University of Nottingham is, in effect, the minority shareholder in a private offshore company. With the exception of the senior managers, who are seconded from Nottingham, the faculty and staff are employed by the Malaysian company and managed by one of the Malaysian partner's human resources department on local terms and conditions. UNMC is, from the perspective of the host Ministry of Education—a Malaysian private higher education institution. It is subject to oversight by the ministry, which approves its tuition fees and enrollments. Its curriculum is accredited by the Malaysian Qualifications Agency and the qualifications offered must fit within the Malaysian Qualifications Framework. Viewed in terms of its key stakeholders, UNMC begins to look less like a UK transplant than the clock tower and the architecture of the buildings suggest. The majority shareholders are Malaysian. Most of the faculty and staff are Malaysian, and all but a handful of seconded managers are locally employed. The students, the regulators, and the companies that employ most of the graduates are all Malaysian. [212]

Does the fact that the company trades under the University of Nottingham brand and awards its degrees tie it inexorably to the United Kingdom and ensure its status as an international branch campus? In principle, both defining features could be swept away at a pen stroke.

- Like Middlesex and Heriot-Watt, the University of Wollongong operates a "branch campus" in Dubai. The UK universities offer degrees from the home campus under a license from Dubai's Knowledge and Human Development Agency.
- In contrast, Wollongong initially set up its campus as the Institute of Australian Studies and, since 2004, the University of Wollongong in Dubai has been licensed by the federal government of the United Arab Emirates as an independent, private institution awarding local, not Australian, degrees. [212]

5.2.10. Clear Agreement Regarding the Rights and Responsibilities

There should be clear agreement regarding the **rights and responsibilities** of both the host government and the home campus. Likewise, the **modus operandi** of both parties should be known in advance. [128]

Any contract of employment should state which country's laws apply in the event of a dispute, as parties are generally free to choose, subject to the Rome Convention, if it is binding in the relevant country. Where the Rome Convention applies, mandatory rules apply automatically. These are the statutory minimum employment standards in the 'host' country. A clear understanding of which country's law is applicable is advisable from the outset. The UK governing body may need to be alerted in advance to those cases where UK staff are subject to another country's laws. [283]

5.2.11. Networking and Involvement: Develop Relation with Local Consultants

Consultants can provide valuable input, as well. Consultants offer a variety of services and are often well-connected in the local context, providing important resources in advising the branch campus. An example would be a government liaison who can speak the local language and assist the administration in dealing with legislative matters. Similarly, experienced security advisors can support the campus' duty of care and emergency management eff orts for a very globally mobile population, while legal consultants and insurance advisors can facilitate a better understanding of the local legal and insurance system and mitigation of the subsequent risks. [222]

Furthermore, dialogue with other entities in the same operational environment could prove very useful. **Other international branch campuses** need not be competitors and may serve as strategic partners for mutual future success. Even non-academic entities, particularly **global companies with the same country of origin** as the home campus, may be a great resource to branch campus leaders, enhancing their **understanding of operations in the local culture and context**. Lastly, groups such as committees, task forces, research groups, and think tanks, whose focus is on long-term impacts and trends of higher education and the country in general, may provide valuable strategic insight for sustained future success of the branch campus. [222]

Networking is essential for success in many emerging markets. For example, guanxi in China, and wasta in Arab countries, is essential to bypass the barriers caused by complex regulations and market structures, and high levels of bureaucracy and corruption. [276]

- Parent institution leaders demonstrated their support for the idea of developing an IBC by working to build ties with potential host countries through direct interaction or delegates.
- Key leaders need to spend time at the IBC
- Another way parent institutions improved relationships with the host country was by hiring nationals from the host country for key positions at the IBC.
- Hired individuals with strong ties and experience relevant to the host country during the process of establishing an IBC. [234]

5.2.12. Capacity Building: May Not Happen

It is clear that Crossborder education can be considered a **double edged sword**. On the one hand, it can increase access for local students and in many cases regional students. But, by importing foreign programmes and providers, one can question the relevance of the curriculum to local context and needs. More importantly, **it often does not help to develop the human capacity of the domestic higher education institutions and faculty to design and offer these programmes themselves.** Critics of Crossborder education believe that relying on foreign expertise to prepare and teach courses introduces issues of dependency, sometimes neo-colonization, and also sustainability. [231]

5.2.13. Moto, Goals and Objectives Must Match with Overall Situation of Host Country

It is possible that many countries may not be suitable for Moto, Goals and Objectives of particular IBC. Let's see few examples.

5.2.13.1. Profit or Not-for-Profit

Attitudes to profit vary in different countries and in different designated higher education zones.

- At Dubai International Academic City (DIAC), institutions can make and repatriate profits,
- At South Korea's Incheon Free Economic Zone, foreign institutions are not permitted to make profits.
- India is a country that is keen to not allow foreign universities to establish branch campuses with the objective of making profit. [207] [276]

5.2.13.2. Revenue Generation

• Africa is already host to at least six international branch campuses and although there is plenty of unsatisfied demand for higher education across the continent, Africa is **not a particularly attractive location** for foreign HEIs aiming to generate easy profit, as average levels of income are very low in many African countries. [207]

5.2.13.3. IBC as Fully Independent University or Simply Partnership with Local Institute

- Chinese institutions of higher education to cooperate and form partnerships with high quality foreign universities, the establishment of branch campuses by foreign institutions is not allowed unless undertaken with a local institution. However, once an international branch campus is established in China, the Chinese government is keen to promote the institution as an independent university and **not as the branch of a foreign university**. This suggests that the foreign universities may not have full autonomy over key decisions such as curriculum, staffing, and issues such as academic freedom. Such constraints may be unacceptable to a range of stakeholders at the home campus. [276]
- China has had legislation in place that regulates foreign HEIs since 2003 (The Regulations of the People's Republic of China on Chinese-Foreign Cooperation in Running Schools). Article 3 of the Regulations states that the national government encourages Chinese HEIs to cooperate

and form partnerships with high quality foreign institutions to provide high quality education in China. However, the establishment of **branch campuses by foreign universities is not permitted** unless undertaken with a local institution. [207]

5.2.13.4. Stability

University College London (UCL) was motivated to open a campus in Adelaide in 2010 when the South Australian government provided US\$3.5 million support as part of its strategy to establish Adelaide as a higher education hub. However, the successor state government proved less committed to the higher education hub idea and UCL announced in early 2015 that it would close its campus in Adelaide as the financial and academic risks had become too great. [276]

5.2.13.5. Regulatory Mechanism

Among the complexities of conducting business in Sub-Saharan Africa is that each country is unique **legally**, **culturally**, **and politically**, notes Ferreira. Moreover, African regulators can be **quite active in some countries and less active in others** with regard to

- Research and education
- Tax
- Immigration
- Employment law

For these reasons, Ferreira recommends working with local African counsel, since U.S. universities must adhere to local law.

- The government can also be inflexible and bureaucratic, which can translate into delays and inefficiencies. Some U.S. institutions have been waiting several months or years to receive various licenses and registrations to operate in certain countries.
- Governments are not keen to offer a "grace period" or "benefit of doubt" to nonprofits and charitable projects.
- Other factors that add to the challenge of doing business in Africa are strict local labor and tax laws, widespread corruption and bribery, and safety and security issues.
- Furthermore, many in Africa question the motivations of U.S. institutions operating there.
- They also need to consider the level of risk they are willing to tolerate.
- Some challenges of conducting business in Sub-Saharan Africa center around internal controls, partnerships, and health and safety.
- Kate Riley explains that UW is very cognizant of how it operates in rural versus urban settings with regards to these factors. In rural settings, it is sometimes difficult to get a receipt and to determine back at the UW home campus how the money was spent. And in urban situations, implementing internal controls can be difficult in small offices where one person is managing everything such that no opportunity exists for checks and balances.
- There also can be high levels of bureaucracy, and changing requirements and delays. With respect to health and safety in rural settings in particular, UW has experienced issues with their medical students resisting taking recommended prescriptions and not heeding advice to be part of a travel assistance program.

• Given the high incidence of crime in urban areas, Riley advises having a checklist for hotel safety, evaluating the safety of the project staff residential quarters, and having a driver make sure that faculty, staff, and students are not in danger when on the roads.

Given this list of complexities, institutions must take the time to define their goals and objectives, ensure proper legal and programmatic oversight, and conduct due diligence, says Ferreira. [233]

5.2.14. Unknown Policies

Unfortunately, in some countries – notably China – the exact selection criteria used by the Ministry of Education to grant approval for the establishment of an international branch campus have never been explicitly stated or published. [264]

5.3. Faculty Issues

5.3.1. Balance between Staff Salary and Tuition Fees

The cost of its academic staff base would, however, be so inflated relative to local rivals that it would need to charge tuition fees that were uncompetitive in the local market.

• The University of Waterloo provides a stark example of this dilemma. It opened a campus in Dubai in 2009 using only seconded staff, charging the same tuition as at the Canadian campus, and closed in 2012 after recruiting only 140 students. [229]

5.3.2. Staff: Local, Seconded, International

The Seconded staff are employed by the home university and are seconded for a fixed period to work at the IBC. [199]

The hiring and supervision of faculty is central to the success and viability of the off-shore campus and relates directly to the maintenance of quality standards. Institutions should therefore make sure that compensation is not the unique attractive factor to bring overseas faculty in. The faculty for off-shore campuses tend to be recruited in different ways, leading to cross-fertilization among faculty including those:

- **Seconded temporarily from the home campus**: It is often not easy to entice home campus faculty to teach at an off-shore campus, particularly after the first couple of years when the initial excitement of the endeavor has waned.
- **Hired from the local market pool**: The career expectations of faculty vary markedly around the world. When hiring local faculty, the institution should be careful to assimilate those faculty into the organizational culture of the institution. However, depending on the location, it can also be difficult to find qualified academic staff locally.
- Attracted from an international market pool. [128]

At the other extreme, if the IBC were wholly staffed by locally-hired academics, it could minimize its cost base, but other than seconded managers (who could, in principle, also be replaced by local managers), the staff would have limited first-hand knowledge of, and institutional loyalty to, the

home university. There is a risk that the IBC would develop an academic and organizational culture that was quite unlike the home university and resulted in the students having an experience that was fundamentally different from that enjoyed by students in the UK, undermining the proposition that students were earning a UK university degree. [229]

If the Transnational Higher Education Institute (TNHEI) decides to deliver the same materials and operate the same curriculum at the branch campus, it needs to bring many resources (e.g., staff) to the target market. This is highly likely to be very costly and uneconomic due to the high travel expenses and higher wages (in most cases) in the home country. However, experienced and qualified local lecturers making a significant contribution to the learning process of students can often be a scarce good, given that the majority of branch campuses are established in developing countries. Thus, relying on staff from the host countries may not be possible or may impinge negatively on the quality of teaching to some extent. However, in some cases, the foreign branch campus is under legal or contractual obligation by the host country's government to recruit locally up to a certain percentage of the total number of staff. Therefore, it seems that transnational universities have no choice but to make strategic decisions regarding the balance between using home and host staff. [189]

International staff are hired through an international recruitment and selection exercise, on terms and conditions related to the equivalent academic rank at the home university. The main difference between seconded and international staff is that the latter are employed by the IBC, not the home university, and have no right to continuing employment at the home university. [199]

Local staff are recruited locally on salaries and terms and conditions benchmarked on local market conditions. The staff are employees of the IBC and have no employment rights at the home university. Generally, the local staff are paid considerably less than the seconded and international staff and have much less generous terms and conditions. [199]

Localizing Staff involves a **trade-off** of **Quality of Academic Culture versus Cost of Provision** (Affordability). [229]

Among the staff from Home Country, Host Country (Local) and International staff, the Local staff is always a cheaper solution. But it may hamper the academic culture and quality. Thus the question is "What should be percentage of Local Staff?". The **trade-off** of Local Staff depends upon **project cost** and **expected quality of academics**. [194]



Fig. 5.5: Decision of percentage of Local Staff depends upon Cost and Academic Culture [194]

University	Project/country	Full-time staff originally from the home campus	Locally recruited staff	Internationally recruited staff
University of Nottingham	Ningbo China	10	-	220 (split not given)
Newcastle University	NUMed, Malaysia (planned figures)	14	104	
University of Liverpool	XJTLU, Suzhou	10	50	60
UCL	Adelaide, Australia	2	5	4
	Astana, Kazakhstan	5	2	40
Texas A&M	Qatar	16	- 5	54
RMIT	Vietnam	0	19	156
University of Wollongong	Dubai	0	0	45
Totals		57		749

Table 5.3: UK IBC: Source of academic staff [283]

5.3.3. Flying Faculty and Seconded Faculty

Smith looked at the challenges for managers of dealing with 'flying faculty', who are sent from the home campus for short periods to support teaching and quality assurance at the IBC. The motivations of the flying faculty are varied (e.g., they may accept a one-off teaching assignment as a form of 'academic tourism' with no long term commitment to the venture) and the manager of the IBC may have no formal line management over the staff while they are on his/her campus. [199]

Source	Advantages	Disadvantages
Fly-in	Extremely high quality (often top experts in their fields) Very strong connectivity to parent institution Strong understanding of culture and values of parent institution High potential to build research capacity	Short tenure (low continuity in teaching) Very high cost (due to travel and airfare expenses) Somewhat difficult to recruit
Long-term secondment	High quality Strong connectivity to parent institution Strong understanding of culture and values of parent institution Moderate teaching tenure (typically 1-3 years) High potential to build research capacity	High cost (due to salary premiums and benefits packages) Difficult to recruit
International	Moderate teaching quality Moderate teaching tenure (typically several years) Potentially strong level of understanding of the culture and values of parent institution (as recruits come from extremely different cultural and professional backgrounds) Relatively easy to recruit Moderate potential to build research capacity	Weak connectivity to parent institution Potentially weak level of understanding of the culture and values of parent institution (as recruits come from extremely different cultural and professional backgrounds) High cost (due to need to offer internationally competitive pay and benefits)
Local	Long teaching tenure Relatively easy to recruit Low cost	Low teaching quality Weak connectivity to parent institution Weak understanding of the culture and values of parent institution (as recruits come from extremely different cultural and professional backgrounds) High cost (due to need to offer internationally competitive pay and benefits) Low potential to build research capacity

Table 5.4: Advantages and Disadvantages of the Different Sources of Faculty [234]

Although no exact figures on the number of seconded and fly-in faculty were obtained in this study, one recently published study reports that among the seven cases examined in their study, the number of full-time faculty from the parent institution ranged between 0 percent and 25 percent, with an average of 7 percent. **Faculty from the parent institution**, therefore, often represent a **small fraction of the total staff**. Anecdotal evidence from this study supports these numbers. [234] [283]

Despite their small numbers, faculty from the parent institution fill key leadership and teaching positions and **play a crucial role** in the establishment of new IBCs. While relatively expensive

and difficult to attract and retain, faculty from the parent institution are experts in their fields and have a strong understanding of the parent institution's mission, goals, and culture. They play a crucial role in providing administrative oversight, fostering academic relationships, and transmitting the parent institution's culture to the IBC. They are also thought to deliver the highest-quality teaching...Even among more established IBCs, however, the use of fly-in faculty often plays a crucial role. As several administrators note, it is often only through the use of fly-in faculty that universities are able to attract "**Nobel Prize winners**" and other high quality academics to their branch campuses....fly-in faculty promote connectivity with the parent institution. [234]

Senior academics are often unwilling to leave their work or uproot their families and junior staff are concerned that spending time overseas will damage their future career prospects. Some branch campuses have organized programme delivery in such a way that professors from the home campus can 'fly in' for short periods of **intensive teaching**. This mode of delivery has generally **not proved cost-effective or popular with students**, and regulatory bodies such as the UAE Ministry of Higher Education and Scientific Research (MHESR) **discourage it**. [284]

5.3.4. Seconded Faculty: Resistance from Home Campus

In 2013, Yale University staffed its campus in Singapore with 21 professors seconded from the home campus, which resulted in protests at the home campus involving both students and staff. [264]

5.3.5. Building Capacity and High Degree of Localization

In terms of staffing at the IBC, meeting the objective of building capacity is most obviously met by a high degree of localization for two reasons.

- The first is that localization reduces the cost of tuition and makes studying at the IBC accessible to a wider group of students.
- The second is that localization involves hiring and training indigenous academic staff, adding to the pool of academic talent from which local universities can benefit in the future. [229]

5.3.6. Dealing with Different Groups of Academic Staff

From a manger's perspective, there are a range of challenges of dealing with different groups of academic staff (Local, International and Seconded Staff). The length of secondments varies considerable. As one manger explained, 'the secondees vary from long-term secondments like myself...to the short-term flying faculty'. Such short assignments mean that the staff often do **not have enough time at the IBC to develop a deep cultural understanding**. The **generous salaries and benefits** paid to secondees and international staff can lead to **friction with the local staff** and allegations of **racial discrimination**. Managing local staff raises another set of issues and challenges for the managers of IBCs. Local staff can be employed on a raft of different contracts, both part-time and full-time, but they are invariably fixed-term, and turnover is high. 'From the quality point of view, the student point of view, that's wrong. They are not getting what they would get in the UK'. The pressure falls on the seconded staff to take a disproportionate burden in terms of administrative support and pastoral care...Sometimes the difference in cultural values and norms between the manager and local staff can lead **to serious problems**. [199] [229]

Managing a diverse workforce can be a major challenge for IBC administrators. Macdonald reveals that "barely a third are nationals from the host country," so it initially might be difficult to get several groups of educators to work together. Sometimes, on-site staff and faculty balk at following instructions from managers at the parent institution. In other cases, seconded employees (faculty or staff members from the parent institution who take a temporary position at an IBC) do not want to accommodate the local culture and lifestyle. [234]

One of the key issues with **international staff** is that, unlike the seconded staff who normally work at the home university, the international staff are employed by the IBC alongside local staff, but on **much better terms and conditions**. One manager noted that the employment of some staff on an international contract 'creates a real tension...with those staff who are on local contracts, because the terms and conditions are significantly different'...The staff on **international contracts often compare themselves unfavorably with the seconded staff**, envying their pension rights and housing benefits and wishing that they could also exercise the right to return to work in a more research-intensive environment on the home campus. [229]

5.3.7. Faculty Buy-in: Difficult to Convince Faculty to Teach in an Overseas Branch Campus

Branch campus initiatives are typically proposed by top university management and not by the faculty or students. They may be seen as a way of boosting the university's global image, contributing to internationalization, earning income, or addressing other institutional strategic goals. The larger academic community is seldom involved in either planning or executing the branch campus initiative. Indeed, it is often hard to convince the faculty and students that branch campuses are worth the additional work, risk, and commitments required. Without faculty buy-in, success is difficult. Reports of significant campus grumbling at New York University have been published, and campus opposition was cited as one of the reasons for the failure of Michigan State University's branch campus in the Gulf. [190]

Most recently, criticism at Yale University concerning that university's partnership with the National University of Singapore, **due to concerns about academic freedom and other issues**, has emerged in the media. International ventures have frequently been subject to considerable complaints in Australian universities as well, with members of the academic community criticizing **commercial motivations** and opposing straying from the university's core academic mission. Press reports concerning virtually all branch campus initiatives have featured disputes between administrators and segments of the faculty. [190]

Experience shows that it is quite difficult to convince home campus faculty to teach in an overseas branch campus for extended periods of time, even when salary and other benefits are attractive. Yet, even once the small group of internationally minded faculty and staff have volunteered go abroad, convincing others to go is all but impossible. Uprooting working spouses and children is not easy. Research-active faculty — especially in the hard sciences, for whom laboratories at the branch cannot match those at home — will also be reluctant to leave their labs. [190]

Junior faculty worry that overseas teaching will not serve their chances for promotion. Concerns about the education of children, employment of spouses, and other family issues also intervene.

Even in cases where additional remuneration and other benefits are offered, it is frequently difficult to lure professors overseas. The problem is exacerbated over time. The **relatively small number of home-campus faculty willing to relocate** is restricted and quickly exhausted. [211]

While there are instances of university leaders developing successful IBCs despite a **great deal of faculty and staff members disagreeing with the decision**, having the support of faculty, staff and students is very beneficial, particularly if the institution wants some of them to conduct research, teach, or study at the IBC. **Support from certain stakeholder groups is not optional**. Some of the interviewees reported that their institutions had to **obtain approval from various stakeholder groups** in order to establish an IBC. As one interviewee explained, the decision to establish an IBC had to be passed by "the Board of Governors, the Rector, Vice-Rector and the two Directors of the Administration and then by representatives of the tenured academic staff, representative of the academic staff, representative of the non-academic personnel, representative of the students, external parties and the unions, for instance. So lots of those people are involved." In such cases, **obtaining the support of faculty, staff, and other stakeholders is thus critical**. **Several leaders devoted resources to engage these various stakeholder groups and foster buyin among them**. Another interviewee noted that her institution offered training sessions to help faculty and staff better understand various issues. [234]

5.3.8. Service Rules and Other Key Issues

- Some countries (like Saudi Arabia) the number of years one works at a university is the primary determinant for promotion, while others use a more meritocratic performance-based model. [209]
- "Salaries in Qatar are tax protected and that's standard for all of the U.S. universities over there." Such policies can make positions at overseas universities much more attractive to faculty and thus help attract quality faculty to the IBCs. [234]
- Opportunity for career advancement was also offered to potential faculty at IBCs. Some universities, for instance, offered faculty the opportunity to advance from lecturer to professor, a promotion which they **could carry back with them to the parent institution**. While none of the universities represented in this study offered a tenure system at their IBCs because they **would not be able to absorb the additional staff** at the parent institution **in the event of a closure**. [234]
- The interviewees noted that the location of the campus itself is often a key factor in successful staffing. When considering a position at an overseas campus, prospective hires must examine the institution's proximity to various cultural activities and international schools, the local culture within which it is embedded, and the cost of living. [234]
- UK Tax Policy: Taxation is another potential area for risk and policies have to be developed to agree whose tax regime is relevant beyond 183 days. Some universities, such as Nottingham, regard tax as the responsibility of the employee, but provide access to expert tax advice. Newcastle has developed an interesting model of tax equalization for its staff in Malaysia, whereby a home staff member would, if Malaysian tax were higher, have only the UK tax deducted, but if the Malaysian rate were lower, the UK rate would be levied on their salary. [283]
- UK Salary Policy: In general, international staff get the same level of benefits as home campus staff; for example, their travel home arrangements are to their home countries. UCL, Texas

A&M and Liverpool make no distinction between the two categories of staff as they will be working together on campus. [283]

• UK Salary Policy: Special incentives for attracting good faculty from Home Country

Benefit	Typical position		
Pension	UK staff remain members of home scheme, as well as joining any compulsory national scheme in the host country		
Housing allowance or accommodation	Provided to UK and international staff		
Furniture allowance	May be offered where no furnished accommodation is available		
Relocation and settling-in allowance	Usually provided to UK and international staff		
Transport	If the work involves travel, a leased car may be provided (see Newcastle)		
Private health insurance	Normally included for staff member and family		
Death and accident insurance cover	Normally included, but may be part of pension arrangements		
School fees	Usually provided for children at an international school nearby. If one is not available, fees could be paid for private schooling in the home country		
Air fares home during stay	Between once and twice a year for staff member and family		
Air fares to and from the country	Paid with generous baggage allowance for self and family		
Preparatory leave before departure	May be given, depending on academic department or dean		

Table 5.5: Benefits varies for Seconded, International and Local faculty [283]

- In Doha there is stiff global competition to get good staff and Texas A&M faculty members receive a bonus in addition to their basic home pay.
- UCL's policy varies in the two countries where it is involved; in Australia all staff are paid on salary scales that are locally competitive and benchmarked against the salaries of the Group of Eight top universities; in Kazakhstan, there is a simple salary uplift of 25% to the UK rate.
- Newcastle pays some of its home staff a salary uplift in Malaysia.
- Nottingham pays its UK staff in China the same as in the UK, but makes adjustments to a proportion of salaries to take account of cost of living and exchange rate differences.
- Glasgow Caledonian University pays incentives on a case-by-case basis, to allow staff to establish themselves overseas.

Fig. 5.6: Salaries of UK Faculty at different IBCs [283]

5.8.9. Partner Should Not Decide Faculty Salaries

In those cases where the level of remuneration and benefits is decided by the local partner institution, there is a risk that they will differ from those given to academic staff of the partner institution and cause a problem in morale.

- In the Surrey International Institute case study, for example, any staff recruited internationally will be appointed on terms agreed with the partner institution DUFE, although they will be on the Surrey payroll. Their pay could well be higher than that of DUFE academic staff who transfer across to the joint venture.
- In the same way, UCL's international staff in Kazakhstan are paid more than colleagues working for the Nazarbayev University. [283]

5.3.10. Job Requirements and Expectations

Managers of IBC should explain upfront how teaching at an IBC may be different from teaching at a local university given potential differences in academic standards between the parent institution and host country, longer work hours, more demanding paperwork, and documentation requirements. Managers should then make it a point to hire individuals who understand these requirements and have the skills to operate in the IBC environment. [234]

While the home campus may expect branch campus employees to focus on the short-term goal of jumpstarting a new campus, it might also expect them to think strategically and build systems and processes that will serve the branch campus in the long-term. The home campus should communicate this unique set of expectations during the recruitment process so that staff members are better prepared to deal with the challenges during the critical startup period. The home campus should address these expectations in job descriptions and discuss them with potential staff during interviews. The home campus should also advise interviewees that they may encounter several duties that will fall outside of their natural scope of the job description. For example,

• During the startup period at Carnegie Mellon University in Qatar, for instance, staff members in the human resources department were responsible for housing arriving employees, assisting

them with obtaining identification and drivers' licenses, finding schooling for children, and facilitating driving tests. [222]

5.3.11. Workshops and Training to Reduce Impact of Cultural Shock

At a branch campus, employees may experience enhanced strain from working with collaborators from entirely different cultures and experience levels. In addition to the unstructured and multicultural working environment, this stress may also impact their personal lives via new living quarters, routines, pastimes, weather conditions, or laws and regulations. The branch campus can offer workshops and training addressing culture shock and dealing with significant change during the startup period to help alleviate the impact of the new environment on employee productivity in the workplace. In addition, branch campuses may offer a forum that allows employees to share their thoughts, frustrations, and concerns during this adjustment phase. This may be an excellent way for administration to better understand the measures that may minimize the effects of these issues on the workplace environment and the progress of the branch campus development. [222]

• Some universities, such as UOWD, provide compulsory teaching and learning programmes for academic staff to instill comparable teaching cultures. [283]

5.3.12. Host Government Insisting on PhD Faculty

In order to allay concerns about the standards in private universities, some governments, such as Nigeria, have passed regulations saying that a certain percentage of the academic staff must have a doctoral qualification. Almost all countries are interested in the numbers and qualifications of academic staff in foreign or private institutions. [283]

5.3.13. Need HR Management Policies like Multinational Companies

Fielden and Gillard stated that "universities will need to adopt human resources management policies like those of multinational companies". Salt and Wood extend this to consider how far UK universities are becoming like multinational commercial companies with regard to international staffing, and whether universities can learn lessons from the staffing policies and practices of multinationals. [294]

5.4. Student Enrollment and Other Issues

Jeffrey M. Riedinger, Dean of International studies and programs, Michigan State University stated that "we realized we needed a more robust economic model for the campus for the **first couple of years**. We better understood that many of the foreign universities in the region had **struggled for the first four years** until they got a **graduating class**. Then that was a powerful signal to parents and would-be students alike. We had assumed a more linear growth pattern, and we probably **should have operated on a business plan reconciling ourselves to relatively low enrollment until we graduated the first class, and then there would be a significant step-up." [303]**

5.4.1. Student Criteria for Selecting Country

It is vital that managers fully understand the markets in which they intend to enter. They need to ensure that

- There are enough students who would want to take their programmes
- These students hold the required entry qualifications (usually the same as required at the home campus)
- They can afford the tuition fees.

If any of these three criteria are not met in a particular country or location, then the institution is unlikely to be successful. [276]

5.4.2. Experience: Want Full Experience

Some of the branches see possibilities for enrollment from the Indian subcontinent, with its large population of underserved students. Yet, a recent survey showed that prospective Indian students prefer to study in the United States rather than at an American branch campus in the Gulf or, for that matter, in India itself. **They would like the full experience of American culture** and, perhaps, the possibility of staying in the United States to work following graduation. However, studying at a branch campus provides neither of these opportunities. Data from China indicate that students are not willing to pay U.S.-level tuition at branch campuses of American universities in China, and they worry about the quality of faculty and programs. [190]



Fig. 5.7: Provide the 'Nottingham UK experience' in China in less than eight years [298]

5.4.3. Experience: Interested to Have Experience of Parent Institute of Home Country

Another important consideration in the design of academic programs is structure. While IBCs by definition have the courses to allow a student to complete an entire academic program at the IBC, many students at IBCs are interested in spending a certain amount of their time at the parent institution. Leaders at parent institutions, likewise, agree that spending some time abroad can be an essential part of a student's academic experience. [234]

5.4.4. Experience: Conflicts of Identity

Another fruitful area of enquiry has been the study of how and why students choose to study at IBCs. Some studies have found that students at IBCs experience conflicts of identity, since they are neither international students studying at an offshore institution nor domestic students studying at a local university. Other studies report frustration by students at the chasm between the 'brand promise' of the home university and the reality of being at a small branch campus where resources are very limited. [199]

5.4.5. Student Enrollment: Few Universities Focusing Only on Expatriates

In Dubai, for instance, institutions such as Manipal primarily serve Indian expatriates and their children living in the Gulf. [209]

5.4.6. Student Enrollment: Government Restrictions for Student Recruitment

Student recruitment may be one of the expectations or requirements set out by host or sponsors of international branch campuses. For instance, it is not unusual for hosts or sponsors to request admissions of students according to their ethnicity or nationality. In Qatar's Education City, the focus is to educate the local population; therefore, the **branch campus must admit a minimum number of local students** to each of the six international branch campuses. Requirements such as this may pose a risk to a branch campus' ability to reach the required volume of student numbers and may subsequently affect any profit earning needed for the campus to continue operations.

5.4.7. Student Enrollment: High Admissions Standards

Furthermore, comparatively **high admissions standards** of internationally accredited institutions may cause more students to opt for local providers of education and pose a risk to a campus' ability to recruit required local students. As competition increases, these local institutions inevitably improve, further widening a student's options for higher education in the region. Universities may need to carefully balance host or sponsor student recruitment requirements against the risk to sustainability from a competitive marketplace, especially since some regions are already heading for saturation of the higher education market. [222]

However, some schools refuse to lower their standards. For example,

• Michigan University's International Branch Campuses in the UAE offer scholarships. Two hundred students applied for some of the scholarships and discount opportunities, but only

10% were academically fit to be admitted at the University. Michigan University however was not and is not willing to compromise its academic standards. The University knows that students admitted without the English skills and SAT scores required for entrance will not succeed and as consequence will end up dropping out of college because they were not ready for a level of education that is significantly more demanding than the one they are used to. Malaysian education system is more student-centered rather than independent learning. Furthermore, IBCs cannot lower their standards if they are providing a full degree that is endorsed by the home university. [261]

- New York University in Abu Dhabi, which admitted its first students in September 2010, believes that there are only a limited number of local students who can satisfy its admission requirements, and as a consequence it expects to recruit most of its students from outside the UAE, and mainly from the US. [261]
- Some more prestigious schools refuse to lower their standards by even operating an IBC. For example, Yale University decided against opening an IBC in UAE due to major concerns over the brand name reputation of the university, quality assurance, and fears related to requirements which local students were not going to be able to meet. Furthermore students were not up to par with Yale standards; and as a result, faculty members were strongly opposed to this opportunity even though it could earn a profit for Yale. [261]

5.4.8. Student Market: Domestic, Expatriates, Third Countries and International

- UAE and Malaysia have aspirations to become education hubs, attracting students from neighboring countries.
- To date the UK IBCs have predominantly served a domestic student market.
- Albeit in the UAE one comprised of resident expatriates.
- The IBCs are beginning to internationalize, partly in response to the policies of their host governments and partly because they naturally attract students from third countries who cannot afford to study in the UK.
- The UAE and Malaysia also have the locational advantage for Moslem students of being Islamic states. 'If you are sat in Karachi or wherever and you want a UK degree, pretty much you used to go to the UK to get it. Or now you can go to Malaysia and get it and its half the price'. [229]

5.4.9. Different College Choice Process of Students in Home and Host Country

The college choice process of students in the host country is often very different from those in the home country. Leaders of American IBCs in the Middle East have reported that a vast majority of students only begin to show interest in an institution a month or two prior to the start of the fall semester, and many show up the first week of classes expecting to be admitted. This is very different from students in America, who usually begin planning for college several years in advance of their admittance, applying up to a year in advance. [230]

5.4.10. Ranking of University Matters

University rankings greatly influence an institution's image and reputation, and the extent to which the institution is likely to be the applicant's first choice. Highly-ranked institutions are able to charge the highest tuition fees and they will still attract the most able students. Lower-ranked institutions may avoid small markets where more prestigious institutions already operate as they may struggle to recruit students, and might be forced to reduce tuition fees and entry requirements.

[276]

5.4.11. Population Growth, Birth Rate and Future Student Enrollment

Before establishing IBC, one must study the next 20 years expected population growth and birth rate etc. It may affect the future IBC student enrollment. For example,

• George Mason University Korea Campus: That South Korea's birthrate is among the lowest in the world is widely known. Still, the impact of on-going decline in the birth rate for Mason's proposed Korea campus is expected to be minimal. [260]

5.5. Intricacies of Authorization Processes and Legal Issues

Transnational Higher Education Institute's (TNHEI) establishing a branch campus in a foreign country are supposed to comply with the rules and regulations of the host country. These regulations can be divided into two categories:

- Trade regulations: It is concerned with
 - Import and export of assets
 - Taxation policies
 - Staff recruitment and so forth
- Quality assurance: The latter category comprises the rules and regulations of each country in terms of quality assurance. [189]

A fundamental responsibility of the government is to authorize the presence of foreign actors, individuals and institutions, to enter the country and provide education within its borders. Each country approaches the authorization process differently. On one end of the spectrum, nations have very liberalized authorization requirements with limited visa and institutional registration requirements. On the other end of the spectrum, nations can have very strict visa requirements and highly specialized requirements that institutions must meet prior to entering the country. Before finalizing Host Country, one should check all the issues and policies related to Authorization. [195]

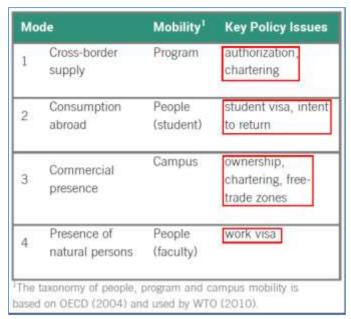


Table 5.6: Key Cross-Border Higher Education Policy Issues, **Authorization** [195]

5.5.1. Visa

The most common requirements, well known to both education and trade officials, are related to visas. Each country establishes the terms under which a foreign individual many enter their borders and how long they are allowed to stay. Some countries also require their own citizens to obtain exit visas prior to leaving their home nation. Most countries have established a specific set of visas for individuals intending to study in their country, as differentiated from working or visiting for tourist purposes. In terms of trade agreements, consumption abroad is the least restricted mode of supply. However, in many cases other government policies may limit such consumption. For example, travel by students and visiting scholars may be limited by specific visa terms such as in the United States. In addition, government sponsored study abroad programs, such as those from China, Russia, Saudi Arabia, and the United States place limits on the students studying abroad ranging from restricting at which foreign institutions they may attend to requiring students to return to their home country after completion of their studies. [195]

One manager explained that to hire an academic, "you have got to seek their [the Ministry of Education's] permission, so you have to send all the paperwork in for this person. They say, yes we find them acceptable. Without that you can't apply for the first stage of immigration pass, the EP10. If you get your EP10, you get your DP11. When you get your DP11, that says Immigration is happy with the person. You then have to go back to the Ministry and fill in all the paperwork to get them registered and to get them licensed as a teacher...They only last for two years and then you've got to do the whole thing again." [229]

5.5.2. Online Delivery System

Every country has a right to determine if an educational provider, whether via an online delivery system or physical presence, can provide an educational service to a student within its borders.

In some countries, online provision is **not regulated**; in other countries it is **not allowed or recognized as a legitimate educational service**. When an institution seeks to set up a physical presence, however, a whole host of authorization challenges are triggered. [195]

- For example, an institution may be required to set up a locally chartered corporation, which in many cases would operate as a wholly or partially owned subsidiary of the home institutions.

 [195]
- Some nations, for example, have specified ownership requirements that insist on local partners with significant financial investment in the venture. Therefore, when Monash University (Australia) established a campus in Kuala Lumpur, their local partner SunWay, retained a 51% ownership stake in the local entity and they developed a management-operating agreement assigning responsibility for the various administrative and academic expectations. Even when local regulations do not have such requirements, it is not unusual for institutions to create alternate governance structures for these cross-border activities. For example, SUNY Korea, a branch campus of the State University of NewYork, is governed by a wholly-owned subsidiary registered in the United States; but obligated to meet the educational regulations of operating in South Korea. [195]

These arrangements can sometimes also create governance concerns in that there may be expectations of who should be on the governance group.

5.5.3. Conflicting Identity & Mission: For-Profit in Home Country & Not-For-Profit in Host Country

What institutions setting up shop overseas may not consider is that their designation in the home country (public v. private v. for-profit) does not necessarily translate into the foreign country. For example, the branch campus of a public university may be considered a for-profit corporation by the receiving nation. **Such designations should not alter the mission of the exporting institution**; however, for some in the education sector there is an identity associated with their home country designation that can be troubling when lost in their cross-border pursuits. [195]

Mission relates to the purpose of the branch campus and the role it serves within society. In both cases, the branch campus activities fall outside of the public purposes of the institution as expected by the home government. Indeed, as viewed from the relationship with the home government, the Australian campuses in Malaysia and the American campuses in Qatar are serving the 'private interests of students, clients and owners'. While the activities are not forbidden by the home government, neither are they considered core to the institutions' public missions.

Both in the United States and Australia, government policies dictate that instructional activities of public institutions that occur outside of the country are not state functions. **In Qatar, however, the branch campuses are expected to fulfil an expressly public mission to serve the needs of Qatar**. As stated by a representative of the Qatar Foundation, '(the six American) institutions were selected because of their international reputations and their ability to bring programs considered core to improving Qatar's economy. For example,

- Texas A&M's engineering programs support our petroleum industry
- Carnegie Mellon's business programs align with our interest in being a financial hub
- The inclusion of Northwestern's journalism programme is meant to help grow our media interests'.

This public focus is corroborated by branch campus deans interviewed for this study. The dean of a private institution noted that the **Qatar branch mission was more public than that of the home campus**. In contrast to the **main campus in the United States, '(community service) is part of the expectation of our being here — to help build the local industry'**. This division between public and private missions is not as evident for all campuses, but the purposes of the branch campuses are more publically oriented when viewed from the perspective of the Qatari government than from that of American state governments. [285]

Sarawak (Malaysia) has a more mixed purpose for its cross-border initiative. While not as clearly public as the Qatar examples, the Sarawak branch engages in **both public and private purposes**.

- The campus supports economic development through providing research and instruction related to the industrial interests in the oil producing region, and several corporate sponsorships of students through scholarships suggests a locally **private role**.
- But the **state interest** is also evident. The public purposes driving the government's engagement dominated the development of the project by defining baseline programme terms. A report from the Australian Universities Quality Agency, states, 'The Sarawak State Government is satisfied with the working relationship and contribution being made by Curtin, and sees it producing graduates whose skills are aligned with the strategic intent and plan of the State'. [285]

5.5.4. Special Economic Zone: May Not Always Match the Reality on the Ground

Some countries have also set up "free-trade" zones for the purposes of recruiting foreign educational institutions. One of the most well-known is the Dubai International Academic City, which exempts institutions within its borders from certain educational and corporate regulations established by the federal government, including establishing a parallel quality assurance regime so that institutions **do not have to comply with local quality assurance regulations**. These free trade zones can provide a number of incentives for the foreign provider; **but the marketing of such zones may not always match the reality on the ground** and it remains the responsibly of the foreign provider to understand all the requirements associated with offering education in that country. [195]

5.5.5. Employment Law, Employment Relations, Payroll and Personnel Administration

When setting up international operations, institutions must remain aware of employment law and employment relations requirements. These include

- Compliance with working time regulations
- Collective agreements with unions
- Work councils and employee protection.

For instance.

- Some countries require employers to pay employees more when they take vacation time.
- Regarding unions and collective agreements, certain countries require employers to refer to industry specific and vocational collective agreements and to consult the workforce before making any changes.
- Lastly, many countries are employee-friendly and provide protection, such as in the event of termination. This means employers are required to apply a fair reason and procedure for

termination so that they have the requisite "just cause" to terminate. For capability issues, the procedure will most often require a performance-improvement plan. [233]

Local requirements are wide-ranging and may pose a long list of items that institutions are required to track, including

- Probationary periods
- Head count
- Service duration
- Salary thresholds
- Collective agreements
- Salary packaging
- Termination payments
- Equality
- State filings to correspond with employee changes.

Given that it can be quite challenging to manage payroll and personnel administration remotely, it might make sense to employ people with local knowledge in this area. Buglass also advises monitoring remote employees since—and it should come as no surprise—they tend to report the highest amount of overtime and use the least amount of vacation time. One good practice is to require pre-approval for both overtime and vacation time. [233]

Among the most common types of disputes that occur in this region are **employment-related disputes** involving African nationals. The challenge for universities is **that employment laws tend to be different in each country** and generally apply to African nationals and to U.S. expats who are employed by the university or assigned to extended positions in the country.

- African law tends to be **extremely protective of local employee rights**.
- Consequently, it is **difficult to terminate employees**, and protections can **vary by class of employee** (i.e., professional, skilled, laborer, administrative, etc.).
- Furthermore, local payroll is quite complicated, with diverse withholdings and statutory contributions.
- The distinction between independent contractors and employees is another complicating factor, where the line often can become blurred. [233]

5.5.6. External Regulatory Compliance

External regulatory compliance is another complex operational consideration. American branch campuses face U.S. government tax implications, foreign banking reporting requirements, and state and federal educational policies such as the Clery Act and Human Subjects Compliance. [209]

5.5.7. Interference in Domestic Affairs: Not Allowed

Singapore requires that IBC activities do not interfere with domestic affairs. [263]

5.5.8. Human Right Issues

Staff employed at international branch campuses often perceive injustice in their places of work. Injustices include the lack of legal rights, lack of job security, and inequalities in pay and benefits among employees of different nationalities. In 2014-15, New York University Abu Dhabi (NYUAD) was twice mentioned in the US and international media over ethical issues. [264]

- New York University Abu Dhabi faced considerable criticism in the international media for the poor treatment of construction workers at its campus. First, in 2014, the media declared that workers at NYUAD's campus faced harsh conditions. Some workers were working up to 12 hours a day, seven days a week, earning as little as US\$272 a month; most had their passports confiscated by the contractor that directly employed them; and it was not unusual to find 15 men living in a room intended for four workers. Dissent is not tolerated in the UAE and when some workers went on strike, they were put in prison and beaten. When New York University established its campus in Shanghai it took far greater care in publicizing and enforcing its comprehensive Statement of Labor Values. Given that each country an institution operates in has its own distinct legal and cultural environment, it is essential that managers appreciate the actions and values that stakeholders expect them to uphold because stakeholders have the power to influence the expansion plans of institutions. [264] [276]
- Then, in 2015, a NYU professor was barred from entering the UAE after his criticism of the
 exploitation of migrant construction workers in the UAE. Both incidents were extremely
 damaging to NYU's image and reputation. A representative of the American Association of
 University Professors declared that the lack of freedom of speech permeates the entire
 (NYUAD) enterprise. [264]

5.6. How an Off-Shore Campus is Organized and Financed?

5.6.1. Financial Sustainability of Off-Shore Campus

The primary sources of IBC funding are supposed to be from "tuition fees, host government subsidies, and private partner investment." Obtaining sufficient funding becomes especially difficult in areas where IBCs are just starting to make their mark. [234]

How an off-shore campus is **organized and financed** can directly affect the sustainability of the endeavor. Institutions relying on subsidies from the outset and on partners and host governments may only be able to remain in the host country for as long as the host government is willing to host them. However, for campuses that are not subsidized, it may be difficult in the early years to obtain the necessary resources to be successful. No matter how altruistic and enlightened the motivation, **financial aspects** of setting up an off-shore campus are likely to prevail. [128]

Sustained funding as the branch campus develops is another challenge. Most universities do not want the branch to be a **drain on home campus resources**, and indeed some institutions **expect overseas ventures to earn a profit**. For public universities, **legal requirements on public funds are an added challenge**, given restrictions on spending public funds overseas. Branch campuses may be under considerable pressure to "break even" quickly. Where there are sponsors with deep

pockets, as in the Gulf, pressures will be less intense, but the branch campuses will eventually need to be financially sustainable. [190]

The investment in the branch refers to initial start-up capital required for the branch to begin operations... The **investment component demonstrates the relative commitment of the host and home governments. Financial commitment from the home government is mostly prohibited**, although there is assuredly spillover from such things as brand recognition and administrative support funded by the home government. From the perspective of the home government, then, the investment component is entirely private, even if those funds come from another government. In contrast, the host governments of Malaysia and Qatar both invested almost all of the start-up costs for the branch campuses. [285]

- The financial considerations can be **extremely complicated**. [195]
- Numerous full and partial ownership models exist for institutions to minimize fixed startup costs. [302]

5.6.2. Examples of Financial Support by Various Host Countries

Let's see the facilities and support provided by various countries for IBC.

- Most of the international higher education hubs offer particularly favorable conditions for foreign branch campuses. At Dubai International Academic City (DIAC), for example, foreign HEIs enjoy 100% foreign ownership, no taxes, 100% repatriation of profits and exemption from the licensing requirements of the federal Commission for Academic Accreditation (CAA). [207]
- In Abu Dhabi, the local government **completely funded the development of campuses** by New York University (NYU) and Paris-Sorbonne, and it will **also meet their on-going operational expenses**. [207]
- The six US universities that have established branch campuses at Education City in Qatar are **fully funded** by the Qatar Foundation, a non-profit organization that is dedicated to building human capital in the country, but they still **retain full autonomy in operational decision-making**. [207]
- Carnegie Mellon will receive \$95 million over 10 years from the Rwandan government to operate a campus in Rwanda. [207]
- An Australian branch campus in Sarawak, Malaysia follows a blended model where the host country helps with start-up investment and operating costs, while the branch campus is expected to cover remaining expenses through student tuition fees. [209]
- George Mason University Korea Campus: Subsidies from Korean government support the
 operation as enrollments build. Use of facilities is rent free for a minimum of five years. Faculty
 housing is also without charge for the first five years and discounts on tuition expenses for the
 dependents of faculty at the international school will be made available. [260]
- The development of Qatar's Education City, including the buildings for each institution and the shared student affairs spaces such athletic fields and the student center, was entirely financed by the Qatar Foundation. In addition each institution was provided with monies to cover their initial operational costs. All of the interviewed deans commented that their budgets are funded by the Qatar Foundation and not the home campus; and the campus student affairs administrators that were part of this study indicated that many of their expenses are paid for by the Qatar Foundation. In fact, it seems there is more public support for student affairs

- activities in Qatar than in the United States. As one participant from a public university said, 'At home, activities like residence halls and many student activities are expected to generate their own revenue; here even the costs that are generally considered private (at home) are covered by the Qatar Foundation'. [285]
- The Sarawak (Malaysia) case is similar to Qatar in that virtually all investment in the branch comes from public sources, or those controlled by the state. The fact that the branch could be started almost exclusively through external investments was considered one of the compelling rationales and necessary preconditions for the home campus to endorse a branch in Malaysia... Compared to the US institutions in Qatar, the **public commitment in Australia was somewhat greater**, given a Statute had to be passed to legally allow offshore operations before the project could move forward. Still, from a financial perspective, no public investment in the branch was offered nor was required to establish and continue the initiative in Malaysia. [285]

Mode		Mobility ¹	Key Policy Issues	
1	Cross-border supply	Program	tuition and fees	
2	Consumption abroad	People (student)	student financial aid, economic impact	
3	Commercial presence	Campus	subsidies, foreign direct investment, corporate taxes	
4	Presence of natural persons	People (faculty)	personal income taxe	

Table 5.7: Key Cross-Border Higher Education Policy Issues, Finances [195]

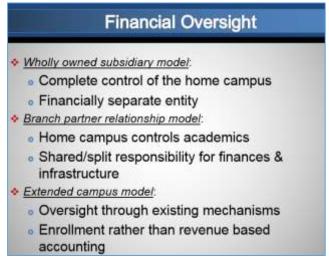


Fig. 5.9: Three different IBC Finance Models [300]

5.6.3. Arabian Gulf States Funding Pattern

To understand the intricacies of the issue, let's consider the Arabian Gulf States funding pattern. Funding from the host government can be subdivided into 6 different subcategories:

• Direct Funding:

- o Direct funding of host governments to branch campuses can take many forms but most often covers **operational costs**.
- Direct funding would be greater for those universities who enroll larger numbers of nationals.
- Qatar and Abu Dhabi both have governmental branches other than central ministries,
 Qatar Foundation and Abu Dhabi Education Council respectively, whose purpose it is
 to deal with such direct funding.
- o This type of direct governmental funding may require a branch campus to be more responsive to and contribute to the stated educational goals of the host government.
- This could have the **potential to create conflict** in deciphering how money is to be used and allocated, in determining the educational priorities of the university, and in the restriction of autonomy in educational practice and policy of the institution. [228]

• Funding Through Tuition Benefits:

O All countries in the Gulf Cooperation Council (GCC) utilize funding through scholarships and tuition benefits to institutions of a variety of home countries, and primarily to local or national students. [228]

• Funding Through Loans:

- Student loans in the GCC are quite different from the loans system in the United States and provide an important outlet for the general lack of full scholarships for non-national students.
- O Qatar Foundation also has implemented a **student employment program** as one form that this financial aid package can take.
- As a result of using loans to help fund studies, there may be a greater responsibility on the part of the university to find jobs for these non-national students as one of the methods for repayment. This issue becomes a complicated task in the context of federal policy requiring the nationalization of the work force as it sometimes bars non-local students from obtaining jobs in certain companies who have already met their expatriate quotas. However, allowing non-nationals to repay their loans through work service to the country could also combat brain drain in an attempt to keep graduates from seeking job placement elsewhere. [228]

• Tax Incentives:

- Tax incentives are primarily utilized by Dubai to entice branch campuses to come to the emirate since the government has more strict regulations on direct governmental and scholarship funding.
- o In particular, Dubai has established several "free zones" in which IBCs are exempt from local regulations. These free zones are then "governed by special authorities" that allow them to operate free of tax or accountability to the government, including in the area of quality assurance.
- o The institutions retain complete ownership of the enterprise, all revenue is retained, and no levies for either import or export are required. Thirty of Dubai's private higher education institutions operate in one of several different free zones. However, these

free zones are primarily economic tools for overall national development and are not "government entities designed to coordinate the growth of private higher education". These free zones have ultimately resulted in a dichotomous regulation system whereby they have an entirely separate regulatory organization from the federal institutions, limiting the role of the government in quality assurance and accountability of foreign educational providers.

O This has caused **much tension** because, as was mentioned previously, Emiratis cannot use government scholarships at these institutions within free zones. Graduates from institutions within free zones also **cannot get a job with the government** because the **government does not recognize the validity of the diplomas received in these institutions**, thus **decreasing the number of local students in enrollment figures**. [228]

• Capital Property:

- Capital property is the most widely provided means of governmental funding among the GCC countries for IBCs. Even the UAE, identified as the strictest regulatory environment of all the GCC countries, provides physical land for universities in the free zones on which to build.
- o Qatar set aside 1,500 hectares for Education City's branch campuses, not to mention funding the construction of one academic building per branch campus,
- Abu Dhabi has set aside the new developments of Saadiyat and Al Reem islands for the growth of NYU Abu Dhabi.
- o In Kuwait, land to build on is one of the major sources of funding, referred to a "land grand facility" which allows institutions to hold long-term leases on land belonging to the state for the construction of buildings (Al-Atiqi & El-Azma). It is expansive and sometimes lavish facilities of IBCs in the GCC that likely bring the most scrutiny from the American higher education community. [228]

• Research Funding:

- While one of the main criticisms of IBCs in the region is that they do not foster their own indigenous knowledge production through research initiatives,
- Some countries are beginning to place a priority on building research agendas for their institutions.
- O Qatar Foundation has begun the Qatar National Research Fund as a means for supporting "original, competitively selected research in natural sciences, engineering and technology, medical and health sciences, social sciences and humanities". In addition, it has established the Undergraduate Research Experience Program designed specifically for undergraduates to pursue their own individual research interests in these areas.
- Other countries in the GCC may also be working towards similar initiatives within the last 2-3 years. As countries are beginning to realize that producing knowledge is a part of the prestige that comes with the brand names of top universities from the US, there has been an intentional shift of the GCC from knowledge consumers to knowledge producers.
- Although still a young area, research funding has the potential to be very curriculum cast-specific as those universities with heavy science and technology programs will likely have more projects and initiatives in research, and thus receive more funding for those projects. [228]

5.6.4. Need to Understand the Funding Pattern of Host Country

Funding

- Model A—Fully funded by institution
 - May be a fading model, as more institutions seek collaborative arrangements, although the benefit of this model is autonomy of decisionmaking and quality control
- Model B—External funding
 - Funding may come from host government funds/support or private companies or other orgs, in the home or host countries, or elsewhere
 - o This model has come on the scene mostly during the last decade
 - Often linked to a national strategy for internationalization by the host country
 - Obvious benefits, however institutions need to carefully consider issues of mission and whether they can cover costs not provided for by the host.
- □ Model C—Facilities provided
 - Newest model but quickly growing
 - Key examples are Knowledge Village (KV) (est. 2002, Dubai) and Education City (EC) (est. late 1990s, Qatar)
 - Most often found in economically advanced states of the Gulf due to availability of resources (public and private \$), lack of local HE capacity (i.e., need and interest in developing this), and a concentrated strategy for reform of local economy (e.g., moving away from reliance on oil revenues)
 - South Korea and to some extent Japan seem to be moving toward "special zones" for foreign investment to facilitate developments along these lines but don't have the investment resources of KV and EC.

Fig. 5.11: Funding Patterns [256]

5.6.4.1. Model A: Fully-Funded by Institution

Fully-Funded by the Institution of the 68 branch campuses for which a funding model has been identified, 37 percent have been established solely through funding from the home institution. However, this approach to offshore operations might become less common as institutions seek more collaborative approaches. The size of the investment required to establish a fully-fledged branch campus and the institution's accountability for any losses discourage many institutions from operating on this model. Advantages connected to this approach include the lack of requirements from partners regarding expected investment returns, repayment, and a time frame for the operation to break even. Of the 16 branch campuses in Model A where a date of opening could be ascertained, 6 were opened after 2000. However, many of the projects are among the first branch campuses established

- Operations in Austria and the Netherlands of the US Webster University in 1981 and 1983, respectively
- The campus in Mexico of the US Alliant International University in 1970
- Established by a for-profit institution (e.g., the operations in Canada and the Netherlands of the University of Phoenix and DeVry University).

Both of the latter institutions operate from multiple campuses in their home countries and have raised capital for their continued expansion through stock offerings. A number of other projects

might be best characterized as smaller-scale operations (with limited program offerings and facilities). These include

- The campuses in London and Singapore of the University of Chicago School of Business, which offer Executive MBA programs
- The facilities in Belgium of Boston University, which focus on business-related diploma and degree programs.

The concentration on potentially profitable fields such as business and the limited expenditure of capital on campus facilities may represent attempts to accelerate returns on the institution's investment. [301]

5.6.4.2. Model B: External Funding

Thirty-five percent of the branch campuses in the study fall under this model, which can be divided into two main subcategories:

- 1. Recipients of host (central or regional) government funds/support and
- 2. Recipients of external support from private companies or other organizations in the host or home country.

In some cases funding comes from more than one external source; for example, a financial contribution from the host government and support from the home government through state-approved loans. Institutions wishing to establish a presence abroad seem to be increasingly opting for funding through Model B. With the exception of three operations, all branch campuses included in this category have been established in the last decade and **70 percent in 2000 or later**. Most branch campuses in receipt of financial or other assistance from the host government have established a presence following an invitation from central or regional authorities. While there are advantages in gaining host government support and funding, an institution needs to evaluate whether the project is in line with its overall mission and institutional goals. In addition, the institution must consider whether it is willing to cover the costs beyond the host country's contribution. Examples of projects in this category include some of the operations established under Singapore's "World Class Universities" initiative, including

- The new campus of Australia's University of New South Wales due to open next year
- The branch campus of the US Carnegie Mellon University currently under establishment in the Australian state of South Australia
- The campus of the UK University of Nottingham in Ningbo, China, and
- The campus of Australia's Swinburne University of Technology in Sarawak, Malaysia.

A range of branch campus establishments has been created with contributions from external private and public organizations. The opportunities and challenges are almost exactly the opposite of those stated in Model A, with the advantages being the financial contribution and shared risks, and the disadvantages the expectations of the investors in terms of return on investment and their influence on the operation. Examples of campuses in receipt of investment from public or private organizations include the operation of

- The University of Nottingham in Malaysia
- The US Temple University in Japan, and
- George Mason University in Ras Al Khaimah, in the United Arab Emirates. [301]

5.6.4.3. Model C: Facilities Provided

Model C is perhaps the **latest development** within branch campus funding models, but a category that already accounts for **28 percent** of the establishments in the study. With the exception of one institution, all developments in this category have been established **within the last six years**. Campuses established through Model C make use of facilities provided by a company or a national government often as an enticement to draw foreign providers to the host country. Examples include

- The Knowledge Village in Dubai, United Arab Emirates (UAE)
- Education City in Qatar.

In both cases, a designated zone with academic and student facilities is provided for institutions, which depending on individual arrangements either lease or take over the facilities. The main advantage for institutions operating through this model is the **reduction in the start-up funds** required. The **potential drawbacks include the regulatory environment for the operation** (e.g., Knowledge Village operates outside the jurisdiction of the United Arab Emirates and under the guidelines of the company that owns the site) and potential changes in costs outside the institution's control, such as rent increases. Model C operations are currently found in the economically advanced states of the Gulf. The reasons for this concentration likely include the available public and private funding for higher education system, and developed strategies to change the main foundation for the economy (i.e., to become less dependent on oil). Other countries (e.g., **South Korea and Japan**) are in the process of establishing special zones for foreign investment, including in education. However, none of them seem to have local investments on the scale of the two examples cited above. Examples include:

- Five US institutions (e.g., Texas A&M University and Carnegie Mellon) operating in Qatar's University City and
- More than 15 institutions (e.g., UK Middlesex and Heriot-Watt Universities, India's Manipal Academy of Higher Education, and Canada's University of New Brunswick) in Knowledge Village. [301]

5.7. Financial and Fiscal Issues

5.7.1. Foreign Direct Investment (FDI)

Globally, foreign direct investment (FDI) flows have increased markedly in the last three decades, largely due to more liberalization of regulations regarding the influx of FDI in general and, particularly, within the education sphere. With respect to commercial presence, FDI can take multiple forms. For example, a foreign entity may purchase a local college such as when Manipal Global in India purchased the American University of Antigua. A joint partnership can be arranged, or institutions can retain sole ownership of a foreign location. As mentioned above, Monash University's campus in Malaysia in a joint venture with a Malaysia company; whereas its South African campus is a wholly owned subsidiary. From a trade perspective, FDI is calculated by the net inflows of investment minus the net outflows and inflows can include a range of items such as building facilities, purchasing equipment, or paying staff.... The point is that different local regulations require different models, with different financial implications (e.g., direct subsidies, research support, preferential tariffs, repatriation of revenues, etc.). Institutions need to

consider that what is permissible FDI in Malaysia is different from what is permissible in South Africa. [195]

5.7.2. Taxation Policy: Faculty

The movement of **faculty** across borders may have tax implications on the income earned while providing a service in the country (or they may be exempted from such tax requirements).

- IBC of George Mason University USA at Korea: Faculty and staff who would like to work on the Songdo campus temporarily will be guided about taxation issues as we move forward. In general, U.S. citizens and green card holders remain subject to the U.S. Social Security taxes when working temporarily in a foreign country. There is a form that can be submitted to payroll if certain conditions apply to exclude income from tax. US citizens who will teach temporarily (not exceed two years) will not pay tax to Korea according to the Income Tax Treaty with South Korea. [260]
- Malaysian government: In an effort to assist and subsidize private higher education providers, including International Branch Campuses, the Malaysian government offers small companies a 1% tax incentive for money spent on higher education for their employees, and a 2% tax break to medium size companies that offer retraining to their employees. For example,
 - Curtin University's campus at Miri in the state of Sarawak, Malaysia, was initiated by a group of private stakeholders and later supported by the Deputy Chief Minister of State.
 - We see something similar in the development of Nottingham's IBC and in Monash's IBC in Kuala Lumpur where 300 scholarships along with land and financial support came from local politicians as well as private investors. [261]

5.7.3. Tuition Fees Policy

Students crossing borders should be aware of whether the country in which they are studying provides subsidies for international students and any associated requirements for accessing those funds. Importantly, such subsidies can boost the recruiting efforts of local institutions. On the other hand, government restrictions on tuition and fees could significantly inhibit a foreign institution's ability to recover costs, especially in cases where domestic public institutions have low or no tuition or fees. In other cases, the government of the exporting country has restrictions on not allowing an institution to charge a lower tuition rate than that charged at the home campus; this type of restriction usually applies to public colleges and universities in the United States. In such instances, the institution looking to deliver their program overseas may want to avoid locations where the market expectation is below that of the rate charged in the home country and target places where that tuition rate is on par with or below the going market rate. [195]

Our analysis of tuition charges reveals that US universities adjust their pricing to local conditions.

- They discount tuition less in countries with higher real GDP per capita.
- Undergraduate degree programs are discounted more than master degree programs because of greater local competition in the market for undergraduate degree programs.

• When universities reduce costs by forging local university partnerships and/ or by obtaining financial support from local governments, they **do not pass on the savings to local students** in the form of lower tuition. [250]

5.7.4. Money Transfer Restrictions

With tuition revenue that does come into the U.S., however, currency exchange can be challenging. Because **China imposes limits on how much money can be taken out of the country**, Farahi says Kean has made arrangements with two U.S. banks in China that will accept Chinese renminbi and reimburse the New Jersey campus in U.S. dollars. [343]

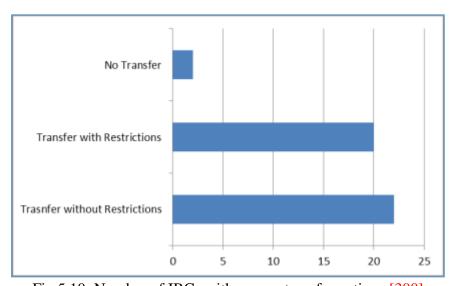


Fig.5.10: Number of IBCs with money transfer options [300]

5.7.5. Indirect Cost: Variety of Activities Involve Time and Indirectly Money

Branch campuses of prestigious universities **receive generous start-up funding** from host countries, institutions, property developers, or other entities. Typically, little up-front investment is provided by the home university and in some cases, such as the Gulf, hefty subsidies. However, **significant nonmonetary expenses** include the time spent by a myriad of administrators and faculty for planning, negotiations with host governments and institutions, and other aspects. Developing curriculums, implementing personnel policies, and working with a variety of stakeholders **all involve time** — **and, indirectly, money**. [190]

International initiatives can be costly **not just financially** but also in terms of **time spent to create connections and links to potential partners around the world**. And after suitable partners have been identified and partnerships agreements have been signed, time and effort must still be invested to develop them and draw from them the potential benefits they can deliver. For many institutions this exercise diverts attention and resources away from pressing home-based issues. And the responsibility for international initiatives can't be completely delegated; this is one area where the head of the institution must remain involved. This requires much travel to meet international partners and keep partnerships active. [232]

An overwhelming number of interviewees stated that establishing an **IBC took far more time** than they initially expected. Their IBCs required several back-and-forth negotiations with potential partners, construction of appropriate facilities, selection and development of degree programs, rapid student, faculty, and staff recruitment, and in most cases, obtaining accreditation. Many of these tasks required significant coordination among international actors and the navigation of new legal and academic regulations. Institutions considering IBCs need to be aware of the incredible amount of time establishing IBCs often entails and understand the associated opportunity costs. Leaders and administrators also have to be aware of the indirect costs to the parent institution in terms of staff time and salaries even if partners pay the IBC's operating expenses. [234]

5.7.6. Wage Factor

Most international branch campuses are established in low-wage countries by universities in high-wage countries. There therefore seem to be opportunities to extend internationalization and at least cover, if not save, costs by transferring labor intensive central services to branch campuses. [224]

5.7.7. Must Have Realistic Time Period To Achieve Break-Even

Establishing an international branch campus typically involves a relatively large financial investment. Managers must have a clear plan for funding such campuses and they should determine a realistic time period to achieve break-even.... If an institution is not financially strong enough to be able to provide the necessary funding over several years, or if there is a lack of commitment among senior managers at the home campus to provide it, then it can be very risky to progress with developing the new campus. It should be remembered that most higher education institutions are not legally able to fund international branch campuses from home campus revenues, which means that in the medium term the branch campuses must be self-funding. [276]

5.7.8. Financial Frauds

- A layer of fraud prevention solutions can be added to the mix as needed to protect balances and ensure accurate payments. [262]
- Instances of fraud by finance staff are not uncommon in Africa, notes Bob Lammey. Most common examples of fraud tend to occur with procurement practices and expense reporting. The challenge for campus accounting departments back in the United States is that U.S. **staff may not be trained to detect fraud**. For example, they may not be sufficiently familiar with the customary expenses of the host country to be able to recognize inflated hotel bills. The issue is further compounded by the fact that U.S. staff may not have adequate or original documentation, consistent with the needs of the IRS due to the more customary occurrence of **cash transactions** in Africa. At UW, reconciliations are ultimately sent along to the central administration accounting department where a primary person has been trained to detect fraud. Even so, this person relies on the internal controls that are supposed to happen earlier in the process. In addition to securing a director of finance in Africa who is deemed trustworthy, Riley stresses the importance of building alignment into the system so that institutions are able to "follow the money." [233]

5.7.9. Credit Services

Credit Services: Knowing your ability to borrow locally for working capital needs is a key
ingredient for your cash flow forecasting. Additionally, depending on your time horizon and
expectations for local government funding, long-term debt may be needed to build out your
branch campus, and allow you to purchase real estate to expand your campus footprint over
time. [262]

5.7.10. Limited Cash Flow: No Cash Cow, No "Pot of Gold"

For the home university, the cost of setting up an international branch campus is generally **much lower than commonly supposed**. This is partly because the university has local joint venture partners to share setup costs, but mainly because the campus is incorporated as a legal entity. With the backing of its local shareholders, the campus can raise capital on its own account to buy land, build the campus and fund its operating costs until it breaks even. On the downside, these financial arrangements mean that there is no "pot of gold" for the home university. It may **take a number of years for enrolments to build to the level where the campus is breaking even** and, thereafter, the **bulk of any profits will go to servicing the campus's debt**. Any residual profit will be split between the shareholders, with capital controls and other restrictions often limiting the ability of the home university to repatriate their minority share. [69] [201]

All this begs the obvious question: why have so many universities opened campuses overseas? Making easy money is not the motivation. In general, the growth has been driven by universities seeking to build their **global brands**, and so attracting international students and staff. But the more important player in the mix is the host government. [69] [201]

5.7.11. In Joint Ventures Revenue Source, Ownership & Regulation Decide Public or Private Nature of Institute

5.7.11.1. Revenue Source

The sources from which this revenue is derived can affect the public or private nature of the institution. If revenue is provided by a government entity, the campus is more likely to pursue public goals. Whereas if revenue is generated from students or other private actors, the institution is more likely to engage in more market oriented activities commonly associated with privatization. Within Qatar and Malaysia, revenue is generated primarily through a tuition-based system. However, in **Qatar**, the tuition is primarily paid by the government, while in **Malaysia** the students pay the fees. As such, when viewed from the perspective of the host government, the revenue generation in Qatar is almost entirely from public sources, while the revenue generation in Malaysia still has a strong private component. [285]

• In Qatar, the government, through the Higher Education Institute Scholarships covers almost all the educational costs of citizens, including those attending the branch campuses at Education City. In addition, there are extensive loan and scholarship programs available for non-Qatari students that want to attend one of the branch campuses. Moreover, the Qatar Foundation has provided their own forms of financial support ranging from work-study programs to the Hamdan Bin Khalifa Financial Aid Programme, which provides support for

academically qualified, but financially needy students that want to attend one of the institutions in Education City. In sum, even though much of the revenue is derived from tuition calculations, most of the annual revenue for the branch campuses comes from public entities in Qatar. [285]

• The Sarawak case (Malaysia) shows a more standard private sector model, with revenue being generated primarily through student tuition along with the assistance of a federal financial aid system (i.e., Higher Education Student Loans provided by the Higher Education Student Loan Corporation) and locally generated scholarships. **But the primary responsibility for paying rests with students and their families**. Additional support from Sarawak and Miri comes through an intellectual license fee based on 8% of the total revenue of the branch. Because of the Sarawak branch's research mission, revenue is also generated through research grants to the Miri campus, which may include grants from public sources in Australia. Nevertheless, the branch revenue model does not presume public support from the home campus or government, and any public resources are supportive of research rather than the primary undergraduate mission. [285]

5.7.11.2. Ownership

Ownership refers to the authority that controls institutional activity and is often a mix of governmental and institutional authority. In many studies of privatization, ownership is the key determinate for analyzing the **private or public nature of an institution**. In most cases, ownership of a domestic institution can be easily identified as being government controlled (i.e., public) or owned by a private corporate entity. However, in **cross-border higher education, activities can often be joint ventures** between government entities, the home institution, and private partners and cross-border activities are pursued by both publicly and privately chartered institutions. Such arrangements make this a **difficult dimension to assess**. [285]

In Qatar, there is joint ownership between the Foundation and the institution. While the institution retains absolute control over the academic aspects of the enterprise, the Foundation owns the campus facilities and controls, which institutions operate and, which programs are offered. On the other hand, the branch operates as a private non-profit when approached from the perspective of the home country. It is controlled by the institution, which can always decide to walk away if the on-the-ground activities are incompatible with the expectations of stakeholders at home. [285]

Sarawak (Malaysia) reflects a similar joint control model, where both the state and the institution are linked in managing the branch effort. In this case, there is an actual legal entity that has been formed to manage the branch with (due to Malaysian regulations regarding foreign ownership) 49% of the stock held by Curtin and 51% held by its Miri and Sarawak partners. Dissolving the branch could technically be accomplished by the majority stake, but in practice both hold the balance of responsibility. Particularly during development of the branch, the 'Miri Working Party' was a representative body that guided the operation of the Sarawak branch, including approval of courses and first year academic plans. A 'Joint Venture Board' met regularly, chaired in alternating fashion by a Curtin representative and a Malaysian partner, to discuss issues arising during the first 6 months of campus operation. Like the Qatar case, the Sarawak branch at home is primarily a private nonprofit effort. However, the specific financial model expected excess revenue to be

generated, and Curtin accepted the option to acquire a stake in the financial success of the branch. Thus, **elements of a for-profit ownership model** can be seen in this case. [285]

5.7.11.3. Regulation

This dimension assesses the **extent to which the branch campuses are regulated as 'public' or 'private' entities**. Similar to most other dimensions, the perspective of the home campus is that these institutions are private entities and largely regulated in that way. The significant difference is that there are **provisions from the home government that are designed to limit any negative impact on the home campus**. In both the Australia and the United States, the government recognizes the existence of the branch campuses and has some regulations, particularly in quality assurance, that pertain to such activities. As such, the home government relationship is deemed more private than public, although not entirely private. [285]

The regulatory framework designed in Qatar evidences extensive control by the government over the branch campus institutions, although the **government regulation is less than that of Qatar University**. Branch campuses in Qatar's Education City are invited into the country by the government and can only offer those programs officially allowed by the government. Moreover, there are occasional quality assurance assessments in which the Qatar Foundation engages to ensure the programs offered in Education City are comparable to those on the home campus and to ensure the students are receiving a quality educational experience. [285]

Regulation also assigns the responsibility for quality assurance and effective operation of the branch. The Qatar Foundation takes this role for Education City branches, serving as the ultimate judge of acceptable educational practice. Regulation at home is achieved through accreditation standards supervised by non-governmental agencies. This is subject to institutional decisions about mission and purpose for the branch, with the primary stipulation being that quality abroad needs to be essentially the same as quality at home. [285]

The Curtin branch in Sarawak is regulated as a **private sector university**. As such, it is subject to clear authority of the federal Ministry. For example, the state insisted that the name of the branch must be 'Curtin University of Technology — Miri Campus' not Curtin International College as the institution proposed. Documentation required by the Ministry of Education included course-related content and details about facilities, as well as individual approval of every faculty member. The branch is, however, **less regulated than a public sector institution** would be, with, according to the 1996 authorizing Act, more freedom regarding admissions and language of instruction. [285]

5.8. Program Selection and Curriculum Design Complexities

Consider the curriculum, broadly defined to include content, pedagogy, assessment and internal quality assurance. Here the **trade-off** of localization is **equivalence versus relevance**. [229]

What to localize?					
	Imperialism	Localization	Globalization		
Staff	×	√	√		
Curriculum	×	√	X		
Research	x	√	√		

Table 5.8: What to localize? [194]



Fig. 5.12: What dimension to Localize? Curriculum [197]

		Teaching Strategy	Teaching Method	Outcome Learning
Level 1	International Awareness	Infusion of international perspective in general curriculum	Supplement existing curriculum with international examples; recognise origins of knowledge	Students expect and respect differences, have an international attitude
Level 2	International Competence	Engagement with the specialist international dimension of the discipline	Add international study options, have students engage with international students, in-depth study of international subjects	Students are capable of performing their profession for international clients
Level 3	International Expertise	Immersion of students in international study	Study (possibly in a foreign language), live and work in international settings	Students become global professionals, at home in many locations

Fig. 5.13: Typology of Curriculum Internationalization [307]

5.8.1. Curriculum of Home Country and Localization

Managing the curriculum is closely related to quality assurance. Prima facie, it would appear to follow that the more precisely the curriculum at the **IBC mirrors its counterpart at the home campus**, the **lower the risk that quality is compromised**. In principle, the degrees at the IBC could follow exactly the same curriculum in terms of content and learning outcomes, with the students being assessed using common assignments and unseen examinations. At the same time, there are legitimate pressures to adapt the content, pedagogy and assessment. Most obviously, some of the content may be **inapplicable to the local context**. [199]

For example,

- Most business studies degrees include one or more modules on business law, which is **jurisdictionally specific**. [199]
- An example is provided by a case where a program developed under the European standard of 60 ECTS per annum (representing 1,680 hours of total academic workload) was submitted for accreditation in South Africa. This was locally considered to be above their standard maximum academic load. Differences in the definition of academic workload were at the basis of this problem. Careful scrutiny resolved the issue without materially affecting the program. [281]
- Universities wanting students to get an identical experience recognize that the context in which qualifications are offered will still affect the student experience (such as whether the culture of the country embraces student unions or not) as well as the qualifications themselves. For example, students studying in China or Malaysia are required to study compulsory national courses on languages or political/cultural subjects that students in the UK are not required to study. The University of Nottingham handles this issue by making these courses additional to the curricula of its degrees, thus students studying in China or Malaysia meet the requirements both of the Senate of the University of Nottingham and the national curriculum requirements of their respective countries. In Vietnam, regulations say that foreign institutions entering the country must offer courses in Ho Chi Minh theory, but RMIT International University Vietnam was able to obtain exemption from this requirement. [283]

5.8.2. Uncomfortable for Western Style

It is also conceivable that, for social and cultural reasons, trying to force the pedagogical approach of the home campus onto locally-hired academic staff and students may be sub-optimal. Staff and students in East Asia, for example, **may be uncomfortable about using a Western case study approach to learning**, which blurs the conventional distinction between teacher and student. Some critics have warned of the dangers of forcing IBCs to conform to the curriculum and assessment requirements of the home campus, arguing that it leads to and inappropriate and damaging degree of homogenization and a 'one world culture that has the potential to undermine local differences'. [199] [229]

5.8.3. Host Country Restriction: Exactly Same Curriculum of Home Country

At one extreme, there is the requirement that the curriculum taught by the IBC must be exactly the same as at the home university. At the other extreme, the host regulator may have requirements which are completely alien and require significant changes to the curriculum... In

some host countries, for example, the syllabus and learning outcomes must remain identical to those of the home campus as a condition of local accreditation. Yet UK academics are accustomed to routinely revising and retitling modules, but at the IBC 'we have to go back to the [host regulator] to get justification to change a module within a programme. Even if it's just a tiny change. That's something that we struggle with'. [229]

The UAE requires that the curriculum is the same as in the UK: 'outcomes have to be identified the same. Assessment has to be the same. They have to be identical'. The home universities, in general, were very resistant to localizing the curriculum in the IBCs. One manager revealed that the home university required the IBC lecturers to teach the courses using PowerPoint slides developed at the home university and would not allow them to change the slides in any way. [199] [229]

Dubai only permits IBC academic programs that exist at the provider institution; whereas, Australia has a rather liberal policy allowing Australian institutions to open foreign branch campuses with academic programs not offered at the home campuses. [209]

5.8.4. Host Country Restriction: Requirements for Localization

The curriculum is also subject to fit—to some extent—the local circumstances. An important issue is the potential mismatch between programme contents and host country's social norms and regulations. Host governments may impose a set of restrictions on the higher education provider. Moreover, content-wise some of the teaching materials in specific subjects may clash with the host country's cultural or religious values... The challenge for the university therefore seems to be to localize the curriculum while at the same time trying to offer identical courses, degrees, and learning experience to both groups of students. [189]

The difficulty of teaching students who share an alien culture and language links closely with issues related to the curriculum and, specifically, the extent to which the curriculum (broadly defined to include **content**, **pedagogy and assessment**) should be adapted to the local context. All the interviewees recognized the difficulty of striking a balance between being responsive to local needs on the one hand, while retaining the distinctive 'Britishness' of the qualification. [199]

5.8.5. Academic Freedom

Concerns over civil liberties and academic freedom were contributory factors to the University of Warwick's decision to not establish a campus in Singapore. [207]

In most western liberal democracies, academic freedom is held as a strong value across academia and gives protection to the university as a visible critic of society and its leaders. In more authoritarian states, specific topics and activities are prohibited, either by regulation or cultural traditions. Cross-border higher education necessarily encounters these differing interpretations of academic freedom when principles held in one country are limited or extended by the principles in another country. [195]

Many western universities and faculty consequently insist on Western-style academic freedom when operating in other countries, and their hosts will accommodate them via regulatory exemptions or contractual arrangements that purport to guarantee academic freedom. [195]

For example,

- In Vietnam where Communist ideology course requirements have been instituted. [256]
- National language and religious/moral education requirements, for example in Malaysia. [256]
- Using the word church or homosexual could be illegal in some Islamic countries and the government can arrest teacher that uses these terms in the classroom. [261]
- International Branch Campuses are often strictly monitored and regulated by central and local governments. In some countries IBCs are not allowed to provide programs on the military, religion or political science fields. [261]
- A teacher conducting a class in communication at the UAE George Mason IBC had to tailor the curriculum for her students because the language in the original version could be offensive to her students due to lack of consideration for the local culture. [261]
- China allows uncensored access to the internet for most foreign universities and has promised full academic freedom for programs sponsored by major U.S. universities like Duke and New York University. Students studying abroad (mode 2) are more likely to adapt to local interpretations of academic freedom, however, unless they are part of a term sponsored by their home university. [195]
- Students who study overseas (mode 2) may have restrictions on the subjects to which they have access. For example, visiting students and faculty may not be allowed to participate in courses or research that involve advanced technology. This is often framed as enforcing export controls due to national security concerns. Mobility based on commercial presence can require institutions to provide specific programs or conduct research only in authorized subjects. [195]
- They may have to teach in a local language, or be required to teach only in a foreign language (English is the most frequently required language). [195]
- Nations may also have degree requirements that include a religious or cultural component (e.g., required courses in Islam, or national history).
- A separate issue relates to the protection of intellectual property for commercial rather than national security purposes. [195]
- Perhaps the biggest threat to an institution's reputation lies in the realm of academic freedom.
 NYU recently caught flak when a professor, Andrew Ross, was denied entry to the United Arab Emirates after criticizing labor practices in the country. [243]
- Another important aspect that requires attention is the lack of academic freedom that local and foreign faculties experience in Malaysia. Without academic freedom higher education at its best cannot be accomplished. Academic freedom allows teachers to teach, learn, and pursue the truth through the free exchange of ideas. In Malaysia some topics are taboo so cannot be discussed in the classroom. Thus, professors in Malaysia are not always free to teach what they believe because of the censorship of ideas. For example Christopher Hill, director of graduate programs of the University of Nottingham's campus in Malaysia, said that there is a specific provision in his contract that says "that I can't say something that would be offensive to the government. There are cultural sensitivities that you have to take into account." Hill called the issue of academic freedom at branch campuses "a hugely complicated situation." Without academic freedom the contribution of students, faculties and universities in Malaysia is limited, which in turn hinders the general development of the country. Furthermore academic

- censorship affects Malaysia's socio-economic growth by limiting the possibility of attracting investors from other parts of the world where such censorship is frowned upon. [261]
- Another relevant example is the case of a British faculty member from the London School of Economics that was not allowed to enter the United Arab Emirates because of his views of the local government. On February 2013, The Middle East Centre of the London School of Economics (LSE) and the American University of Sharjah (AUS) jointly organized a conference. The theme of the conference was "The New Middle East: Transition in the Arab World" The London School of Economics abruptly pulled out of the conference after the United Arab Emirates (UAE) government intervened to inform the American University Sharjah that no discussion of Bahrain would be permitted. The London School of Economics withdrew from the event, citing "restrictions imposed on the intellectual control of the event that threatened academic freedom." On arrival at Dubai International Airport, Kristian Coates Ulrichsen a faculty member from the London School of Economics (and the writer of the paper entitled "Bahrain's Uprising: Domestic Implications and Regional and International Perspectives" which is deemed to be critical of the UAE government) was stopped by immigration officials who informed him that he was being denied entry to the UAE and sent back to London. [261]
- Recently in March 2015, a New York University professor who has written critically on migrant labor issues in the United Arab Emirates was blocked from boarding a plane to Abu Dhabi. Andrew Ross, a professor of social and cultural analysis at the New York City campus and president of NYU's American Association of University Professors chapter, was prohibited by UAE authorities from boarding an Abu Dhabi-bound plane at New York's Kennedy International Airport due to stated "security reasons." Ross had been planning to continue his research on migrant labor issues in the Emirates over his spring vacation. He was not planning to stop by the NYU Abu Dhabi campus while there, but was prevented entry, anyway. [261]
- The University of Groningen will be the first Dutch university to open a branch campus in China. In collaboration with China Agricultural University, Beijing, the University plans to establish a presence on a campus in the city of Yantai, Shandong province, from 2017. Chinese legislation states that the government may not interfere with the content of programmes taught at foreign institutes. This was one of the main conditions agreed between the University of Groningen and CAU. We are in charge on the campus. These are our programmes. If academic freedom cannot be guaranteed, the plans will not go on. [278]
- NYU is one of many Western universities to have set up a satellite or a branch campus in China...These campuses may be similar to universities in the West in terms of academic quality, faculty composition and learning style, but there are still very Chinese elements about them. Every one of them has a Party committee, and students still need to take courses on Marxism and ideology. But unlike Chinese universities, where administrative interference is considered one of the biggest problems with the education system, the Party committees in these branch campuses usually don't have a say in academic affairs, educators say...For instance the issue was brought up over and over again at regular meetings of the Academic Council of Duke University. Many faculty members have raised questions over free access to the Internet, unstable Google searches, and if a professor might be kicked out for irritating the government, according to minutes of their Academic Council meetings...Mary Brown Bullock, executive vice chancellor of Duke Kunshan, said in an e-mail to the Global Times that they have received assurances from the Chinese side that Duke Kunshan "will be accorded"

the **highest level of academic freedom**, so that our faculty may teach what they want, and our students may learn what they want." [279]

• In one country the law specifies that the university president must be a national of the country and stipulates that university staff can only be promoted with the approval of a government committee. [283]

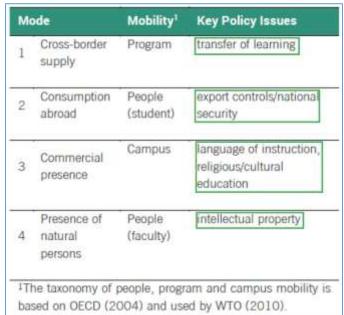


Table 5.9: Key Cross-Border Higher Education Policy Issues, **Curriculum & Academic**Freedom [195]

5.8.6. Measurement of Learning Outcomes

The UK's not that developed in learning outcomes. ...We specify a learning outcome for our modules, but we don't have to measure them...Whereas in Malaysia you do need to measure your learning outcomes'. [229]

5.8.7. Three Main Barriers for Preventing Adaptation

They cited three main barriers preventing adaptation:

- Host regulatory agencies
- The home university
- Local students. [199]

Some of the managers believed that the **local students themselves were a source of resistance** to local adaptation. Students study at the IBCs to earn a UK degree. Their resistance to localization extends beyond the curriculum to assessment and grading: 'I think a lot of the international students **like to feel the fact that** the British academics are running the exams boards here because they are getting a British degree'. [199]

5.8.8. Few Disciplines Need Localization

One interviewee gave an example of the need to customize content. 'In engineering, they teach about central heating as part of their curriculum. [Here] we teach how to cool things down. In building, the **buildings are differently constructed**. In the UK environment, they have to be differently constructed. So there's a **difference in civil engineering**'...Engineers in hot, dry countries need to learn different techniques and models from UK students operating in a cold, wet climate. [229]

5.8.9. Co-Curricular Aspects of IBCs

There is a significant gap in the literature related to the co-curricular aspects of international branch campuses. [209]

5.8.10. Selection of Academic Programs: Strengths of Parent Institution

Administrators look at their own institution's strengths when selecting academic programs, which helps them obtain a competitive edge and offer high quality programs. One interviewee explained that "you don't want to go out there to offer something you are not very strong at." An interviewee at another university, with a strength in medicine, noted that "the best thing [our university] should do is build out from its medical expertise so the second course probably shouldn't be business. It should be biochemical studies. Then you go from biochemical studies perhaps to food nutrition, and from there you're going to some other sciences, and then perhaps go into business and build out that way." [234]

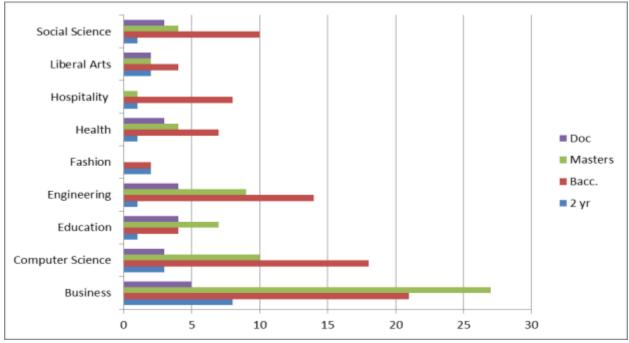


Fig. 5.13: Programs offered by various IBCs [300]

5.8.11. Selection of Academic Programs: Costs Considerations

Parent institutions must also consider the **cost of facilities and faculty required for certain programs**, **weighing the costs of the programs against the alternatives**. While certain programs may have a high demand, the provision of those programs or others may be prohibitively costly. Some programs, for instance, may have extensive resource requirements. Discussing his institution's choice to offer a social science management program over other options, one interviewee noted, "It's a nice area because it doesn't involve terribly elaborate lab or technology needs, so it's pretty straightforward in terms of what we have to ask [our host country] partners to provide." [234]

The ability of an IBC to charge and collect tuition commensurate with the cost of providing the education is important. This is particularly the case for IBCs that rely on tuition rather than funding from the host country to operate, although even in IBCs fully paid for or heavily subsidized by the host country, the parent institution still must assess whether or not the IBC could eventually support itself if or when funding is discontinued. [234]

5.8.12. Selection of Academic Programs: Identifying Sustainable Academic Programs

The selection of academic programs is a key part of the screening and evaluation of suitable IBC opportunities. Notably, it is part of the decision-making process itself, not something that is determined after the decision to establish an IBC in a particular country is made. This is because

- Understanding the demand for
- The willingness of students to pay for
- The feasibility of offering certain programs

is necessary in order to determine whether or not the IBC can generate enough revenue to cover its costs. [234]

5.8.13. Selection of Academic Programs: Avoid Programs with Scarcity of Faculty

Other academic programs require, and may have difficulty attracting, a large specialized faculty. One interviewee explained that "we have some very specialized programs; for example, petroleum engineering, where a high degree of specialization is required. So, one or two people can't deliver the program, even if there's, say, 30 students in the course. You need to have quite a wide range of expertise to deliver that program." Another challenge lies in attracting professors in the sciences... One of the most commonly selected fields is business. In fact, according to the Observatory on Borderless Higher Education (OBHE), over 60 percent of IBCs offer business at the undergraduate or graduate level. It is chosen on account of its high demand worldwide and the fact that it can be provided at a relatively low cost since it does not require sophisticated facilities or a highly specialized faculty. [234]

5.8.14. Selection of Academic Programs: Stability and Risks

Universities also consider the stability and risks associated with their selection of academic programs. Some institutions focus on one small program and expand later if the initial effort is successful as a means of containing the risk of failure, while others offer multiple programs for

better insulation against risks...Moreover like a fully-fledged university, you may not get permission by regulator of Host Country to start all the programs at IBC. [234]

5.8.15. Selection of Academic Programs: Internationalization

Universities also consider what programs "make sense to offer in an international setting." Some programs are especially well suited to take advantage of the international setting to enrich the academic experience. Academic programs such as international business and international relations that benefit from immersion in a foreign culture or interaction with an international population are two examples. For students enrolled in these and other programs, the opportunity to study in multiple locations is seen as a benefit. Internationally-focused programs also attract faculty to teach at the IBC because the programs provide opportunities to build research relationships and conduct research abroad. An IBC in China, for instance, might give scholars interested in topics like global health the opportunity to collaborate with local Chinese global health scholars. One leader noted that it is difficult to get faculty and students in fields such as engineering or biology to study abroad because being abroad does not necessarily benefit them. But a student majoring in Chinese studies would benefit from spending time in China and an international relations professor might benefit from working abroad and collaborating with researchers in another country. [234]

5.8.16. Selection of Academic Programs: Market Share

As Levy's framework argues, universities often select programs in markets that allow them to gain market share by offering something better or different than local alternatives or by absorbing excess demand. One interviewee's university differentiated itself by offering a new way of teaching. This interviewee explained that "we were unique because we were offering not only a subject that was popular, but...a very new way of offering it. I think the [host country] thought that the environment in which their students would be studying was just as important—perhaps more important—than the subject they were studying." Another institution carved out a niche by offering a subject not otherwise taught in the area, explaining that "we look at the demographics ... and look for a vacuum we can fill." Another key concern administrators expressed is the ability of their institution to differentiate their programs from local alternatives. One interviewee acknowledged that "the challenge will be how different [our programs] are from the programs that are offered by [local] universities and if they are attractive enough to get students." [234]

5.8.17. Selection of Academic Programs: Market Demand

Interest among Parent Institution Faculty and Students Parent institutions consider the **demand for certain programs among students** in the host country as well as the interest of students and faculty at the parent institution. Because parent institutions need to attract students and staff to the IBC, both from the parent country and from the host country, the interest of students and faculty at the parent institution is important for gauging the viability of an IBC. [234]

Host country also select institutions and academic programs based on the needs of their particular region. As one parent institution explained, "the reason we went with engineering was

because that's what the government wanted. It's a mining area, so they wanted civil engineering...They also wanted nursing [and] gerontology since it's an area where people want to go to retire." Other region-specific cultural considerations may also come into play. One interviewee at a parent institution with an IBC in Qatar noted that although there wasn't initially a large industrial base for the academic program they were being invited to offer, demand for this program among female students was high. The interviewee explained that "it wasn't that common for [females] to study abroad without being chaperoned. And so her Highness and the Emir wanted to bring the education to them." [234]

As previously discussed, most IBCs are not initiated entirely by the parent institution but by **invitations from people or institutions in the host country** as well. The host country may reach out to a particular institution to establish an IBC to teach specific academic programs. This is especially the case in education hubs, where the host country often invites several universities to establish IBCs, **each with a different area of focus**. The host country typically chooses parent institutions for particular academic programs based on the academic reputation, expertise, and international experience of the institution. Administrators at parent institutions overwhelmingly stated that in cases where they were recruited by a host country, the host country chose the parent institution based on its "rankings" and/or expertise in a particular field of study. [234]

In cases where the host country approaches the parent institution to teach a particular subject or set of subjects in which it has expertise, the parent institution often has little choice about what academic program it can offer. Instead the parent institution has to make a decision regarding whether or not it can successfully offer the requested program in that particular country. Assessing student demand for the program, the students' and host country's willingness to pay, program costs, and program risks are crucial for the assessment of the program's viability.

[234]

Student demand for a program is a critical host-country factor universities must consider when deciding whether or not to offer a certain academic program. Like host countries, parent institutions also consider the demand for particular academic programs, their own strengths, and the suitability of the program for the international setting. Evidence from the interviews revealed that universities assess demand differently, with some relying on informal discussions or requests from students and trial and error, and others conducting in-depth market analyses and even using outside consulting firms to conduct market research. Among the interviewed institutions, there was a tendency towards more sophisticated research in newly established IBCs while leaders of more-established IBCs reported that they (or their predecessors) relied more on advice from their partners, previous experience, and other less-formal measures. The tendency for more rigorous due diligence is perhaps a result of universities becoming increasingly aware of the significant financial and reputational risks associated with a failed IBC and the pressure that comes with that... Another factor universities consider is the popularity of particular academic programs within the host country. Institutions also look at the enrollment choices of students studying abroad...Linked to demand are local needs and labor markets, which are also taken into consideration. [234]

5.8.18. Selection of Academic Programs: Start with Master's Program and then UG Programs

First, an institution needs to decide if it wants to offer undergraduate-level programs, graduate-level programs, or both. As one interviewee noted, "it's simply much harder to develop a high quality undergraduate education at scale." **Undergraduate programs require more extensive resources, on average, than graduate programs**. As one interviewee described, "to do an undergraduate education on the level of what [the parent institution] expects, you need so many more faculty because you have so many more disciplines involved." [234]

Given these difficulties, one approach universities are taking is to **start with a master's program** and then slowly develop additional programs. As one interviewee noted "and so you can experiment, develop high quality programs at a master's level and that gives you the increased capacity to expand back to the undergraduate level." Another interviewee explained, even with its various challenges, "I think eventually undergraduate education can be done, I just think it's better to gain familiarity at the master's level, learn how to do it really well, and then move it back to the undergraduate level." [234]

5.8.19. Course Scheduling

Another key consideration is course scheduling. Some universities are using alternative schedules and experimenting with **courses of different lengths** to help IBCs **attract faculty who may not want to spend an entire semester at the IBC but may be willing to spend a shorter time there.** Explaining the rationale for this decision, another interviewee at the same institution noted that by offering alternative teaching schedules, the university hoped to make "the teaching experience more attractive to…faculty because they can go to the IBC and, for instance, **teach double time**, **teach more intensively for seven weeks** and then return to their parent institution or stay here [in the host country] and have some free time. [234]

5.8.20. Recognition of Qualifications

Increased academic mobility raises the issue of credential recognition to a more prominent place in international education policy. The credibility of higher education programmes and qualifications is extremely important for students, their employers, the public at large, and of course for the academic community itself. It is critical that the **qualifications awarded by Crossborder providers are legitimate and will be recognized for employment or further studies both at home and abroad**. To establish a credential review and assessment agency is a challenge facing many countries of the world. [231]

5.9. Pedagogy and Teaching Issues

5.9.1. Teaching Challenge: Harder to Adapt to the Teaching Environment

Most obviously, students at IBCs are likely to have difficulty adapting their learning styles to the teaching methods promulgated by the home university. Unlike an international student, who

leaves his/her own country to be immersed in the culture of another country while studying overseas, students at an IBC remain in their home country. This may make it harder to adapt to the teaching environment on campus, which is effectively a small 'bubble' of foreign culture that students experience for a few hours each day. [199]

A closely related challenge for expatriate staff is teaching students who have very different learning styles and cultural frames of reference. As Tierney and Lanford note, 'international branch campuses, with their emphasis on face-to-face teaching, foreign ownership, awarding of credentials by a foreign provider, and physical campus environments, are uniquely positioned to serve as 'hotspots' for cultural transgressions...conflicts and misunderstandings among students, faculty, and administrators are inevitable'. [199]

Education Culture Differences in the educational culture between the parent institution and host country are important when the parent institution selects academic programs. One interviewee noted that in different cultures there exists "different learning styles and different students. Chinese students, for example, are not used to being put on the spot and being asked for their opinions. So they have a 'conversion year'"—a year during which they focus on improving their English and getting used to the British way of teaching and learning... Cultural differences also affect the teaching styles in some academic programs. One professor notes that "you have to be really highly aware of [differences in the educational culture] because some of the discussions or exercises that work really well at [the parent campus]... might fall a little flat at [the IBC]." Professors must learn how their students think and change their teaching styles to reflect the education culture of the IBC. [234]

In order to motivate students learning, transnational faculty members ought to understand that in different countries, students may have their own preferred learning styles. It is necessary therefore for foreign faculty members to suspend their assumptions about the teaching methods they have used elsewhere and to review the suitability of modifying their teaching methodologies for local contexts.

- In Uzbekistan, the first language is Uzbek, second language is Russian, third language is Tajik, and English is an optional language for the majority of students not only in the IBC, but also in other state universities in the country. Students may not be able to fully understand lectures, especially the subjects are full of technical jargon, therefore, transnational faculty members are advised to take note to allow time for them to digest in class. [273]
- In addition, culture, historical traditions, and the teaching methodologies in Uzbekistan pretertiary education generally focus on teacher-centred in preference to student-centred learning. This leads to Uzbek students to expect to be passive recipients of information and to rely on summarized study packs instead of reading from the textbooks and other reference sources. They are not able to adopt an independent approach to learning and problem solving, especially applying critical analysis to essay writing and coursework preparation. Uzbek students expect lecturers/tutors to state the facts for them to memorize and regurgitate. Students who perform poorly in their academic study often suffer from the inability to adapt to the independent learning style in the international programme. Foreign faculty members face the challenge of adjusting their teaching methods to satisfy both the expectations of their institutions and the preferences of the students. It will be the students who usually have to adjust to the new styles

- of learning and lecturers/tutors will often need to offer additional guidance and support to students not familiar with student-centred learning methods. [273]
- Walton and Guarisco undertook a qualitative research study which highlights this tension. One of their interviewees commented on the difficulties of using an 'Anglo-American' pedagogy to teach Russian students in a transnational partnership, observing that 'traditionally the Russian higher education system has been based on the German one, where the teacher or lecturer is a guru who tells stupid kids what they should do... They are supposed to take notes, learn by heart, think for a while, and then present what they have learned at examination'. [289]

5.9.2. Difficulties Aggravated when Students Are Being Taught In Their Home Countries

The interviewees reported a range of issues with students, which primarily related to the difficulties of teaching students with different learning styles and needs, as well as English language ability. Although they conceded that the same issues existed on UK campuses, there was a general feeling that these **difficulties were exacerbated** when students are **being taught in their home countries**. One observed: 'you are dealing with different student bodies, different students. Academics here who have taught international students say the students here are different, completely different, and completely immature'. Several interviewees argued that the central challenge was to give students a UK-style education that led to the same learning outcomes as in the UK. This is difficult when the students and most of the staff are operating in a different cultural context. [199] [229]

One observed: 'you are dealing with different student bodies, different students. Academics here who have taught in Australia, taught international students and they are teaching international students here, but they say the students are different. Completely different. Completely immature. We face the same problems with teaching. It's a problem in the UK, **but its huge here**'. [229]

• In China, one manager noted that the difficulty of engaging with students was increased because 'the wider **student experience** is **controlled by the Party**'. Explaining that the Partyrun student affairs office managed all the mandatory Chinese culture courses, personal tutorials and student societies. The manager concluded, 'the Chinese government is **wanting to reinforce the teaching of Chinese ideology in HEIs**, so we have to watch this space'. In general, there was a feeling that, for a variety of reasons, the **students needed greater support than in the UK**, but that the IBCs were not sufficiently well-resourced to respond to this demand. [229]

5.9.3. Not Having Similar Educational Background at Home and Host Country

There remains a great variability in the **learning outcomes** of secondary schools in **different nations**. Faculty cannot expect the host country students to have had the **same educational background or learning expectations** as students in the home nation. [128]

IBC at Host Country may face problems like

- Different learning styles
- Inadequate English-language skills
- Secondary School preparation
- Not having similar educational background at home and host country

Both the branch campuses and local universities often need to provide up to a year of **preparatory study** for many students **before full admission** is possible, due to a combination of inadequate English-language skills and inadequate secondary school preparation. For selective universities, like Carnegie Mellon or New York University, it is highly questionable whether the pool of qualified candidates will be large enough to become sustainable over time. [190]

5.9.4. Cross Cultural Pedagogy: Individualism and Collectivism

It is very difficult to develop the cross cultural pedagogy, which is suitable to particular IBC. Many years are required to align the teaching strategy, which is most suitable for particular IBC. Let's see the complexities.

In the classroom, those from a **collectivist society** may strongly value tradition and acquire education as a form of prestige. Individuals will not speak out unless called upon, or while working in small groups. Several factors relating to **Individualism/Collectivism need to examine before finalizing Pedagogy**. While some behaviors could be observed, most of the data is based on the instructors' perceptions.

- The relationship between students
- Group-work
- Ethnic homogeneity
- Students willingness to initiate debate
- The in-class discussion of personal issues. [258]

For example,

- Canadian college St. John's Newfoundland, Canada
 - o According to Hofstede, Canada is rated as an individualist society and Qatar is considered collectivist.
 - o Canadians display the opposite traits such as independent learning, interrupting the teacher, questioning, and expressing contrary points of view.
 - o The students in St. John's often spoke about their personal situations, especially when explaining absenteeism or late assignments.
- Canadian college in Doha, Qatar
 - o In Doha, the students were proactive in helping their classmates, which was expected in a collectivist culture.
 - o Instructors in Doha found that late or non-submission of homework was a serious problem, e.g. Reading and homework must be done in class, as students won't do homework. This creates a problem getting through the class material.
 - o The Qatari students were more hesitant to speak out in class.
 - o A classroom in an Arab setting students expecting teacher-centered classes, obedience to the teacher, and students with lower status deferring to higher ranked students.
 - o Students in Qatar were observed to be more formal with their teachers.
 - o The hesitance of the Doha students to speak out may be attributed to collectivist behavior traits.
 - It may also be indicative of the students having less experience from which to draw due
 to their unfamiliarity with Western topics. Two occasions were observed in which
 students stated that the Business practices being taught direct marketing and debt

- **collection** were not practiced in Qatar. In St. John's, the students seldom contradicted each other, but generated examples from their personal experiences and the media.
- The Doha students rarely spoke about their personal lives with the instructors. This is consistent with the expectations of a collectivist culture, where family and work are not blended. The teachers were reluctant to ask the students personal questions, as they were unsure of the social taboos.
- o In Doha, the primacy of English as the language of instruction was observed to be a handicap for many students.
- The Qatari students also may have felt more comfortable receiving help from their peers.
- O People in the Arab world tend to have a high propensity for Uncertainty Avoidance that could be manifested by students desiring highly structured learning situations with precise objectives as well as the statistically related variables of strong displays of emotion and avoidance of taboo topics.
- The Qatari public education system relies heavily on memorization and repetition, so it was predicted that students would have strong Replicative traits.
- Western ideas are more difficult to transfer to the Qatari societal context.
- o In a society with Aggressive traits, students openly compete, and failure is seen as a severe blow. In a considerate society, students help each other and failure is relatively unimportant. In Doha, the instructors set up competitions to motivate the students. While the students focused on 'winning', no one was upset about 'losing', or was hesitant to reveal an unfavorable score.
- The Qatari students, in contrast, were provided with free tuition and a salary while studying and most had guaranteed jobs upon completion of the program. As enrollment in the college provided the students with both freedom and money, the instructors opined that most students were not in a hurry to graduate. [258]
- A survey conducted in the UAE revealed that many professors believed their students had insufficient ability in mathematics and writing in English. It is possible that these things are due, in part, to the need for international branch campuses to recruit and retain students. [261]

Hong Kong

o In Hong Kong, students reported a lack of trust in the foreign teachers, and often felt the teachers were proselytizing Western values. [258]

• International students

 International students had a strong preference for local case studies and were often frustrated and alienated by Western curricula, as they felt their prior experience was not valued nor were the expectations understandable in their societal context. [258]

According to cultural background the pedagogy or teaching strategy must be adopted through variety of techniques like

- 1. Using structured lecture format
- 2. Going over texts and problems in class
- 3. Expressing a desire to move students from dependent to independent learners
- 4. Holding office hours to provide additional guidance
- 5. Checking comprehension

- 6. Beginning the term with highly structured activities, and then slowly progressing towards independent learning
- 7. Using a variety of question forms such as fact/recall or open ended
- 8. Asking students to explain concepts
- 9. Calling on quiet students individually
- 10. Using guiding questions
- 11. Using student presentations to promote independent learning
- 12. Using local examples
- 13. Allowing groups of students to negotiate assignments and translate
- 14. Employing set seating plans to discourage cheating
- 15. Requesting that stronger students allow others to answer, and allowing more time for answering
- 16. Having students work on the same task at the same time
- 17. Asking individuals to speak out
- 18. Being mindful not to embarrass students who are not prepared for class
- 19. Using local examples
- 20. Acknowledging conflicting feelings towards group-work
- 21. Using a progress chart to show achievement. [258]

5.10. Aligning Accreditation between the Home Institution and Host Country

5.10.1. Quality Assurance

Quality assurance refers to the policies and procedures countries use to identify (i.e. recognize) legitimate institutions of higher education and establish standards for their operation.... In particular, private sector initiatives in higher education, including for-profit and cross-border higher education, were seen as low-quality providers that could not be trusted to naturally serve the public good... The agency typically is an arm of the national or sub-national government, or operates as a non-governmental organization with official recognition from the state to perform quality assurance functions. [195]

5.10.2. Aligning Accreditation between the Home Institution and Host Country

Simultaneously meeting standards of multiple regulatory frameworks of Home and Host Countries is a really major challenge. [302]

Aligning accreditation between the home institution and host country is perhaps the **most serious challenge** a branch campus faces. Requirements of local accreditation agencies, combined with the academic standards of incoming students, present an uncertain environment for foreign institutions. In the absence of clear planning, the delivery of overseas programmes can **jeopardize home campus accreditation** and the representatives at the branch campus will not be fully aware of what areas of programme delivery are flexible to local adaptation to market demands, student ability and host country regulators. [180]

One of the special complexities of managing academic quality in an IBC is that, in an increasing number of host markets, the managers have to satisfy the regulatory requirements of both the home governmental agency (e.g. the Quality Assurance Agency) and the host governmental agency. In Malaysia, for example, IBCs are subject to regulation by the Malaysian Qualifications Agency, which specifies the curriculum requirements, and the Ministry of Education, which controls enrolment numbers and tuition fees. [199]

Мо	de	Mobility ¹ Program	Key Policy Issues fraud, illegitimate activity
1	Cross-border supply		
2	Consumption abroad	People (student)	credential harmonization
3	Commercial presence	Campus	equivalency of standards
4	Presence of natural persons	People (faculty)	expertise and qualifications

Table 5.10: Key Cross-Border Higher Education Policy Issues, Quality Assurance [195]

For example,

- In the UK, **industrial placement** is not a requirement of accreditation, whilst in Malaysia it is. The question faced was how to integrate the Malaysian requirement for industrial placement whilst maintaining the undifferentiated nature of the degree. The solution adopted was to create an industrial training module which the students needed to pass in order to progress to the final year of the MEng degree. The module carries zero credits so that it does not contribute to the degree programme; consequently, the students studying at the Malaysia campus need to do more work to pass the undifferentiated degree. [282]
- The University of Wollongong Dubai (UOWD) provides a **unique example** in this category. It is in fact difficult to categories, but provides several examples of good practice. Despite its independent status, UOWD chose to seek accreditation from the United Arab Emirates (UAE) Ministry of Higher Education and Scientific Research. It also chose to retain strong links with the University of Wollongong, and through this link is also audited by the Australian Universities Quality Agency (AUQA). Programme changes are approved by the UOWD governance structures as well as by the University of Wollongong. [283]
- The accreditation is also often provided from outside the university in addition to their internal assurance systems. For example, University of Nottingham's business schools in China and Malaysia both received European Quality Improvement System (EQUIS) accreditation and Texas A&M University at Qatar was accredited as a branch campus by the Southern Association of Colleges and Schools (SACS) in 2007 and the degree programmes were accredited by Accreditation Board for Engineering and Technology (ABET) in 2009. [283]

5.10.3. Difficult to Apply Home Country Accreditation Processes

Maintaining quality control in IBCs may be more difficult because managers and staff operate in an alien culture far from the home campus. If many of the staff are locally hired, they may share different value sets from their managers and find it **hard to apply academic regulations and procedures set far away in the home university.** [199]

5.10.4. Local Accreditation and Employment

Degrees conferred by IBCs lacking local accreditation may not be recognized by certain—often governmental—employers. [209]

5.10.5. Washington Accord: Within their Respective National or Territorial Boundaries

Although the degrees offered by the international branch campuses are usually undifferentiated, they are not covered by the Washington Accord. The national emphasis of engineering accreditation is reinforced by Item 3 of the Accord which states that 'The Accord applies only to accreditations conducted by the signatories within their respective national or territorial boundaries. [282]

- At this point it is worth using the University of Nottingham as an exemplar. The university has campuses in Malaysia and China and offers engineering degrees on all campuses. A student graduating with MEng degree from the Nottingham campus, under the terms of the Accord, will be recognized by the Accord signatories and will be able to register as a graduate engineer in a signatory country.
- This is not the case for a student who studied the same engineering degree at the Malaysia campus, because his/her degree is not covered by the Accord even though it has been accredited by a UK professional body. However, the student will still be able to register in another signatory country because the University of Nottingham has sought appropriate Malaysian accreditation. China is not a signatory of the Accord and so a student graduating in China, with exactly the same degree, will not be able to register under the standard scheme as a Chartered Engineer. [282]

The mutual recognition of undifferentiated degrees delivered by an international branch campus, either in another signatory country or in a country that has not signed up to the Washington Accord, is solvable by modifying the Accord. Interestingly the IEA has two other Accords, covering engineering technology programmes (**Sydney Accord**) and engineering technician programmes (**Dublin Accord**). In each of these Accords there is some provision for transnational education; however, the published rules still require the undifferentiated programmes to meet the requirements of both the home and host accrediting bodies. [282]

The accreditation processes are national in nature and have been designed to improve the programmes within a specific country. In addition, the implementation speed of any recommendations made by accrediting panels by institutions of higher education differs from country to country. In the case of the international branch campuses, implementation changes are even slower because the effect of any proposed change on other campuses needs to be understood before any proposal is agreed and adopted. [282]

• The IEA specifies generic learning outcomes, but the implementation of outcome-based learning by the signatories is derived nationally and leads to differences. For example, the system chosen by the Malaysian Engineering Accreditation Council is different from that implemented by the professional bodies of the UK. The Malaysian system places significantly more emphasis on Bloom's taxonomy and continual quality improvement. These differences accentuate the diversity of learning philosophies in various countries. For example, independent learning is expected of students studying in the UK but less so for those studying in Malaysian universities. [282]

The ongoing challenge for the Faculty of Engineering at the University of Nottingham (and other institutions operating international campuses) is to have one set of processes that address the multiple requirements of the differing accreditation bodies, whilst maintaining the undifferentiated nature of the programme, the educational ethos and compliance with the rules and regulations of the university. [282]

5.11. Research Aspects

5.11.1. IBC: Predominantly Teaching Institutions, Only Few Research Oriented

Although branch campuses are predominantly teaching institutions, a number of IBCs are also engaged in research. Research conducted at IBCs has the potential to benefit both the host country and the home campus, although many institutions choose to avoid the complexities of engaging in research. Localized research offers tangible benefits to the home country.

• For instance, the University of Nottingham campus in Ningbo, China established a center that researches efficient and affordable energy sources to feed the surge in Chinese construction [209]

Started primarily as teaching institutions, a few have developed substantial research capacity, and a growing number of IBCs encourage their faculty to pursue a research agenda. These **research agendas tend to be locally relevant** and, at times, **funded by local funds**. It seems that the **research programs are most prominent at locations where the host government has begun to provide funds to the IBC**. For example,

- The campus of Georgia Institute of Technology (United States) in France runs a collaborative lab dealing with telecommunications and innovative materials that is partly funded by the French government.
- The University of Nottingham's (United Kingdom) campus in Malaysia received support from Malaysia's National Cancer Council to support research into potential anticancer drugs derived from Malaysian wildlife. [199]

However, many IBCs also now appear to be creating internal programs to help foster a research environment.

• The University of Wollongong Dubai (UOWD) was established with the intention of becoming a research university. The University of Wollongong-Dubai (UOWD; Australia) began offering a doctorate of business in 2010 and supporting its faculty to create research-based case studies relevant to the practice of business in the Middle East. Research is expected of all

academic staff, three-quarters of whom have PhD degrees and expect to continue their research careers. UOWD also provides research seed-grants to faculty in other areas. Academic staff are recruited and promoted on the basis of their research records. There is an active research committee, chaired by the UOWD president, which has a broad remit of promoting and developing research and researchers and policies and infrastructure to support this. [199] [283]

- Nearby, at the Dubai campus of the Middlesex University (United Kingdom), an interinstitutional research forum was designed to bring together researchers to share and collaborate on research. [199]
- Some research-based universities, such as UCL insist that there be a long-term research dimension in any proposed international partnership. [283]
- Academic staff at Texas A&M at Qatar are expected to be active researchers (and are evaluated on publications and grants awarded). [283]
- The British University in Dubai, which was not one of the case-study institutions, was also established with the explicit aim of being a postgraduate university with staff expected to spend 40% of their time on research. [283]

In general, research has a **relatively lower profile in the IBCs than the home universities**, because the **primary function is teaching**. The staff base of the IBCs tends to comprise **seconded staff**, **whose research is often interrupted** while they are based in the IBC, and **locally-hired staff**, **who often have lower academic qualifications** than their counterparts in the UK. Commenting on the teaching loads, one manager said there is '**very high contact time**. We're talking about teaching 42 weeks of the year. Class contact could be 20 hours a week'. While some of the more mature IBCs are beginning to develop a research culture, the **lack of research support** was the most widely cited obstacle to improving research productivity. One manager recalled that 'we had a professor join last year. She struggled because she hasn't got PhD students and she lacks the infrastructure of support around her'. The **higher cost of sending staff to conferences** was cited as an important factor, because the most prestigious academic conferences tend to be in Europe and North America. [199]

5.11.2. Locally Relevant Research

More research needs to be done regarding the growing research agendas and capacities within IBCs, but such developments suggest that these institutions are becoming more locally engaged in relevant research and could signal long-term commitment to the regions in which they are located. [230]

Localizing research involves a **trade-off** of **international reputation versus local impact**. As research is localized, it strengthens the perceived legitimacy of the IBC in the eyes of the host government and opens up new sources of local funding. For example,

- The International Finance Research Centre at UNNC is a joint venture which was established in 2008 as part of a 'Strategic Cooperation Agreement' between UNNC, the Ningbo Municipal Government and the China Academy of Social Sciences.
- The Crops for the Future Research Centre (CFFRC) in Malaysia was established as a joint venture between the University of Nottingham Malaysia Campus (UNMC) and the Malaysian government in 2011 to carry out research into underutilized crops and improve agricultural biodiversity.

The host government self-evidently has an interest in the IBC localizing its research agenda, to address the needs of the host country. [229]

5.11.3. Location-Specific Program Opportunities and Advantages

The existence of certain programs helps attract social and intellectual capital. **Certain locations may also offer strong research opportunities**. One interviewee noted that "being a part of the [education hub] presents exciting research opportunities." Continuing, he explained that the **host country is setting up a research center in the education hub** that will focus on a certain topic of research—the same topic of research that the parent institution planned to specialize in—and is inviting several companies who work in that topic area to collaborate with the parent institution and other universities at the hub. He said that his university reasoned that "if we can offer programs [in the same topic area] over there, we are in a good environment…" and noted that the host country's new research center influenced his university's decision to pursue the IBC in that particular hub. [234]

5.11.4. Research Restrictions

A number of governments, often through the trade ministries, have instituted rules and regulations that **restrict the flow of certain types of research and research related materials**. The intent is often to inhibit potentially dangerous knowledge from falling into the wrong hands or to protect a country's natural ecosystem. [195]

- For example, in 1999 the United States passed the International Traffic in Arms Regulations. Despite an exclusion for fundamental research, there have been numerous examples of foreign research collaborations being interrupted and foreign-born academics working in the United State being restricted from continuing to work on certain federally funded projects deemed to be protected. [195]
- Similar regulations have said to have been invoked to exclude students from countries where there is an embargo from enrolling in courses at US-based IBCs where certain forms of protected knowledge was to be taught. [195]
- A further restriction on trade is invoked when countries cite protection of natural resources and biodiversity to prevent foreign academic researchers from studying native biological samples.
 [195]
- The Convention on International Trade in Endangered Species of Wild Flora and Fauna, for example, restricts academic research on certain species to scientists in their native countries. Currently 180 States have ratified the Convention, including nearly all members of the United Nations. Any trade agreements that included rules and/or market access commitments in educational services would need to accommodate these types of international agreements. [195]

The results: what dimensions to localise (3)? Research - Topics studied The trade-off of localising research: - International excellence - vs - Local impact

Fig. 5.14: What Dimensions to localize? Research [197]

5.12. Complex Relationships

5.12.1. Types of Partners and Complex Relationship

The joint venture partners are of two broad types.

- One is the **conventional joint venture partner**, which takes an **equity stake in the IBC** along with the home university and, usually, provides a range of commercial services as well as being a source of funds. For example, joint venture partners often build the campuses of the IBC and may directly employ administrative and support staff (e.g., security, cleaners, caterers, and gardeners) and even the locally-hired academic staff.
- The second type of joint venture partner (taking a broad definition of 'partner') is the **development partner**, which builds and operates the campus, while the home university leases the land and buildings. Although the development partner **does not a have an equity stake** in the IBC, and so cannot directly influence decision-making at board level, the operational relationship can be as close, and as challenging, as with an equity partner. Many of the key activities of the IBC (e.g., accommodation, catering, security, project management) are controlled by the development partner. [229]

One manager reported that the **relationship with the management team of the joint venture partner 'is complicated** because we are minority shareholders in the joint venture. So it's not a partnership of equals'. Another complained, 'from a governance point of view I think the issue is with the balance of power... this building isn't owned by the university... We always struggle with it'. Working with private sector joint venture partners is particularly challenging for the managers of IBCs, who have mostly had little previous management experience within academia, let alone in a commercial environment. [199]

Joint venture partners of whichever type are commercially orientated. Generally, this manifests itself in the **IBC managers being pressurized** to reduce costs, either directly through the joint venture board or indirectly by the need to cover the costs of the lease and remain competitive in the market. This will tend to drive the IBC towards localizing staff to the greatest extent possible. [229]

5.12.2. Joint Venture Partnership Convert IBC into Private Educational Company

A common feature of all the IBCs studied was that managers spent a considerable amount of time on dealing with the joint venture partner. In all cases, the IBC is **not technically an offshore campus of the home university**, but a **private educational company established and registered in another country**, in which the home university has an **equity stake**. [229]

For example,

- In China, foreign universities are required to have a Chinese partner to establish an IBC under the Sino-foreign Cooperation in Running Schools Regulations 2003.
- Prior to the establishment of the Iskandar development corridor, Malaysia also required foreign IBCs to have a local partner.
- In the UAE, the IBCs studied all had local partners, but this is not required by law. [229]

5.12.3. If not Joint Venture Partnership, then Host Government is Hidden Partner

Some of the IBCs are 100% owned by the home university and so, in a technical sense, do not have a joint venture partner. However, this could be seen as purely semantic. None of the IBCs has been financed and built by the home university. For those that do not have a technical joint venture partner, the campus has been built by the host government and then leased by the IBC. While the joint venture partner does not sit at the board table, there is nevertheless a clear partnership between the IBC and the government's development agency. [229]

• In both Iskandar and Dubai, where this arrangement is common, the IBC leases its teaching and administrative buildings, but many of the support services (student accommodation, catering, sports facilities, etc.) are provided by the developer, **creating the need to manage the partnership carefully**. [229]

5.12.4. Searching Strong, Supportive, Trustworthy Potential Partners

In 2014, the University of Central Lancashire's Cyprus campus was criticized for accepting a £16million investment from the pension fund of Cyta, the state telecoms firm in Cyprus, which was later accused of corruption and possibly illegal actions. [264]

The individuals interviewed in this study overwhelming noted that an important part of the screening and selection process is **finding and vetting a partnership offer**. They emphasized that having a strong, supportive, trustworthy partner or partners was critical to the successful establishment and ongoing operation of the IBC. While IBCs are independent operations, not joint ventures, universities often pair with other universities, government partners, or entrepreneurs when establishing an IBC. These partners help them navigate the **academic, legal, business, and cultural landscapes of the host countries**.

- Academic partners—typically a university in the host country—might, for instance, work with the parent institution to navigate the host country's academic regulations and expectations. They may also help them get accreditation.
- Government partners, such as a city or state-level partner, help parent institutions obtain permits, get appropriate business licenses, navigate the legal landscape, etc. Several

interviewees noted that government support was also important in the accreditation process. Partners also typically provide certain types and amounts of financial support. [234]

5.12.5. Balancing of Power: One Partner Usually Carries the Upper Hand

Academic partnerships should be mutually beneficial to each institution otherwise they aren't sustainable. This is easier said than done. In the case of the Joint Institute, this process likely took years of negotiating and tweaking to satisfy both sides. However, don't confuse mutual benefit with partnership equality. In reality, one partner usually carries the upper hand. Institutional prestige typically dictates this position of power, which is influenced by factors such as global rankings, reputation, and proximity to a global economic center. Each side should consider the implications of this imbalance. For instance, dominant partners often expect to have the final say over contested issues and the lessor partner is frequently expected to foot a majority of the bill.

5.12.6. Balancing of Power: Management of Home and Host Campuses

All the mangers interviewed expressed a degree of frustration with the inevitable **power imbalance between the senior management on the home campus and the managers of the IBC**. It's 'a perennial complaint of people at branch campuses that you know it's always the case you are always far more dependent on the home campus than they are on you'. [199]

A wide range of issues were reported in terms of relationships between the managers of the IBCs and academic colleagues at the home university, ranging from **ignorance and indifference at one extreme to outright hostility at the other**. A **lack of understanding** by colleagues at home repeatedly highlighted: 'a lot of people I spoke to at the home campus hadn't got a clue what was going on here'. Several interviewees complained about key committees failing to remember to invite representatives of the IBC to attend meetings by Skype or scheduling committees at times which were impractical for IBC staff working in another **time zone**. Some felt the ignorance may unconsciously be fueled by outdated stereotypes. [199]

5.12.7. Partners and Stakeholders: Different Objectives and Conflicting Expectations

Even with a 'clear demarcation', relations could be strained if the parties had different objectives. The IBCs are private companies and the local partners are for-profit, while the home universities are usually motivated by objectives like global reach and reputation... One summarized the difference in outlook by recalling '[our vice chancellor] would say "we're not a for-profit organization. The MD [of the partner company] would say, but we're not a for-loss one as well' [229]

Experience shows that at times **conflicting expectations** of the sponsoring university and the host country or sponsor can result in serious problems. Contractual agreements may be interpreted alternatively — sometimes leading to conflicts among participating parties or even the closure of the branch. A number of these conflicts resulting from differing or interpretations of agreements are, even in this early stage of the branch campus phenomenon, already evident. The problems

may be exacerbated when one side — usually the host country — is investing the bulk of the funds. [190]

A much more complex situation could arise when an IBC is the result of a partnership in which the **partners have different objectives**. The importance of alignment on this aspect cannot be understated. There are good examples of just how calamitous a clash between academic and economic objectives can be. The conflict between the need for program viability versus academic standards may lead to the IBC's closure or a move. The insistence of upholding certain standards by the University Quality Assurance International Board caused several IBCs to be excluded from operating in Dubai. The solution in this case was to move to another emirate in the United Arab Emirates where no such quality-control method existed. [281]

This literature suggests that managers of IBCs may find it harder to remain focused on their role as an agent of the home university the longer the period of secondment. Perhaps a more important consideration is that, unlike a more conventional joint venture, the **objective** functions of the university and the local partners in an IBC may be **quite dissimilar**. Many IBCs involve local **partners drawn from the property development or financial sectors**, rather than local educational institutions. These local partners may operate in a more overtly **commercial way** and have a much more focused **profit-maximization** goal than the university partner. For the manager of the IBC, this may make liaising between the home university and the local partners increasingly challenging, especially if his/her sympathies begin to shift in favor of the latter over time. [289]

5.12.8. Consequences of Neglecting IBC Issues

Failure to take account of the IBC can lead the academics at the home campus to unwittingly make changes to courses which **jeopardize the IBC's relations with host regulators**, which often require syllabus and learning outcomes to remain identical to those of the home campus as a condition of local accreditation. [199]

5.12.9. HR, Finance, Information Systems and Libraries

Relationships can be strained by the home campus using processes and policies which are not fit for purpose for the IBC. A number of the interviewees pointed out that UK universities are not multinational corporations, with HR and finance departments accustomed to moving staff and money across borders and national jurisdictions. One lamented 'the naiveté or lack of any real knowledge in the home campus' in terms of dealing with seconded staff. Bemoaning the inability of the home finance department to comprehend arcane local rules on depreciation and auditing, one IBC manager concluded simply by saying, 'we are a Malaysian organization'. [199]

For the major functional departments like **HR**, **finance**, **information systems and libraries**, trying to apply policies designed for a UK campus to an IBC based in a different country, with a different language, culture and legal system, is **highly problematic**. It is not simply that the home university's processes may not work in the context of the host country, the problem is also that the IBC is fundamentally a very different type of organization, being a private education company in which the university has a minority shareholding. [199]

5.13. Competitors

The managers interviewed identified a range of competitors, including

- UK universities
- Other third country universities
- Domestic competitors, which included both indigenous providers and other IBCs. [199]

5.13.1. Competition with Own Home University

As some IBCs begin to recruit international students, there is the risk that they compete for students who might otherwise have gone to the UK. Moreover, most of the IBCs deliver the same or very similar curriculum at the IBC and in the UK, creating the risk that the wealthier students may choose to complete their students in the UK rather than the IBC. [199]

One interviewee explained that there were tensions between the home university and the IBC 'around 2+2s that we run ourselves, but also 2+2s of our partners. And it's where the students go. Do they go to [the IBC] or do they go to the [home university]? [...So] two...campuses compete for students from a given partner'. In this sense, there is genuine competition between the IBC and the home university and this is growing. [229]

5.13.2. Third Country

In the UAE, competition from third country universities is a risk, because the students at the IBCs are mostly of South Asian origin and their residency status is linked to the family breadwinner's employment visa. As one interviewee explained: 'people were saying, I'd rather enroll my son or daughter in an Indian university because if I lose my job and go back to India, they can carry on there'. [199] [229]

5.13.3. Primary Competition: Domestic Universities and Other IBCs

The primary source of competition comes from domestic universities and other IBCs. The former includes public universities which have a range of competitive advantages over the IBCs. Their combination of cost, access and prestige factors means that, as a generalization, IBCs are competing for the students who cannot get into the major public universities. For such students, the choice is between lower status public universities, the domestic private universities and the IBCs. One interviewee noted: 'out here we are private organizations in Malaysian terms and there's also 20 other private schools of variable quality. It is quite a cutthroat business'. [199]

For example,

- Public universities in the UAE are well-resourced, only open to Emirati citizens and charge no tuition fees, so that almost no Emeriti students choose to enroll in an IBC.
- Accordingly, the UAE IBCs can only compete for the expatriate students who are excluded from public universities.
- In Malaysia, the public universities are heavily subsidized by the state. Tuition fees at the country's leading university, the University of Malaya, are typically in the region of MYR

2000 (£358) per annum (for academic session 2014-15). By rationing places for non-Bumiputra students in the pre-university matriculation system (completion of which is an essential prerequisite for entry to public universities), the competitive landscape in Malaysian higher education is distorted on racial grounds.

- In China, tuition fees for local students are also heavily subsidized, with entry to universities (including IBCs which are established as private Chinese universities) managed through a complex system of national entrance examinations (the 'gao kao') and provincial quotas. The importance of 'guanxi' (personalized networks of influence) means that the best students automatically aspire to enter the leading Chinese universities like Peking (colloquially 'Beida'), Tsinghua and Fudan.
- In contrast, in the UAE where the IBCs compete directly with each other for the expatriate market, they see the other UK and Australian IBCs as competitive threats. The same students are applying to three or four different universities [IBCs] and shopping around.
- Significantly, major **Indian IBCs like Manipal University and BITS Pilani**, were also seen as appealing to a very different demographic than the western IBCs, so not in direct competition

This combination of cost, access and prestige factors means that, as a generalization, IBCs are competing for the students who cannot get into the major public universities. For such students, the choice is between lower status public universities, the domestic private universities and the IBCs. [229]

In a host country where an increasing number of branch campuses and local universities compete with each other, it may be difficult to sustain the conventional model of only accepting host country students who meet stringent selection criteria set by home institutions, particularly for prestigious institutions which have high enrollment standards. [266]

For example,

• The branch campus of the University of South Wales in Singapore demised only after two months of operation. The close of the short-lived campus was largely due to two strong local competitors in Singapore: National University of Singapore and Nanyang Technological University. Most Singaporean students prefer these two prestigious universities over any other education providers. [266]

5.13.4. Competitors Affect the Action of IBC, Especially Localization

Competitors are a fundamentally different type of external stakeholder from the cluster represented by the host country. Competitors are stakeholders in the sense that they affect, and are affected by, the actions of the IBC, but unlike the host government, they have no direct control over the IBC. In terms of the way they impact the localization of the IBC, the primary transmission mechanism is by competing for students. Public universities typically have a major cost advantage over IBCs, insofar as their tuition fees are publicly subsidized. Private universities also have a cost advantage, since their entire cost base is localized and they do not rely on seconded staff and flying faculty to supplement their labor force. This suggests that the presence of competition will tend to force the IBC towards localizing staff, in order to minimize staff costs and make tuition fees competitive.

2.13.5. Must Compete Locally

Regardless of the international reputation of an institution, an IBC must compete locally. This often means establishing a local brand recognition and learning to differentiate from local competitors, most of whom the home campus would never have considered as competitors. Many IBCs rarely understand these issues until after they have already set up shop, and it is often very difficult for the home campus administrators to understand these issues from afar. To address the issue, IBC leaders need to work with the home campus to adapt institutional policies to allow for local conditions, but also maintain the quality standards of the home campus. In some cases, institutions have created special "academies" to educate students with sub-par qualifications in English and other areas. Participation in these academies does not guarantee admission to the university, but they can help prepare students for admission and serve as potential enrollment pipelines for the IBC. [230]

Despite the differences between the home and host environments, many home campuses do not allow IBCs much freedom to adapt their policies and procedures to local conditions. This often seems to come from a fear that adaptation would lessen quality and negatively affect the home campus reputation. Since the IBC operates in the name of the home campus, there is a need to ensure that academic programs are of comparable quality. However, administrative functions that support the academic activities of the branch could be viewed more flexibly in light of unique local conditions. [230]

5.14. Key Factors Influencing International Campus Marketing

Professor Reg Jordan of Newcastle University stated that "Newcastle is following the market. If we sit here in the UK waiting for students to come to us, it will all dry up". [287]

Vicky Lewis Independent Consultant, UK stated that "International branch campuses can succeed or fail depending on whether they enroll enough students. Failure is costly – financially and for reputations. To give such a high-profile, high-risk development the best chance of success, marketing expertise must be sought and heeded throughout the project". [248]

Certain questions need to be addressed at the earliest stage of discussions, informed by local knowledge and data. Commissioning independent market research to help quantify demand can enhance the credibility of the business case. Questions to consider include:

- Is the academic portfolio (the one you launch with and the one you aspire to in five years' time) informed by the needs of the target market? Does it match host government priorities? What about the needs of employers in the host region?
- Are enrolment targets realistic? Which programmes should be offered in the first year? How
 long is the process for validating these (in home and host country) and does this leave time to
 promote them effectively?
- Which are your target markets local students from the host country, those from the wider region, other international students, students from the home campus and what proportion of each do you aim to recruit? Are all these markets accessible from the start? Do students from any of your target segments need academic or linguistic preparation?

• How are other branch campuses faring in this country? Is there any scope for collaboration? [248]

National and institutional context both affect the marketing of an international campus. The nature of the marketing input required also changes according to its stage of development. [202]

5.14.1. National Context

Host countries vary in their support for 'foreign campus' developments. Some have established processes and a clear regulatory framework. For marketing purposes it is helpful to know how long the host country course approval process (if required) will take. Different ownership / partnership models also have an impact. It may be necessary to work with a government or private partner, requiring a **collaborative approach to marketing**. There are also **different cultural and business norms to consider**. Some UK institutions have been surprised at the level of competition in their host country, where they suddenly become part of the private higher education (HE) sector with its different rules of engagement. [202]

5.14.2. Institutional Context

If the home institution has previous experience of establishing an international campus, this helps significantly and can speed up the process from initial concept to launch. Aspirations for the future relationship between home and international campus also play a role. If the new campus is seen as an emerging partner or member of a network, it tends to be given a higher profile internally and externally. Institutions whose campus is treated as a subsidiary or satellite (often characterized with reference to the parent-child relationship) need to work harder to raise profile. The planned growth trajectory is also relevant. If the intention is to recruit a substantial first cohort of students, then increase enrolments rapidly, marketing and student recruitment infrastructure and activities need to be in place well in advance. [202]

5.14.3. Market Intelligence and Marketing Strategy

Recommendation 1: Understand the market – and use this understanding to inform business case, proposition and portfolio.

- Balance market research and market intelligence gathering
- Match the campus offer to the needs of the market
- Understand the whole market environment

Marketing-specific recommendations start at the business planning stage with market intelligence and marketing strategy (typically commencing around four years before campus opening), Then cover the setting up of marketing resources and expertise (about three years ahead), before concluding with brief recommendations about marketing activity planning. [202]

Recommendation 2: Business plan and marketing strategy must go hand in hand.

- Develop a clear marketing strategy
- Align business and financial plans with marketing strategy [202]

5.14.4. Marketing Resources and Expertise

Recommendation 3: Provide adequate marketing budget and coordinate account reporting

- Treat the new campus as a start-up business and invest in marketing accordingly
- Establish clear marketing budget ownership and accounting processes. [202]

Recommendation 4: Foster a cross-campus team culture between all those involved in marketing and student recruitment

- Position the campus project to optimize collaboration amongst those involved in marketing
- Lay the foundations for an inclusive, flexible marketing and student recruitment team
- Facilitate team-building and open communication
- Determine the most suitable organizational location for key marketing functions
- Secure staff with the right skills and experience early in the process
- Draw up a plan to fill any gaps in expertise and capacity whilst developing staff [202]

5.14.5. Marketing Activity Planning

Recommendation 6: Factor in enough time for building in-country relationships and reputation

• Don't neglect reputation-building and 'soft' marketing. [202]

Recommendation 7: Develop a broad-based, jointly owned marketing and student recruitment plan whose success can be measured

- Ensure the marketing activity plan is comprehensive and jointly owned
- Include mechanisms for measuring and reporting on progress [202]

5.15. IBC Leader

5.15.1. A Tough Job

Prof. Nigel Healey, Pro Vice-Chancellor (International) at Nottingham Trent University, says that "Managing an international branch campus is not just extraordinarily challenging, but it is generally far beyond the comfort zone of even the most experienced academic manager," [274]

IBC managers are operating in the tough unknown unfamiliar environment. They nevertheless have to construct their own understanding of their objectives within the context of the wider social structures and power relations. The IBC managers are working in an unfamiliar culture where they may not speak the local language or fully comprehend the social norms and conventions. They have to work out what they think are the agendas of the host government, their joint venture partner and their competitors and what they believe their students want. They also have to interpret the home university's objectives, which may be vague or ambiguous given the differing objectives of the most senior leaders and the shifting political alliances in the senior management team... the IBC managers are constantly facing novel problems or issues that neither they, nor their senior colleagues at the home university, have ever come across before. They must have independent decision taking capability to resolve the issues.... To shoulder this challenging responsibility there

is a need of extensive training and supporting environment for IBC managers; so that they should feel empowered to make decisions in the right direction. [229]

The interview data suggest that there are five main clusters of stakeholder that influence the chosen degree of localization, identified as the host country (government, regulators and employers), the joint venture partner (broadly defined), the home university (management, processes and staff), competitors and students (of the IBC). **These groups of stakeholders have different, potentially conflicting, objectives**,

- Sometimes in relation to those of the IBC managers (eg, the joint venture partner wanting to minimize cost and extract profit) and
- Sometimes in relation to each other (eg, the host government wanting to treat the IBC as an autonomous private university and the home university wanting to maintain control over the branding, curriculum and quality control).

These results hint at the challenge for the **IBC managers**, who's choices about localization (local responsiveness) will depend on the **relative power of stakeholders with divergent goals**. [229]

The results of the analysis also suggest that the optimal degree of localization chosen by IBC managers will **change over time**, because both the objectives and the relative power of the stakeholders will **not remain constant**.

- For the external stakeholders (host country, competitors and students), their objectives may shift quite quickly, for example,
 - o Because a new government changes the legal framework within which IBCs operate or
 - Reshapes the competitive landscape by investing in its own public higher education sector or
 - Opening up the market to greater competition from private institutions.
- For the internal stakeholders (joint venture partners and the home university), their objectives may also shift over time,
 - o As new leaders are appointed or
 - o Changes in strategic direction are ordered by governing councils.
 - o For the internal stakeholders, however, there is also a dynamic at work, with both relative power and trust evolving over time in ways which, in general, may tend to result in a tendency to greater localization. [229]

5.15.2. Inexperienced Leader

In the main, the managers interviewed were seconded from the home university. While the managers differed considerably in age and gender, a common theme was that most of them had little previous management experience at the home university. One noted that 'I didn't have any senior management role at University of M...so this really is getting into the deep end' (Interviewee D). This appeared to be characteristic of most of the IBCs. [199]

The lack of significant prior management experience is a striking finding. Given the inherent riskiness of establishing and running at IBC, it is surprising that **universities do not seem to second their most experienced and successful senior managers to take on these roles**. The stakes are high. One interviewee said 'I am the registered chief executive. If anything happens

there I could be fined RM50,000 and jailed. A VC was jailed here five years ago for business malpractice'. [199]

One explanation for the inexperience of the managers, especially those involved in the start-up phase of an IBC, is that it is often the university's first major offshore venture. The role of provost of the IBC is new. For existing deans and pro-vice-chancellors, taking it on is seen as 'career suicide'. One bluntly asserted that 'it is only attractive to retired people, who have their pensions and can afford to take the risk'. [199]

While the managers differed considerably in age and gender, a common theme was that **most of them had little previous management experience at the home university**...Most were, however, younger and seconded from the home university, but reported being **motivated by factors other than wanting to develop a managerial career**. A **desire to have an international experience** was often cited as the primary reason... Reflecting the fact that so many of the managers had roles that had been newly created on an **ad hoc basis**, rather than being part of an established managerial hierarchy, the selection processes were often informal...the managers are typically appointed in a **fairly informal**, **ad hoc fashion**...While a **multinational company** might undertake an international job search for the chief executive officer of a new Malaysian joint venture, seeking an experienced manager fluent in English and Bahasa Malaysia with a strong track record of managing multinational joint ventures, there is **no equivalent pool of IBC managers**. [229]

5.15.3. Demonstrate Support for the IBC in both Word and Action

The evidence also showed that leaders must demonstrate their support for the IBC in both word and action. They did this in four main ways:

- Engaging and fostering buy-in among faculty, staff and students;
- Allocating funding and staffing to support the IBC;
- Bolstering ties with potential host countries; and
- Rearticulating the university's mission to give context to the establishment of the IBC. [234]

5.16. Other Intricacies of IBC

5.16.1. Insufficient Legitimacy can Lead to Closure of IBC

Organizations are legitimate when their activities and behaviors are congruent with the larger social system. Legitimacy is the perception or assumption that actions are appropriate within a socially constructed system of norms, values, beliefs and definitions. Organizations seek legitimacy when they strive "to establish congruence between the social values associated with or implied by their activities and the norms of acceptable behavior in the larger social system of which they are a part". Thus, organizations whose practices conflict with host country social norms and values will tend to conform to host country standards to establish and maintain legitimacy. Organizations seek to establish legitimacy three ways:

- Adapting output, goals, and operations to what is accepted in the society as legitimate;
- Attempting to alter the social definition of legitimacy; or

• Identifying itself with symbols, values, or institutions that already have legitimacy. Legitimizing behaviors can include visible corporate generosity, such as charitable giving, cooptation, including bringing legitimized individuals onto the organization's governing boards, and adapting to the societies norms and values. [263]

In order for an IBC to legitimize itself, foreign managers, faculty, and staff should understand the institutional and cultural distance between their two countries on a societal level.

- Institutional distance refers to the extent of dissimilarity between home and host institutions among regulatory, cognitive, and normative components.
 - The regulatory component reflects laws and rules within a nation-state that enforces behavior.
 - o The cognitive component refers to how people "notice, categorize, and interpret stimuli from the environment".
 - The normative component refers to the values and belief systems considered normal in particular societal culture.

Kostava and Zaheer proposed that the larger the institutional distance, the more difficult for a multinational corporation (MNC) to establish external legitimacy. [263]

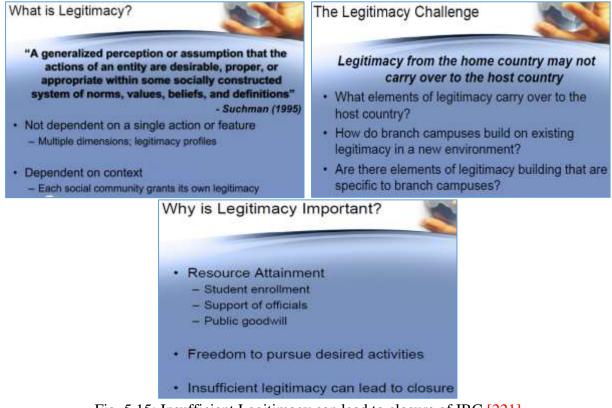


Fig. 5.15: Insufficient Legitimacy can lead to closure of IBC [221]

5.16.2. Obstacles for Few Professions

The University of Calgary's Doha campus is supported by the Qatari government. One of the major obstacles U of C faced at the outset was a **widespread perception in Qatar that nursing wasn't an esteemed profession**, said Dr. Marshall, the provost.

- University of Calgary undertook a major advertising campaign to promote the value of nursing. "I remember the first time I arrived in Doha, every street I drove down had a University of Calgary banner about nursing," she said.
- The support of Sheikha Moza bint Nasser, wife of the ruling emir, has been instrumental in the turnaround, Dr. Marshall added. Sheikha Moza has strongly supported women's education and the school; she attended the recent convocation ceremony. When UCQ visited a local high school to recruit prospective students, it attracted the interest of about 70 students, whereas in past years it was closer to 15. "This is the effect that a country leader can have on valuing a profession, a profession that is just developing in the country," said Dr. Marshall. [223]

5.16.3. Consider International Richness

While admitting the students, along with the diversity of the international students, one must consider the "International Richness". That is, there should not be cultural domination of any group of students from specific country. [232]

Creating a rich international learning environment is a real challenge. Major obstacles, which we call "Assimilation Traps", must be overcome. The trap operates at two levels: at the institution as a whole and in specific programs within the institution. At the institutional level, the assimilation trap refers to the pressure the institution faces to serve primarily the educational needs of its local market. At the individual level the trap refers to the tendency of students to adopt the norms and views expressed by the dominant culture present in the classroom.

The institutional assimilation trap is most difficult to overcome when the local market is very large. In such market, the institution must educate primarily the large number of local students. This is why, for example, business schools in large countries such as United States, India, China, and Brazil are unable to transform themselves into schools with deep international richness – there is simply a limit to the number of foreign students the can enroll...It is not surprising that the schools with the largest number of foreign students are mostly located in small countries with limited local demands. [232]

How to avoid the individual assimilation trap? One way is to create a classroom where there is no dominant nationality or culture, that is, where everyone is in a "minority" position and hence freer to express themselves and share their personal experiences without the pressure to subjugate their own experience to that of a dominant culture. [232]

5.16.4. Issues Related to Technology

China similarly routinely **blocks service like Google and Outlook**, disrupting communications between the home university and the IBC. 'I've gone blue in the face trying to tell them [the home university] that **FaceBook and YouTube is banned here'**... The United States has banned its software companies from selling **software which may have military applications** in the Middle-East. This includes well-known engineering software which is core to the delivery of UK electronic and mechanical engineering curricula. 'The poor business partner cannot buy the software and the academic here [in the UK] is saying all **my learning notes are based on [the software]**' [229]

5.17. Various Trends and Issues of IBC

5.17.1. How Long This Trend Will Continue? : No One Remains a Child Forever

Another point requiring serious consideration is the status of the IBC relative to the home campus. This has major repercussions for corporate identity, governance and decision-making. Is it a parent-child relationship? Will the home campus be hands-on or hands-off? Will this relationship change over time? Who makes key decisions and how are these communicated? How is the relationship presented both to the local market and, crucially, to staff and students at both campuses? How can you avoid those attached to the IBC from feeling isolated and treated like 'the poor relation'? [248]

As long as institutions continue to determine that they are achieving their objectives and deriving benefits from operating branch campuses abroad, and as long as students and host governments want them, international branch campuses are likely to remain in existence... International branch campuses will continue to be a key form of transnational higher education as long as they are attractive and provide benefits to each of the main stakeholder groups (i.e., students, institutions and governments) and as long as the global demand for higher education exceeds the total supply of places. [275]

Put simply, when managers are sent to lead IBCs, there is a natural tendency for them to seek greater autonomy. The most generally used metaphor to describe an IBC was a 'child', with the home university playing the role of 'mother'. IBCs that are maturing were often described as 'unruly teenagers', chaffing at maternal discipline. It was generally felt that the risk of the unruly teenagers growing into independent adults will 'depend on how rigidly they stick to seconding people into senior posts. [193] [229]

"History suggests that international branch campuses either flourish and become independent, or fail and close. **No one remains a child forever**." [193]

This is a strong sense of growing separateness of identity, which is an outcome of all of the other issues combining. Put simply, when relatively inexperienced managers are sent to lead IBCs, which employ local staff, deal with host governments and regulators, have to satisfy local joint venture partners, become frustrated with the home university's management and processes and increasingly yearn to customize their teaching and research to meet local needs, there is a natural tendency for the managers and their senior colleagues to seek greater autonomy. [229]

It is difficult to predict how long this trend will continue, but the experience of the British Commonwealth suggests a **downturn will come as the higher education systems of host countries mature**. Remember, the Universities of the West Indies, Colombo and Zimbabwe all began life as remote branches of the University of London, teaching an academic syllabus devised and examined in Russell Square. They subsequently developed their own identities and academic cultures, **cutting the ties** with London as they grew up to become proud, autonomous institutions of higher learning. [69]

Unlike the UAE, where **only one IBC** has broken away from the KHDA accreditation to be recognized by the Federal Ministry of Education as an autonomous private university (University of Wollongong in Dubai), all the IBCs in Malaysia and China are established as private Malaysian companies. [229]

As the IBCs mature from **start-up to steady-state**, the management positions tend to become more secure and more embedded with the organizational structure of the home university. At the same time, the **organizational culture within the IBC tends to develop a more distinct** and **separate identity from that of the home university**. [229]

It has been recently argued that some IBCs could break free and become independent institutions.

- One example is the American University in Dubai, which is now an independently accredited institution and no longer a branch campus of American InterContinental University. The Observatory on Borderless Higher Education, which has published reports on IBCs in 2002, 2006, 2009 and 2012, classified this institution as an IBC in 2009, but not in 2012.
- Another example is the United States International University in Kenya, which broke free from United States International University (USIU) when this merged in 2001 with California School of Professional Psychology (CSPP) and became Alliant International University. [290]

5.17.2. Interesting Fact

While there are few if any data available, it seems that the most financially successful branch campuses are those **sponsored by less-prestigious universities** and other educational providers, which **offer programs that are inexpensive** to provide and have a ready interest abroad. **Quality standards are often low**, and **careful attention is given to the bottom line**, with little regard **for local relevance**. [190]

A quality branch campus, **even if it is small and specialized**, requires **careful financial planning** in a context, which include many variables that are difficult to measure or predict. The costs of coordination and administration at the home campus, direct instruction, maintaining appropriate enrollment and income levels, and other variables are **extraordinarily difficult to forecast**. [190]

Lessons for UK universities from the study

- Prepare and train managers of IBCs
- · Rotate academic and professional seconded staff
- · Upskill professional services staff at home
- Design systems that can be globalised
- Be prepared for ontological shock!

Fig. 5.16: Lessons for IBC [197]

5.17.3. Changing Loyalties: For Best Deals Campuses are Moving Locations

It is clear that colleges and universities are emerging as important international actors, offering benefits to the institution as well as the importing and exporting nations. What is not clear is how these arrangements will affect the relationship between a nation and its higher education sector. **Historically, colleges and universities have been viewed as anchor institutions that are tightly linked to their local communities and often are significant engines of economic development.**[291]

But we are now seeing **campuses move locations** in their effort to find "**best deals**" in terms of more regulator flexibility or government subsidies.

- The University of Chicago's Booth School of Business announced in 2013 that it would leave Singapore and set up shop in Hong Kong.
- Similarly, the University of Nevada, Las Vegas has indicated that it will leave Singapore this year. It is now looking for another Asian base.

Are such institutions evolving into multinational corporations with limited affinity with their home nations? [291]

5.17.4. New Model of IBC

In any case, cooperation seems to be the wave of the future. For a long time the typical IBC was an operation set up and run by a **single institution**. That model is **gradually declining**, as more and more IBCs are research operations **set up by two or more universities**. A recent example is **IITB Monash Research Academy in Mumbai**. This model not only reduces the reputational and financial risk posed by the establishment of an IBC, but also makes the notion of 'independence' almost irrelevant. [290]

5.17.5. Benefits of Starting IBC at Education Hub

There are numerous benefits of starting IBC at Education Hub. They are as follows:

- Joining a hub may reduce the costs of operating abroad. Establishing an IBC involves substantial risks and coordination costs. There are fixed and variable administrative costs which increase when an IBC is being managed across borders. The particular laws, customs, academic environment and business culture also differ between the parent and host nations. Agglomeration economies achieved through hubs can offset these costs.
- The presence of other universities in the region can help service communications, legal agreements, and other negotiations.
- Parent institutions may benefit from the experience of IBCs who entered the hub before them.
- The uncertainties associated with opening an IBC and operating in a foreign country can be reduced if parent institutions go to areas that already have a large concentration of successful IBCs and work with partners that have already demonstrated their commitment to higher education in the region and their ability to adhere to the terms of the education hub.
- Establishing an IBC in a hub may benefit universities by allowing them to share services, facilities, and faculty with other institutions. They may share support services such as facilities management, for instance, or facilities such as libraries or athletic fields.

- IBCs in a hub may be able to benefit from a higher concentration of qualified faculty in the same area. Universities needing an instructor for just a single course, for instance, may be able to recruit a professor from another university in the hub to teach that course rather than an entirely new faculty member.
- Having a larger number of faculty in one area, moreover, may also create more opportunities for research and collaboration among these faculty.
- Additionally, a larger concentration of students might help the hub facilitate a stronger academic experience. While it is often difficult for a single university to offer a large number of extra-curricular activities and student services at an IBC, particularly when it is newer, close proximity to or even sharing campuses with other institutions may make it easier to create a more complete academic and social experience for the students. [234]

5.17.6. Decide the Primary Goal and then Talk about Failure or Success

Ultimately, branch campus **success or failure** depends **not on how a university ventures overseas**, **but why**. The most common motivation for establishing foreign branch campuses entails some combination of increased revenue (sometimes couched as portfolio diversification) and increased international recognition (that is, branding at the global level). The former rationale – often the unspoken reason for a public institution to serve populations outside of its mission population – is less likely to endure repeated financial losses presented to its board of trustees. In contrast, the ambitious motivation to create a global footprint allows an institution to better weather financial losses and be likely to develop coordinating offices at the home campus for international developments. Too often, however, institutions can fall into the trap of expanding for the sake of expansion. When this occurs, the sowing of global campuses can lead to an undervaluing of the uniqueness of local markets and conditions, which in turn can endanger the entire overseas portfolio. [180]

5.17.7. Shared Services Models

"Shared services models in which management functions are provided jointly across institutions or are outsourced to specialist providers are also a **way of controlling costs** and improving quality for newer universities," Ong said. **Iskandar EduCity project in Johor was an example of such a model** where shared common facilities were financed jointly by several universities, including a number of foreign branch campuses, he said, adding that the institute's findings would have "serious implications" for the sustainability of the private higher education sector. [187]

5.17.8. IBC: Mostly form Tuition Dependent Universities

Finance plays a decisive role in offering overseas programs. Schools with greater tuition-dependency are more likely to offer overseas programs. [250]

5.17.9. Two Steps Approach

Some institutions, such as the University of Reading in Malaysia, have found it effective to adopt a **two-step approach when entering a new foreign market**: first, to set up in partnership with a

local institution that knows the local market, regulations, and business practices, and then later to establish a campus independently. [276]

5.17.10. Need to Know the MNE and IBC Categories

5.17.10.1. Categories of Multi-National Enterprises (MNE)

The four types of global organizational strategies are:

- Global: The global organization focuses on standardization, integration, centralization, and coordination in order to achieve economies of scale.
- International: The international organization is neither integrated nor responsive, and functions as an appendage of the parent.
- Multi-domestic: The multi-domestic organization is concerned with adaptation and differentiation. This strategy is based on responsiveness to local market demands. Subsidiaries under the multi-domestic model are autonomous, consisting of the company's entire value chain. Innovation and knowledge developed at these national companies will most likely stay in the host country rather than be dispersed to other companies within the MNC.
- Transnational: The transnational organization attempts to simultaneously respond to both global and local pressures. This strategy tries to maximize both integration and responsiveness, and disperses developed knowledge and innovations throughout the entire network. Transnationals simultaneously seek economies of scope and scale, standardization, coordination, integration, and local responsiveness and differentiation. [263]

Bartlett and Ghoshal identified three different types of multinational organizations (MNE).

- Global Organization: The global organization is a type of MNE that focuses on world market without much attention to national and local expectations. This type of MNE suggests a high level of integration and standardization.
- The second type is the MNE that tries to exploit economies of scope through differentiation by focusing on national- local needs and expectations. This type follows the idea of loose integration and adaption to local markets.
- Transnational Organization: The third type identified by Bartlett and Ghoshal is the **transnational organization**. Transnational organizations try to respond to both global and local forces at the same time. In other words, they seek economies of scope and scale, coordination—integration, and local responsiveness—differentiation simultaneously. [189]

5.17.10.2. IBC Categories: Receptive Subsidiary, Autonomous Subsidiary

- Receptive Subsidiary: If the degree of integration is high and the degree of local responsiveness is low, the branch campus of the TNHEI represents the type of the receptive subsidiary. This means that the curriculum would be packed at the home campus before sending down to the branch campus and academic staff would be seconded from the home campus to the offshore branch campus.
- Autonomous Subsidiary: However, if the degree of integration is low while the degree of local adaptation is high, the branch campus would play the role of an autonomous subsidiary. Under these conditions, academic staff would be recruited locally and they would have

autonomy to change the curriculum and adapt it to the local needs. The local needs include both mandatory adaptations required by the host government and voluntary courses of adjustments, which are underpinned by the TNHEI in pursuit of a higher performance for the institution. The latter one, in other words, is concerned with a type of change that addresses the satisfaction of the target market, hence an increase in the legitimacy of the TNHEI in the host country. [189]

• Active Subsidiary: A branch campus of a TNHEI is more likely to play the role of an active subsidiary when the institutional distance between the home and the host country is very small. Therefore, the two opposite strategies would not face a strong contradictory challenge. In theory, if a TNHEI can manage to turn its branch campus into an active subsidiary by maintaining a high degree of local responsiveness and global integration, they have arguably reached the ideal position. However, in reality, large institutional distances make this scenario less likely to occur. Finally, the quiescent branch campus represents a poor alignment between the undertaken strategies and the external requirements. Obviously, these are extremes and what happens in reality is a combination of these: in the three areas of curriculum packing, staffing, and research, HEIs make a choice regarding to what extent these three areas are (or will be) globalized or localized. This is represented in the figure below. [189]

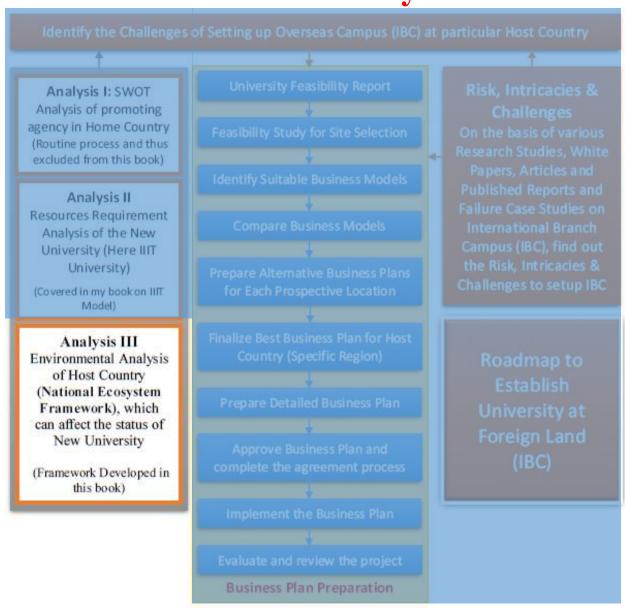
5. Remarks

These intricacies or complexities are nothing but **challenges** for developing perfect Business Plans.

It concludes that managing an IBC is much more complex than generally understood. The IBCs are, in general, registered as private education companies and operated with foreign, forprofit joint venture partners. They operate in a highly regulated educational environment, which is prone to shifts in host government policy. The managers have to deal with an alien commercial and cultural context. Against this backdrop, the shifting objectives and power of the various stakeholders means that managing an IBC is not just extraordinarily challenging, but it is generally far beyond the comfort zone of even the most experienced academic manager. [199]

Simply knowing the variety of problems faced by existing IBCs are not sufficient to prepare Business Plan. One must do the extensive Environment Analysis of prospective host country. It is very vital and critical step. Along with other two analysis, it helps to understand the existing complexities of Host Country, which can affect the status of New University. To do this, I have developed National Ecosystem Framework, which I would like to highlight in next chapter.

Chapter 6: National Ecosystem Framework for Environment Analysis of Host Country



6.1. Importance of Environment Analysis

It is important for parent institutions to consider the unique **social, cultural, political, economic, and academic factors** relevant to each country when establishing an IBC **to increase its chances of success**. This is because the success of the IBC is just as much about the how the characteristics of a particular IBC will interact with its environment rather than the mere presence or absence of specific factors. This means that the factors most important in one context may not be relevant in another or may even have the opposite effect. It also means that what works in one country, may not work in another. Because each opportunity to establish an IBC is unique, the success or failure of one endeavor is hardly generalizable. Also, given that several factors are involved, it is difficult to identify after the fact exactly what factors contributed to the success or failure of a particular IBC. A careful understanding of the context is thus very important. [234]

6.2. Location and IIIT Model

In this chapter I would like to discuss the framework for studying the overall Environment of Host Country, which can affect the status of New University. I would like to consider special type of Technical University "IIIT University" for this analysis, later on it can be extended for general University. Let's consider the best practices and guidelines of IIIT Model, which I have explained in my book "Secrets of Success of IIIT Model".

Best Practices: IIIT Model

- 1. Self-Sustainable Industry Supported IIIT Research University
- 2. Must be located in Metros or in the middle of IT Industry Hub
- 3. 40% Income Generation through industry oriented Research & Technology Transfer
- 4. Government provides only Land and Buildings either directly or through PPP model
- 5. Intensive Search for internationally renowned faculty by conducting interviews at USA
- 6. 40% to 75% faculty with PhD from World Renowned Universities & remaining from IIT / IISc
- 7. Industry supported Research Centers, Labs, Chair Professors, Scholarships & Research Grants
- 8. During Internship, opportunity to do research and project work at many foreign universities
- 9. Controlled by BOG, which consists of renowned persons from academics and IT industry
- 10. Not having departments, organizing structure around Research Groups / Centers / Labs
- 11. Involving industry as partner, involving them in curriculum design and teaching too
- 12. Building strong international linkage through internationally qualified faculty
- 13. More weightage to coding and problem solving. Establish "Coding Culture"
- 14. US University style salary structure and service conditions
- 15. International Curriculum with high degree of flexibility
- 16. Nurturing Innovative Minds through Innovation Culture
- 17. Business Innovations through Incubation Center
- 18. Strictly merit based admission process
- 19. Fruitful international collaborations
- 20. Active Alumni involvement
- 21. Visionary Vice Chancellor

In this model, it is clearly mentioned that the IIIT must be located in Metros or in the middle of IT Industry Hub (the guideline number two). That is, the IIIT must be located very close to Innovation Cluster (Innovation Ecosystem) or Business Cluster.

If finance plays an important role, universities' **location choice** may not be much different from those of multinational corporations making FDI. Thus, to examine how host country characteristics are related to the location of overseas programs, we follow the international trade literature. Specifically, we relate the number of overseas programs in a host country to measures of economic development, the recent economic growth rate, the size of the market for higher education, the US outflow of FDI, and other local environmental factors. [250]

6.3. Location Plays Very Important Role

S. SOVIII									
Ranking	Institute	Age	Faculty	Infrastructure	Placement	Research	Location	Brand	Overall
1	IIIT Hyderabad (1998)	A+	A+	A+	A+	A+	A+	А	9.86
2	IIIT Allahabad (1999)	A+	(A+)	A+	A+	A+	A	A+	9.86
3	IIIT Bangalore (1999)	A+	A+	A+	A+	A+	A+	A	9.86
4	IIIT Gwalior (1997)	A+	(A)	A+	Α	(A)	В	A+	9.29
5	IIIT Delhi (2008)	A	A+	A	A	A+	A+	В	9.29
6	IIIT Kerala (Trivandrum) (2000)	A+	A	А	А	В	A	A+	9.14
7	IIIT Kancheepuram (2007)	А	А	A	A	A	В	A+	9
8	IIIT Jabalpur (2005)	A+	А	А	A	В	с	A+	8.86
9	IIIT Bhubaneswar (2006)	А	В	A	8	В	А	А	8.57
10	IIIT Guwahati (2013)	8	В	В	D	С	А	A+	8
11	IIIT Sri City (2013)	В	В	В	D	С	В	A+	7.86
12	IIIT Vadodara (2013)	В	В	c	D	С	В	A+	7.71
13	IIIT Amethi (2005)	A+	С	D	В	D	D	A+	7.57
14	IIIT Kota (2013)	8	В	D	D	С	В	A+	7.57
15	IIIT Lucknow (2015)	c	8	С	D	D	A	A+	7.57
16	IIIT Kalyani (2014)	8	С	С	D	D	В	A+	7.43
17	IIIT Una (2014)	В	В	С	D	D	с	A+	7.43
18	IIIT Kurnool (2015)	С	В	С	D	D	В	A+	7.43
19	IIIT Srirangam (2013)	8	С	D	D	D	В	A+	7.29
20	IIIT Naya Raipur (2015)	С	С	С	D	D	А	А	7.29
21	IIIT Kilohrad (2014)	В	D	D	D	D	с	A+	7
22	IIIT Manipur (2015)	С	D	D	D	D	С	A+	6.86

Table 6.1: Ranking of IIITs in India by the Ignite Engineers [28]

The above Table shows the Ranking of IIITs in India by the Ignite Engineers team through internal surveys and opinions based on the data available on the Internet. No external surveys have been conducted to prepare the same. [99]

You observe that, in this statistical analysis, the Location (8th Column) is the most important factor. The Ranking of IIIT- Allahabad and IIIT- Gwalior is affected because of location.

Given the importance of the location towards the success of the IIIT, it is important that the location for each IIIT is a well-thought decision arrived at by a careful consideration of all factors and criteria. Some criteria that should be considered for selection of the location are as follows: Presence of a number of IT parks & IT SEZs will enable the institute to leverage the good quality infrastructure. Presence of leading IT companies will enable the development of academia-industry linkages.

Fig. 6.1: MHRD specifies the Location for IIIT under PPP Model [191]

Even the MHRD has given enough weightage to location for establishing 20 new IIITs under PPP Model.

The IIIT-Hyderabad, IIIT-Banglore and IIIT-Delhi are located in metros or mega cities and in the IT or Industrial hub, which are important innovation clusters of India. That is, any University can grow in much better way, when its location is nearer to Innovation Cluster or Business Cluster. Let's discuss the concept of Innovation Cluster or Business Cluster in next section.

In case of IBC, the Parent institutions value locations in urban areas close to air and rail transportation. Three administrators with IBCs located over an hour from international airports noted that lack of transportation was a problem. One of these IBCs ultimately closed and another relocated its campus to the city. [234]

Finance plays a decisive role in offering overseas programs. Schools with greater tuition-dependency are more likely to offer overseas programs. Their location choice illustrates the important role economics plays in these programs. Real gross domestic product (GDP) per capita and tertiary school age population are two key determinants of the location choice. Universities in the United States target countries with large potential markets where the local population has the economic means to pay for their services. They also follow US multinational corporations' FDI flows and invest in business friendly countries with loose regulations. Asia and the Middle East are the most popular destinations for overseas programs, but for different reasons. Asia provides a large market with strong local demand for US- style education. Alternately, Middle Eastern countries are attractive because they grant substantial financial aid to sponsoring universities with their oil money. [250]

6.4. Innovation Cluster or Business Cluster

6.4.1. Concept of Innovation Cluster or Business Cluster

Porter (1998) defines clusters as geographical concentration of specialized suppliers, service providers, organizations like universities, commercial unions and interconnected enterprises which they compete against each other and at the same time they collaborate in a specific industry and related industries. Member organizations engage in price competition and product differentiation, but they cooperate in acquiring supplies, gaining research and development. Universities help other agents of cluster enhancing new knowledge and technology, business associations try to create favorable business environment. Clustering also bring new advantages in case of attracting qualified labor. Clusters are interrelated industry groups. A cluster has two components. They are organizations in the clusters and their relations with each other. Interrelated organization groups are close to each other, thus geographical proximity is one of the key feature of a cluster. Connections among organizations can be vertical like seller buyer relations or horizontal like providers of similar services, users of similar supplies and users of similar technologies. These connections include useful social relations and social networks as well. Geographical proximity causes easier communication and value creation through networks. Level of cluster development depends on means the strength of interconnections among private enterprisers which are the living organisms of innovation ecosystem. Level of cluster development is measured by Global Innovation Index 2009-2010 for 132 countries. [54]



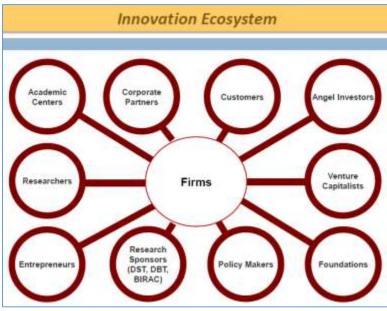


Fig. 6.2: Innovation Ecosystem [57-61]

4.4.1. Remarks

I have explained the concept of innovation in my book "Innovation - Growth Engine for Nation - Nice Buzzword but Often Misunderstood".

6.4.2. National Innovation System

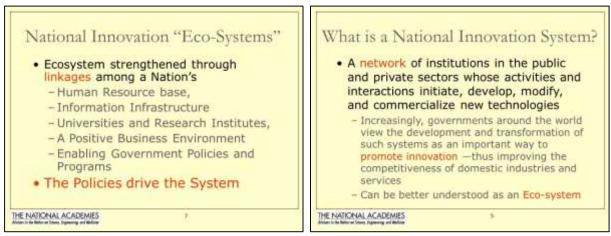


Fig. 6.3: Ecosystem: Linkage among subsystem [56]

In the conventional view, innovation is something that just takes place idiosyncratically in "Silicon Valley garages" and research and development (R&D) laboratories. But in fact, innovation in any nation is best understood as being embedded in a National Innovation System (NIS). Just as innovation is more than science and technology, an innovation system is more than those elements directly related to the promotion of science and technology. Rather, it also includes all economic, political, and other social institutions affecting innovation (e.g., a nation's financial system;

organization of private firms; the pre-university educational system; labor markets; culture, regulatory policies and institutions, etc.). [55]

6.4.3. Case Study: Silicon Valley Cluster

The best example of the innovation cluster (Ecosystem) is "Silicon Valley Innovation Cluster" of USA.

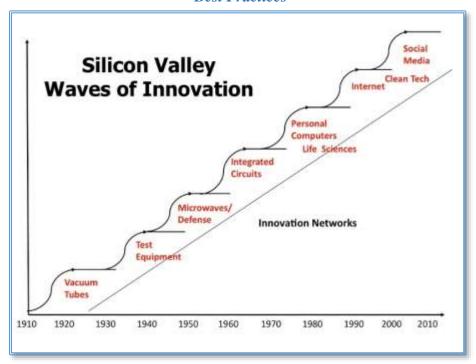
Case Study: Silicon Valley

Silicon Valley is an amazing American asset. One of the major factor inputs in Silicon Valley are the **Universities and R&D firms**. Universities are extremely important because one thing in common that every company we visited stated, was the there is a shortage of talent and more available positions than available bodies. **Universities, such as Stanford, stand as a double input to the cluster. Stanford has one of the strongest Computer Science programs in the world** and produces excellent talents for the tech industry and they also have a very strong research program. A lot of the people we met while visiting companies, were Stanford alums. That alone establishes connections for new grades to the different companies that are looking for new talent. The other strong input, is the research firms. The research firms partner with a lot of the companies, and help work on research theories or solving problems. [63]

Best Practices Silicon Valley ecosystem Although Silicon Valley is one of the most successful innovation hubs in the world, it is not a general model to imitate everywhere The success of Silicon Valley is based on its dynamic ecosystem consisting of - venture capitalists, - a global talent pool of knowledge professionals, - top universities and research institutes. a sophisticated service structure (accounting, design, law firms, marketing, technologies...), - many customers, lead-users, and early adopters of new technologies. - flexible recycling of professionals, ideas, and knowledge Bahrami&Evans 2000, Hautamaki 2010

Silicon Valley Innovation Cluster: **Ecosystem concentrated in one region** [48-49]

Best Practices



Silicon Valley: Waves of Innovation [50]

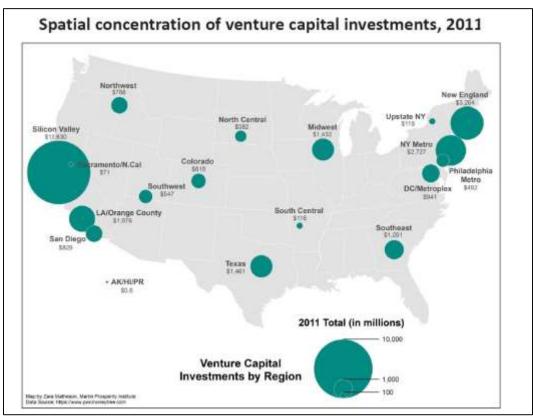


Fig. 6.4: Venture Capital Investment by region (2011): Silicon Valley [51]

Best Practices

The matrix below gives the distances between the 6 top SV icons that I visited.

19

4

Distance in Kms between the top silicon valley brands Apple Facebook Google Intel Yahoo Stanford Apple 24 13 14 14 22 Facebook 24 12 24 19 4 Google 13 12 14 9 11 Intel 14

Now, what the above table shows is something incredible. All these guys are located within an hour's drive from each other - in fact, less than half hour's drive within each other on days without much traffic. Our entire trip to travel to all these places took less than 3 hours!

9

11

9

23

18

18

Silicon Valley: Top 6 Icons located within an hour's drive [52]

6.4.4. Case Study: Cambridge

Yahoo

Stanford

14

22

Case Study: Cambridge

The UK is home to **world-leading clusters** such as one around Cambridge, which is focused on IT and life sciences and has produced significant companies such as ARM Holdings, Autonomy, Cambridge Silicon Radio, as well as many innovative start-ups and early development companies. It also attracts inward investment from companies like Takeda and Pfizer. [62]

6.4.5. Case Study: Digital Media City of South Korea

Case Study: The Digital Media City of South Korea

In the late 1990s, the Seoul Metropolitan Government in South Korea developed the **Digital Media City** (DMC), a 135-acre complex, four miles outside of the city's central business district in the Sangam-dong district. With Seoul's rapidly growing cluster of multi-media, IT, and entertainment industries, the Digital Media City, through its vibrant agglomeration, helped to promote these industries and companies whose core business required use of information, communication, and media technologies. DMC grew and prospered as a global business environment, raising Seoul as an east-Asian hub of commerce. The cluster of its digital media-related, high-tech firms spawned partnerships which in turn leveraged both human and social capital in the area. Eventually, **DMC fed the innovation of more than 10,000 small-scale Internet, game, and telecommunication firms** located in Seoul.

In development of DMC, the Seoul government leveraged initial funding by private technology partners and developers. It is also provided IT broadband and wireless networks to the area as well as needed infrastructure. The Seoul government even provided **tax incentives** and **favorable land prices** for magnet tenants who would attract other firms to the area due to established business relationships and through their presence which would in turn promote DMC as a prime location.

With such a **concentration of these entities**, Seoul has become a major nexus of high-technology and digital media. It is home to digital media R&D firms across a range of types including cultural media creation, digital media technologies, digital broadcasting centers, technology offices, and entertainment firms. Just outside the DMC complex include international firm affiliates, schools, moderate to low income housing, commercial and convention facilities, entertainment zones, and the city's central rail station. The **cohesive connection of industry, cultural centers, infrastructure, and human capital** has fostered Seoul as a strong metropolitan economy and South Korea, the Miracle on the Han River, as a storied nation transitioning from a manufacturing to an innovation economy. [53]

6.5. IIIT in Host Country Should be Located in the Innovation Cluster

In previous section, we have seen that the location of the IIIT University should be in the Innovation Cluster. That is, the IIIT University at Host Country should be located in a region, which should have all the facilities (parameters) mentioned in block diagram of Innovation Cluster.

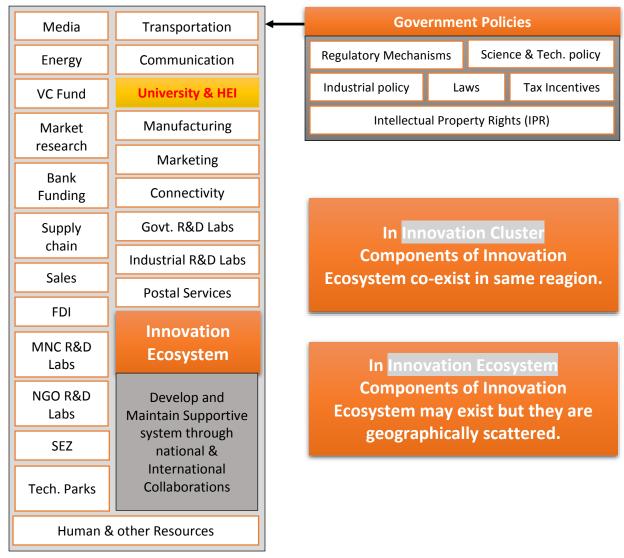


Fig. 6.5: Block Diagram of Innovation Cluster

The parameters of Innovation Cluster are:

Facilities

- 1. Media
- 2. Transportation
- 3. Digital Connectivity
- 4. Energy
- 5. Health
- 6. Postal Facilities
- 7. Stock Exchange
- 8. Banking and Insurance Sector

Funding

- 9. Venture Capital (VC) Fund
- 10. Foreign Direct Investment (FDI)

R&D Labs, SEZ, Parks

- 11. Government R&D Labs
- 12. Industrial R&D Labs
- 13. Multinational Companies' (MNC) R&D Labs
- 14. Non-Government Organization's (NGO) R&D Labs
- 15. Special Economic Zone (SEZ)
- 16. Technology and Software Parks

Manufacturing Sector, Market Research & Conditions

- 17. Manufacturing Sector
- 18. Market Research
- 19. Marketing Conditions
- 20. Supply Chain
- 21. Sales

Resources

- 22. Human and Other Resources
- 23. University and Higher Education Institutes (HEI)

These are the essential parameters for growth of the new University at Host Country. Thus we must include these parameters in the National Ecosystem Framework.

6.6. Overall Environment of Host Country: Need to Include Country Specific Parameters

To Study Overall Environment of Host Country and develop National Ecosystem Framework, we need to include Country Specific Parameters. They are as follows.

- 1. Relationship of Home and Host Country
- 2. Geographical Location of Host Country
- 3. Internal Problems of Host Country
- 4. Climatic conditions of Host Country
- 5. Law and Order situation and Crime rates of Host Country
- 6. Culture, Language Spoken, Customs, Traditions, Cost of Leaving, Currency of Host Country
- 7. Foreign Relationship and Influence of other nations on Host Country
- 8. Economical status of Host Country
- 9. Government Policies of Host Country
 - i. Regulatory Mechanism
 - ii. Science & Technology Policy
 - iii. Industrial Policy
 - iv. Tax Incentives and Policies
 - v. Intellectual Property Right (IPR) Policy
 - vi. Trade Law and Foreign Investment Policy
 - vii. Labor Laws
 - viii. Financial Regulations
 - ix. Accounting Practices
 - x. Accreditation Policies
 - xi. Admission Policies

- xii. International Student Policy
- xiii. International Policy
- xiv. Taxation Policy
- xv. Visa and Immigration Policy
- 10. Role and Involvement of Home Country in economic developments of Host Country
- 11. Demographics
- 12. Status of Higher Education System of Host Country

6.7. National Ecosystem Framework: Innovation Cluster plus Parameters of Host Country

While launching the University at foreign land or Host Country, one must consider the parameters of Innovation Cluster and parameters of Host Country. This combine together form a **National Ecosystem** for Host Country. The following Figure shows the various parameters of National Ecosystem framework.

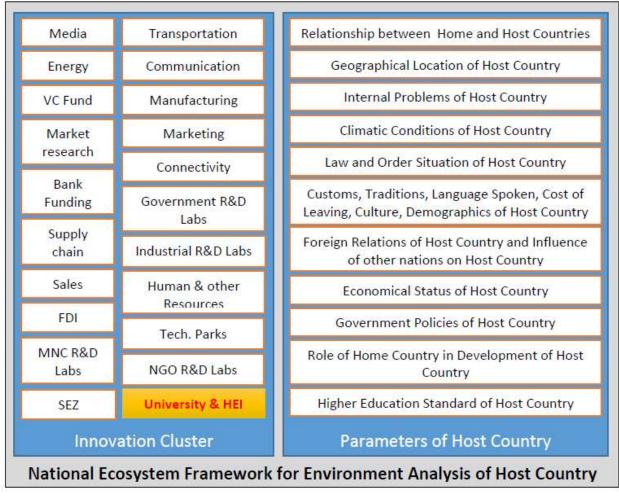


Fig. 6.6: National Ecosystem Framework for Host Country consists of Parameters of Innovation Cluster and Parameters of Host Country

Thus the complete list of parameters of National Ecosystem Framework is as follows:

- 1. Relationship of Home and Host Country
- 2. Geographical Location of Host Country
- 3. Internal Problems of Host Country
- 4. Climatic conditions of Host Country
- 5. Law and Order situation and Crime rates of Host Country
- 6. Culture, Language Spoken, Customs, Traditions, Cost of Leaving, Currency of Host Country
- 7. Foreign Relationship and Influence of other nations on Host Country
- 8. Economical status of Host Country
- 9. Government Policies of Host Country
 - i. Science & Technology Policy
 - ii. Industrial Policy
 - iii. Tax Incentives and Policies
 - iv. Intellectual Property Right (IPR) Policy
 - v. Trade Law and Foreign Investment Policy
 - vi. Labor Laws
 - vii. Financial Regulations
 - viii. Accounting Practices
 - ix. Accreditation Policies
 - x. Admission Policies
 - xi. International Student Policy
 - xii. International Policy
 - xiii. Taxation Policy
 - xiv. Visa and Immigration Policy
- 10. Role and Involvement of Home Country in economic developments of Host Country
- 11. Demographics
- 12. Status of Higher Education System of Host Country
- 13. Parameter related to Innovation Cluster (Ecosystem) (location of new University) at Host Country

Facilities

- i. Digital Connectivity
- ii. Transportation
- iii. Health Services
- iv. Postal Facilities
- v. Media
- vi. Energy
- vii. Stock Exchange
- viii. Banking and Insurance Sector

Funding

- ix. Bank Funding
- x. Venture Capital (VC) Fund
- xi. Foreign Direct Investment (FDI)

R&D Labs, SEZ, Parks

- xii. Government R&D Labs
- xiii. Industrial R&D Labs

- xiv. Multinational Companies' (MNC) R&D Labs
- xv. Non-Government Organization's (NGO) R&D Labs
- xvi. Special Economic Zone (SEZ)
- xvii. Technology and Software Parks

Manufacturing Sector, Market Research & Conditions

- xviii. Manufacturing Sector
 - xix. Market Research
 - xx. Marketing Conditions
- xxi. Supply Chain
- xxii. Sales

Resources

- xxiii. Human and Other Resources
- xxiv. University and Higher Education Institutes (HEI)

With the help of these three analysis, it is easy to identify the complexities and challenges of establishing overseas campus at particular host country. In next chapter I would like to discuss this issue.

Chapter 7: Use of Three Analysis to Identify the Challenges at Host Country



7.1. Three Analysis Plays Vital Role

In the Chapter 3, we have seen intricacies for establishing Overseas Campuses. These complexities are nothing but challenges for developing perfect Business Plans.

In this Chapter, I would like to discuss the process of identifying the Challenges of establishing University at Host Country. Again the three analysis plays vital role in this process.

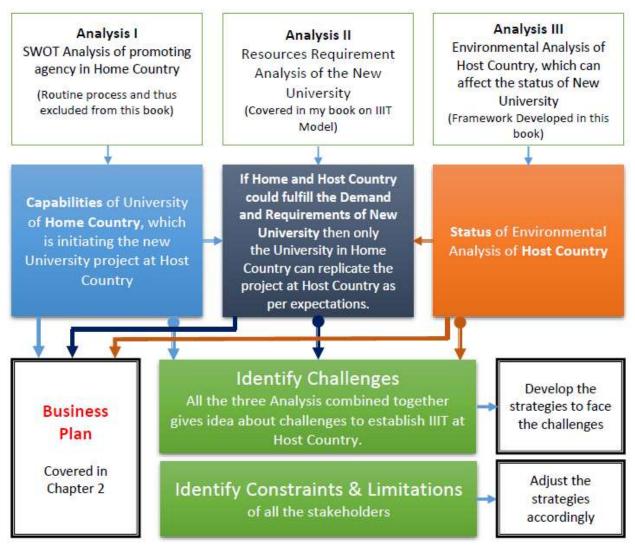


Fig. 7.1: How to identify challenges?

If the capability of University of Home Country, which is initiating the University at Host Country and Status of National Ecosystem of Host Country could fulfill the Demands and Requirements of New University at Host Country then only the University (or Agency) in Home Country can replicate the project at Host Country as per expectations.

7.2. How to Identify the Challenges of Establishing University at Host Country?

7.2.1. Identify Challenges on the Basis of Status of National Ecosystem for Host Country

Let's consider a hypothetical example. Suppose that the status of National Ecosystem of Host Country is as follows.

SN	Parameters of National Ecosystem	Grade
1.	Relationship of Home and Host Country	В
2.	Geographical Location of Host Country	В
3.	Internal Problems of Host Country	В
4.	Climatic conditions of Host Country	A
5.	Law and Order situation and Crime rates of Host Country	С
6.	Customs, Traditions, Language Spoken, Cost of Leaving, Culture of Host Country	В
7.	Foreign Relationship and Influence of other nations on Host Country	В
8.	Economical status of Host Country	C
9.	Regulatory Mechanism	В
10.	Science & Technology Policy	В
11	Industrial Policy	В
12	Laws	В
13	Tax Incentives and Policies	A
14	Intellectual Property Right (IPR) Policy	С
15	Trade Law	В
16	Foreign Investment Policy	A
17	Role of Home Country in economic developments of Host Country	В
18	Demographics	A
19	Status of Higher Education System of Host Country	С
20	Digital Connectivity	В
21	Transport	С
22	Health Services	С
23	Postal Services	В
24	Media	C
25	Energy Sector	С
26	Stock Exchange	A
27	Bank Funding	A
28	Venture Capital (VC) Fund	C
29	Foreign Direct Investment (FDI)	В
30	Government R&D Labs	C
31	Industrial R&D Labs	C
32	Multinational Companies' (MNC) R&D Labs	C
33	Non-Government Organization's (NGO) R&D Labs	C
34	Special Economic Zone (SEZ)	В
35	Technology and Software Parks	C
36	Manufacturing Sector	C
37	Market Research	C
38	Marketing Conditions	C
39	Supply Chain	C
40	Sales	C
41	Human and Other Resources	C

Table 7.1: Status of National Ecosystem (Hypothetical case)

From this table extract the parameter, which are having C grade and try to find out the expected challenges for establishing Overseas Campus for that Host Country.

SN	Parameters of National Ecosystem	Grade	Challenges
5.	Law and Order situation and Crime	C	Difficult to attract good students and faculty
	rates of Host Country		May create administrative problems
8.	Economical status of Host Country	C	Government funding will be difficult
			Difficult to get funding from industry
			Government may give less priority to higher education
14	Intellectual Property Right (IPR)	C	Without IPR culture it is difficult grow Incubation
	Policy		Center's activities
			Less Patent revenue
19	Status of Higher Education System	C	Difficult to get talented students as well as local faculty
	of Host Country		
21	Transport	C	Without these basic facilities it is difficult to grow
22	Health Services	C	Difficult to attract global talent
24	Media	C	
25	Energy Sector	C	
28	Venture Capital (VC) Fund	C	Progress of Incubation Center will be affected
30	Government R&D Labs	C	Difficult get support from industry to develop self-
31	Industrial R&D Labs	C	sustainable institute
32	Multinational Companies' (MNC)	C	Less industrial exposure to student and staff
	R&D Labs		Difficult to establish industry supported Research
33	Non-Government Organization's	C	Groups, which is a backbone of IIIT
	(NGO) R&D Labs		
35	Technology and Software Parks	C	
36	Manufacturing Sector	C	
37	Market Research	C	
38	Marketing Conditions	C	
39	Supply Chain	C	
40	Sales	C	
41	Human and Other Resources	C	IIIT will be solely dependent up on foreign faculty
			Difficult to provide state of art support services

Table 7.2: Parameters with C grade

7.2.2. Identify Challenges on the Basis of Requirements of IIIT Model

In addition to this, the IIIT Model specifies the expectations of best IIIT. On the basis of above Status of National Ecosystem, one can judge the difficulty level or challenges for pursing the best practices mentioned in IIIT Model. Following table shows the fact.

SN	Requirement of IIIT Model	Difficulty	Challenges		
		Level			
1.	Self-Sustainable Industry Supported IIIT Research	High	It's a major challenge.		
	University				
2.	Must be located in Metros or in the middle of IT	High	Wouldn't get advantages of		
	Industry Hub		Innovation Cluster for faster growth		
			rate.		
3.	40% Income Generation through industry oriented	High	Hamper financial status of IIIT.		
	Research & Technology Transfer		Need to find out other sources of		
			income generation.		

4.	Government provides only Land and Buildings either directly or through PPP model	High	If Industry is unable to support IIIT then institute need support from government for longer duration.
5.	Intensive Search for internationally renowned faculty by conducting interviews at USA	High	It will affect the performance of IIIT
6.	40% to 75% faculty with PhD from World Renowned Universities & remaining from IIT / IISc	High	
7.	Industry supported Research Centers, Labs, Chair Professors, Scholarships & Research Grants	High	IIIT will be over dependent up on government funding, student's fees and other source of income.
8.	During Internship, opportunity to do research and project work at many foreign universities	Moderate	
9.	Controlled by BOG, which consists of renowned persons from academics and IT industry	Low	
10.	Not having departments, organizing structure around Research Groups / Centers / Labs	High	It is most important requirement of IIIT.
11.	Involving industry as partner, involving them in curriculum design and teaching too	High	IIIT will be over dependent up on government funding, student's fees and other source of income
12.	Building strong international linkage through internationally qualified faculty	High	Need to exert more to achieve this goal.
13.	More weightage to coding and problem solving. Establish "Coding Culture"	Low	
14.	US University style salary structure and service conditions	High	Most important factor for growth of IIIT
15.	International Curriculum with high degree of flexibility	Low	
16.	Nurturing Innovative Minds through Innovation Culture	Low	
17.	Business Innovations through Incubation Center	Low	
18.	Strictly merit based admission process	Low	
19.	Fruitful international collaborations	Low	
20.	Active Alumni involvement	Moderate	
21.	Visionary Vice Chancellor	Moderate	

Table 7.3: Identified Challenges with the help of IIIT Model and status of National Ecosystem

7.2.3. Status of National Ecosystem: Identify implications on Various Aspects of University

Once you know the status of National Ecosystem, it is easy to identify its implications on various aspects of the new IIIT University like:

- 1. Constraints on Financial model
- 2. Effect on Project Cost
- 3. Support from Home and Host Countries
- 4. Effect on Organizing structure
- 5. Faculty Recruitment pattern
- 6. Problems for establishing culture of innovation
- 7. Academic freedom
- 8. Collaborative framework
- 9. Restrictions from Regulatory Mechanism and Government Policies

7.3. How to Identify the Constraints and Limitations of Stakeholders?

From above two tables, one can easily identify the Constraints and Limitations of Stakeholders. For example:

- Economic Status of Host Country may force the Government to reduce the research funding.
- In short duration, the Government of Host Country can't enhance the basic facilities of Host Country. Thus IIIT at Host Country may not be in a position to offer many advanced IT facilities etc.

In short the Status of National Ecosystem of Host Country Decides the Dimensions of IIIT University.

In the next chapter, let's see, how to use the National Ecosystem Framework for doing the Environmental Analysis of Host Country namely Myanmar.

Chapter 8. Case Study: Environmental Analysis of Myanmar

With the Help of National Ecosystem Framework

Myanmar has again been named one of the world's **Least Developed Countries** (LDC) in a report from the **United Nations** Conference on Trade and Development (UNCTAD). Myanmar has been on UNCTAD's list since the late 1980s. [143]

8.1. Indo-Burma Relations

8.1.1. Indian Perspective

From India's perspective, Myanmar is an immediate neighbor of vital importance for defense and internal security needs, stability and development in the North Eastern Region (NER), and expansion of our influence in the Bay of Bengal area and Southeast Asia. Myanmar is not where only China and India 'meet'; it is also the intersection between South Asia and Southeast Asia. Thus, both countries have a strategic convergence in treating Myanmar as the 'gateway' between India and Asian and beyond, through expansion of connectivity and cooperative links. [1]

8.1.2. Geographical Location

Myanmar perceives itself 'sandwiched' between two Asian giants – China and India – which are also the two fastest growing economies in the world today. Naturally, it seeks cooperative relations with both, keen to leverage its strategic location to derive maximum benefits, while safeguarding its independence. [1]



Fig. 8.1: Political Map of Burma / Myanmar

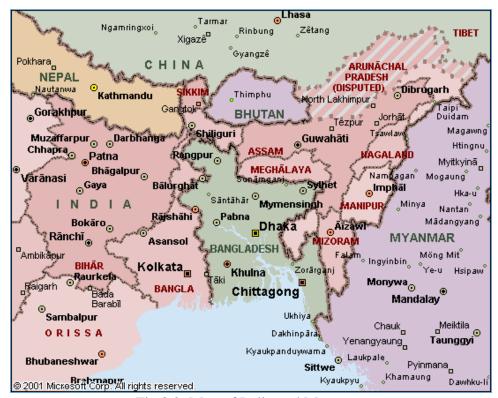


Fig.8.2: Map of India and Myanmar

8.1.3. Fluctuations

History reveals difficulties in putting an accurate label on the **complex relations** between India and Burma/Myanmar. Geographical contiguity, ethnic and cultural heritage, Asian values and religion have been permanent factors molding these ties which have, however, **fluctuated – at times quite widely**. The two countries have related to each other as neighbours, strangers, even adversaries at times, but mostly as friends and partners. Happily, neither has treated the other as irrelevant to its national interests. [1]

There is no doubt that the **Burmese want close ties with India**.... If we, however, ask if the Burmese are happy with India's role in Myanmar, there is a sense of **frustration at the pace at which India has been moving**....The lack of proper and **effective implementation** of policies and projects has been a major source of **damaging India's image**. During Chairman Than Shwe's 2910 visit, Minister for Science and Technology U Thaung observed frankly the Indian business community was taking "**too long to come, unlike China and Asian countries**". [4]

8.1.4. Historical Background and Indo-Burma Relations

8.1.4.1. 1947-1962

1947 to 1962: For many years, Indo-Burmese relations were strong due to Myanmar previously having been a province of India, due to cultural links, flourishing commerce, common interests in

regional affairs and the presence of a significant Indian community in Myanmar. The shared cultural and religious heritage was intensely emphasized by leaders of both nations. [4] [5]

8.1.4.2. Ne Win Years (1962-88)

- In 1962 when Indo-China war took place Myanmar chose to remain neutral, which India interpreted as siding with China. [6]
- The military coup in Burma in 1962, however, changed the nature of the two nations' political and economic relations. While there was not necessarily an open rift between them in the following decades, a lasting mutual indifference developed that was helped by Burma's self-imposed isolation. The overthrow of the democratic government by the Military of Myanmar led to strains in ties. [4]
- After he seized power through a military coup in 1962, along with much of the world, India condemned the suppression of democracy, thus General Ne Win ordered a large-scale expulsion of Indians. [7]

8.1.4.3. Direct Military Rule under SLORC/SPDC (1988 to 2010)

- India and Myanmar jointly launched "Golden Bird" operation in 1995 to squeeze the insurgents hidden in the North-East region. However, India's announcement of Aung San Suu Kyi as the recipient of the Jawaharlal Nehru Award for International Understanding disappointed the Burmese military and they withdrew from the operation. [6]
- During 2002, the Indian Consulate General in Mandalay was re-opened and the Consulate General of Myanmar was set up in Kolkata. [8]
- India was hesitant in reacting to the 2007 Burmese anti-government protests that had drawn overwhelming international condemnation. India also declared that it had no intention of interfering in Burma's internal affairs and that the Burmese people would have to achieve democracy by themselves as it respects the sovereignty of Myanmar. [5]

8.1.4.4. Disciplined Democracy Led by Aung San Suu Kyi (2011-16)

After a gap of twenty five years, since the visit of Rajiv Gandhi in 1987, Indian Prime Minister, Dr. Manmohan Singh, visited the country in 2012. By this time India's foreign policy and outlook has changed and is no longer bounded by idealism. Keeping China's tremendous presence and influence in Myanmar in mind India started paying serious attention to its eastern neighbor which it considered as the gateway to other South-East Asian countries. India at that time faced sanctions from world communities, specially its western partner due to the nuclear test it conducted in 1998. India needed to look for newer avenues of economy which is yet another reason to engage with Myanmar. Things have dramatically improved with the coming to power of the Narendra Modi government and India's official involvement in the peace process of the country. [6]

8.2. Internal Problems: Ethnic Groups, Civil War and Democracy

Burma's conflicts are neither new nor are they singular. Conflicts along multiple-lines – class and ideology, civil society and the military, and ethnic groups—have been going on for nearly 65 years, that is, since Burma's independence from Britain in 1947/1948. [66]

8.2.1. Ethnic Groups

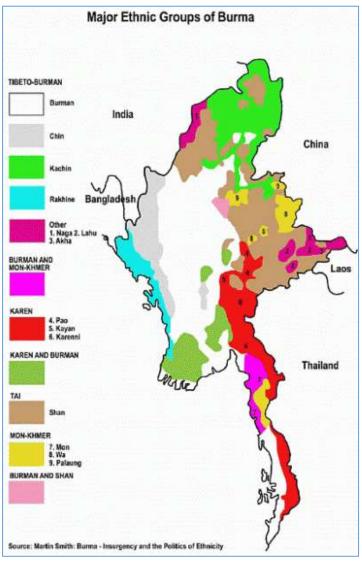


Fig. 8.3: Ethnic Groups of Myanmar [9]

Myanmar is ethnically diverse. The government recognizes 135 distinct ethnic groups. While it is extremely difficult to verify this statement, there are at least 108 different ethnolinguistic groups in Myanmar, consisting mainly of distinct Tibeto-Burman peoples, but with sizeable populations of Tai–Kadai, Hmong–Mien, and Austroasiatic (Mon–Khmer) peoples. [9]

The Bamar form an estimated 68% of the population. 10% of the population are Shan. The Kayin make up 7% of the population. The Rakhine people constitute 4% of the population. Overseas Chinese form approximately 3% of the population. The Rohingya Muslim people are a heavily oppressed minority. [9] [47]

Ethnic Indians (PIOs persons of Indian origin) today account for approximately 2% (about 950,000) of the population of Burma and are concentrated largely in the two major cities (Yangon and Mandalay) and old colonial towns (Pyin U Lwin and Kalaw). Almost half of Yangon's population was Indian by the Second World War. As a consequence of the Japanese invasion of 1942, half a million members of the Indian community fled Burma overland into Assam. There are PIOs of numerous ethnicities from states including Bihar, Bengal, Tamil Nadu, Uttar Pradesh and Punjab. They are largely barred from the civil service and military and are disenfranchised by being labeled as 'foreigners' and 'non-citizens' of Burma. It is time for the Indian government to assist those who are stateless, with the relevant state governments also helping to re-establish ties.

8.2.2. Civil Wars

Myanmar is a multi-ethnic society and continues to face considerable ethnic conflict, particularly in border regions. For most of its independent years, the country has been engrossed in rampant ethnic strife and Burma's myriad ethnic groups have been involved in one of the world's longest-running ongoing civil wars. During this time, the United Nations and several other organisations have reported consistent and systematic human rights violations in the country. [10]

- In early August 2009, a conflict known as the Kokang incident broke out in Shan State in northern Myanmar. For several weeks, junta troops fought against ethnic minorities including the Han Chinese, Wa, and Kachin. During 8–12 August, the first days of the conflict, as many as 10,000 Burmese civilians fled to Yunnan province in neighboring China. [11]
- A widely publicized Burmese conflict was the 2012 Rakhine State riots, a series of conflicts that primarily involved the ethnic Rakhine Buddhist people and the Rohingya Muslim people in the northern Rakhine State—an estimated 90,000 people were displaced as a result of the riots. Rohingya have been fleeing Rakhine State by boat in recent years. Often, the boats are very small and dangerous on the open seas. An estimated 100,000 Rohingya have fled Myanmar in the last two years in fear of persecution and violence [11]
- In October 2012 the number of ongoing conflicts in Myanmar included the Kachin conflict, between the Pro-Christian Kachin Independence Army and the government; a civil war between the Rohingya Muslims, and the government and non-government groups in Rakhine State; and a conflict between the Shan, Lahu and Karen minority groups, and the government in the eastern half of the country. [11]
- Armed conflict between ethnic Chinese rebels and the Myanmar Armed Forces have resulted in the Kokang offensive in February 2015. The conflict had forced 40,000 to 50,000 civilians to flee their homes and seek shelter on the Chinese side of the border. [11]

Refugee camps exist along Indian, Bangladeshi and Thai borders while several thousand are in Malaysia. Conservative estimates state that there are over 295,800 minority refugees from Myanmar, with the majority being Rohingya, Karen, and Karenni are principally located along the Thai-Myanmar border. [11]

Various insurgent groups operate in parts of Shan, Mon, Chin (Zomi), and Karen States along the Thai and Chinese borders. Travel to these regions generally requires a government permit. The government also restricts travel to Kayah State, Rakhine State and Kachin state due to insurgent activity. However travel is entirely unrestricted to the districts of Yangon, Bago, Ayeyarwady, Sagaing, Taninthayi, Mandalay and Magwe. [47]

8.2.3. Restoring Democracy

In 2011, the military junta was officially dissolved following a 2010 general election, and a nominally civilian government was installed. While former military leaders still wield enormous power in the country, Burmese Military have taken steps toward relinquishing control of the government. This, along with the release of Aung San Suu Kyi and political prisoners, has improved the country's human rights record and foreign relations, and has led to the easing of trade and other economic sanctions. There is, however, continuing criticism of the government's treatment of the Muslim Rohingya minority and its poor response to the religious clashes. [11]

Myanmar general elections were held on **8 November 2015**. These were the first openly contested elections held in Myanmar since 1990. The results gave the National League for Democracy an absolute majority of seats in both chambers of the national parliament, enough to ensure that its candidate would become president, while NLD leader Aung San Suu Kyi is constitutionally barred from the presidency. [11]

8.3. Climate

Much of the country lies between the Tropic of Cancer and the Equator. It lies in the monsoon region of Asia, with its **coastal regions** receiving over **5,000 mm** (**196.9 in**) of rain annually. Annual rainfall in the **delta region** is approximately **2,500 mm** (**98.4 in**), while average annual rainfall in the **Dry Zone in central Myanmar** is less than **1,000 mm** (**39.4 in**). The Northern regions of Myanmar are the coolest, with average temperatures of 21 °C (70 °F). Coastal and delta regions have an average maximum temperature of 32 °C (89.6 °F). [11]

- In May 2008, **Cyclone Nargis** caused extensive damage in the densely populated, rice-farming delta of the Irrawaddy Division. It was the worst natural disaster in Burmese history with reports of an estimated **200,000 people dead or missing**, and damage totalled to 10 billion US Dollars, and as many as 1 million left homeless. [11]
- Severe flooding in Myanmar began in July 2015 and continued into September, affecting 12 of the country's 14 states, resulting in about 103 deaths and affecting up to 1,000,000 people. Most of the casualties were reported from the Irrawaddy Delta. Torrential rains that began on 16 July destroyed farmland, roads, rail tracks, bridges and houses, leading the government to declare a state of emergency on 30 July in the four worst-hit regions in the west—Magway Division, Sagaing Division, Chin State and Rakhine State. [12]

8.4. Law and Order Situation and Crime Rate

Myanmar is one of the **safest countries in the developing world** for tourists to visit, mainly because of the **strict Buddhist culture** but in part because of the **government's Draconian punishments for those who trouble foreigners**. [47]

- Myanmar is one of the world's most corrupt nations (Number 171 out of 178 nations)
- Myanmar had a murder rate of 15.2 per 100,000 population (very high).
- Myanmar is the world's second largest producer of opium after Afghanistan
- Myanmar is the largest producer of methamphetamines in the world [11]

Popular tourist destinations such as Yangon (Rangoon), Mandalay, Inle Lake and Bagan are open to foreigners. However, **much of Myanmar is closed to foreign travelers**, and **many land routes to far-flung areas are also closed** (for example, to Mrauk U, Kalewa, Putao, Kengtung). [47]

8.5. Customs, Traditions and Culture, Language Spoken, Cost of Leaving

8.5.1. Culture

Myanmar's culture is heavily influenced by Buddhism. Influence of ancient Indian culture intertwined with local traditions and some Chinese influences can be clearly seen in local architecture and food habits. Various stupas and temples throughout the country bear a distinct resemblance to those in northern India. Like neighboring Thailand, Theravada Buddhism is the single largest religion, and even some of the most remote villages will have a village temple for people to pray. Other religions which exist in smaller numbers include Christianity, Islam and Hinduism. Generally speaking, most Burmese people are incredibly friendly and polite as long as you respect their local customs, and will do their best to make you feel welcome in their country.

8.5.2. Languages Spoken

- English is the second language of many Burmese people
- Though taxi operators and hotel personnel in Yangon and Mandalay have been known to speak Mandarin and Hindi.
- Hygiene in Myanmar may seem terrible to the average Western traveler but it is possible to stay healthy with some basic precautions such as prophylactic medication, care choosing food and water, and antibacterial ointment [47]

8.5.3. Customs and Tradition

- Address elders with U or "Uncle" for men, and Daw or "Auntie" for women.
- Physical contact such as shaking hands with strangers is uncommon, especially between members of the opposite sex, except in business settings
- Myanmar is still a conservative country. Modest clothing is practically required in religious places.

- Avoid t-shirts with images of Buddha's or Buddhist imagery, which is considered highly disrespectful
- Give generously at temples and monasteries but women are not allowed into some sacred areas
- Never touch a monk's robes, no matter what sex you are.
- Note that monks are not allowed to come into physical contact with the opposite sex, so be careful not to touch hands if offering a donation
- When praying or paying respects, it is important to ensure that the *soles* of your feet do not point towards the Buddha or anyone else.
- When receiving items from people who could be considered equal to or higher than you in status, it's respectful to use your left hand to support your right elbow, and receive it with your right hand.
- Women do not take the name of the father or husband after marriage. Her name is her own and the name is known from birth to death unless she changes it of her own accord.
- In Myanmar family, there is no preference for boys. Both boys and girls are equally loved. Some may attach more values for girls. There is a Myanmar saying: When a daughter is born parents' usually say, "assurance of an additional dish on the dining table". In Myanmar family, the husband and wife share equal household responsibilities. The husband provides the financial needs and it is the woman who manages the family decision making in providing food, clothing and schooling etc. The women may go out to work for the social development; they still have the major responsibility to look after the family. The two responsibilities must be balanced for a woman who wishes to lead a harmonious and happy life both at home and in the society. One must be careful not to go against the cultural norms and values attached to our families.
- There is no discrimination against the girl-child in Myanmar. [47] [174]

8.5.4. Cost of Leaving

- Cost of living in Myanmar is 110.65% higher than in India (aggregate data for all cities, rent is not taken into account). [123]
- Rent in Myanmar is 215.73% higher than in India (average data for all cities). [123]

8.5.5. Currency

- Prices are often quoted in US dollars because of frequent fluctuations in the kyat exchange rate with US dollars.
- Most banks are licensed to accept US dollars.

8.6. Foreign Relations of Myanmar and Influence of Other Nations on Myanmar

8.6.1. Foreign Relations of Myanmar

Generally maintained warmer relations with neighboring states. Though the country's foreign relations, particularly with Western nations, have been strained, relations have thawed since the reforms following the 2010 elections.

- After years of diplomatic isolation and economic and military sanctions, United States relaxed curbs on foreign aid to Myanmar in November 2011 and announced the resumption of diplomatic relations on 13 January 2012
- The European Union has placed sanctions on Myanmar, including an arms embargo, cessation of trade preferences, and suspension of all aid with the exception of humanitarian aid.
- On 13 April 2012 British Prime Minister David Cameron called for the economic sanctions on Myanmar to be suspended in the wake of the pro-democracy party win.
- The country has close relations with neighboring India and China. In 2008, India suspended military aid to Myanmar over the issue of human rights abuses by the ruling junta, although it has preserved extensive commercial ties, which provide the regime with much-needed revenue. [13]

8.6.2. Influence of Other Nations on Myanmar

Myanmar's foreign policy will remain consistently neutral and nonaligned. [68]

Sino-Myanmar Relations: Both China and Myanmar (2) name each other "paukphaw". This is the Myanmar word for sibling or intimate. It is a reflection of the closeness of Sino-Myanmar relations that "paukphaw" is never used for any other country. The two have maintained substantive relations for centuries. Based on China's pragmatic foreign policy, Beijing supports Yangon's (Rangoon's) current military regime through the full spectrum of political, strategic, and economic ties. When Chinese President Hu Jintao met with the Chairman of the Myanmar State Peace and Development Council (SPDC), Than Shwe, in the Indonesian capital, Jakarta, in April 2005, he reiterated the strength of the relationship: "Since ancient times, the people of two countries have conducted close exchanges as brothers. To build good-neighborly friendship between China and Myanmar is a major part of China's foreign policy with neighboring countries". Beyond the official rhetoric, Myanmar remains cautious about its relationship with China. In reality, Sino-Myanmar relations have undergone a series of ups and downs, and China even in modern history has posed a threat to Myanmar's security. [67]

8.7. Economy

The McKinsey Global Institute estimated that in 2010, the **size of Myanmar's economy** was approximately United States Dollar (USD) **45 billion**. [105]

Myanmar has again been named one of the world's Least Developed Countries (LDC) in a report from the United Nations Conference on Trade and Development (UNCTAD). Myanmar has been on UNCTAD's list since the late 1980s. [143]

India's GDP crossed the \$2-trillion (\$ 2000 Billion) mark in 2014, according to data released by the World Bank in Washington late on Wednesday. After taking 60 years to reach the \$1-trillion mark, India added the next trillion in just seven years. [142]

8.7.1. Last Few Decades: Least Developed Economy

Burma remains a poor country with no improvement of living standards for the majority of the population over the past decade. The economy is one of the least developed in the world, and is suffering the effects of decades of stagnation, mismanagement, and isolation. Heavy government intervention in the economy has made Burma one of the world's poorest countries. Corruption is endemic. Due to a complex and capricious regulatory/legal environment and extremely low government salaries, rent-seeking is ubiquitous. Rule of law and protection of property rights are weak. Judicial decisions are often influenced by government interference, personal relationships, or bribes. [14]

8.7.2. After 2010

Burma's emerging but deeply flawed democratic reform process will likely lose momentum in the run-up to the 2015 elections. Burmese economy is expected to grow by about 8.8% in 2011. Although **no one can guarantee** that changes in Myanmar are "**irreversible**" now, it is assumed that, if there are no mishaps, the country will undertake further reforms, strengthening its democracy, opening its economy and re-balancing its external relations. [1] [15]

8.7.3. Key Facts and Figures

Areas to focus to boost the economy are:

- Transport and Communication: Road, Railway, Telephone / Mobile, Internet.
- Energy: More than 45 million of the country's population is without electricity, with 70 per cent of people living in rural areas.
- Education Projects: In very bad shape.
- Health Care Sector: Moderate facilities are available in urban area.
- Pharmaceutical Sector: The industry relies heavily on foreign medicine, with more than 90 per cent imported. **Indian suppliers enjoy the largest share at 35.4 per cent**, followed by Thailand, China, Pakistan, Bangladesh, South Korea and Indonesia. [127]
- Technology: The lack of an educated workforce skilled in modern technology contributes to the growing problems of the economy especially E-Governance. [14]
- Oil and Gas: Myanmar exported \$3.5 billion worth of gas, mostly to Thailand in the fiscal year up to March 2012. [14]
- Mining: 90% of the world's rubies come from the country. Burma's gemstone industry is a cornerstone of the Burmese economy with exports topping \$1 billion. [14]
- Irrigation: Need special attention.
- Banking Sector: In developing stage.
- Tourism: Tourism is thus a growing sector of the economy of Burma. In 2012, 1.06 million tourists visited the country, and 1.8 million are expected to visit by the end of 2013. Its tourism industry development pace is still at a modest level due to existing substandard tourism infrastructure. [14]
- Garment Sector: Garment exports are estimated to have reached US\$1 billion at the end of 2012/13 fiscal year. [14]

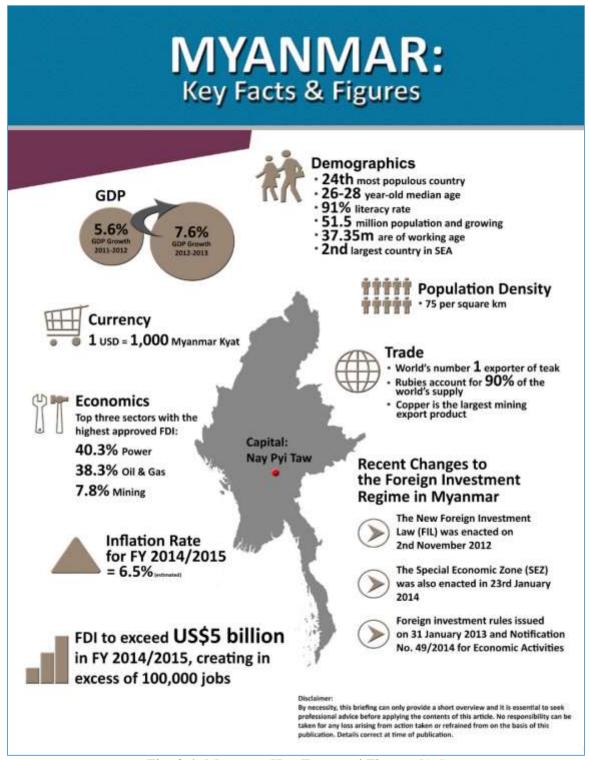


Fig. 8.4: Myanmar Key Facts and Figures [16]

8.7.4. GDP

Following figure shows Myanmar's GDP and GDP PPP Per Capita from 2006 to 2012. [105] [141]

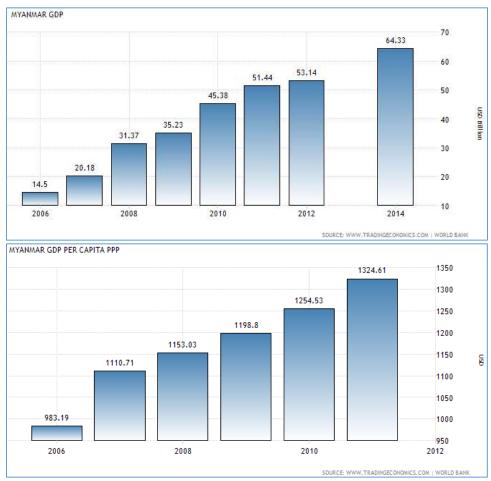


Fig. 8.5: Myanmar GDP and GDP per Capita PPP [17] [141]

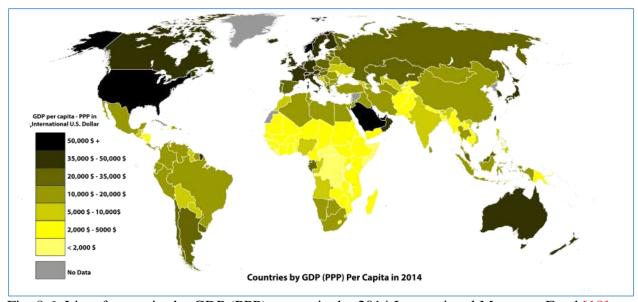


Fig. 8.6: List of countries by GDP (PPP) per capita by 2014 International Monetary Fund [18]

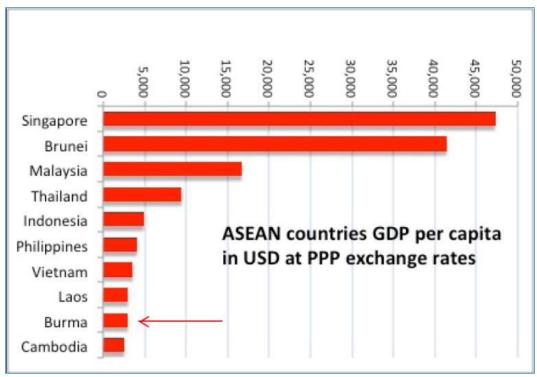


Fig. 8.7: Asian Countries GDP per capita in USD at PPP exchange rates [19]

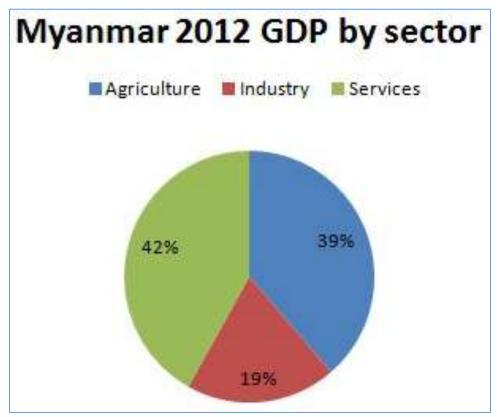


Fig. 8.8: Myanmar GDP by sector [20]

8.7.5. Import and Export



Fig. 8.9: Myanmar – Export Earnings by Sector [21]

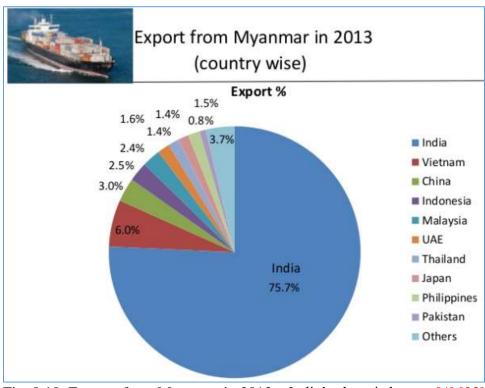


Fig. 8.10: Exports from Myanmar in 2013 – India's share is largest [4] [23]

8.7.6. Employment by Sector

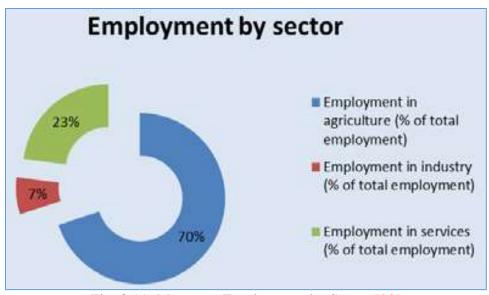


Fig. 8.11: Myanmar Employment by Sector [22]

8.7.7. FDI Investments

The country approved US\$4.4 billion worth of investment projects between January and November 2014. Foreign investment comes primarily from People's Republic of China, Thailand, South Korea, UK, Singapore, Malaysia. The following figure shows that the combine FDI share of **China and Hong Kong** is **52%**. [14]

Aung Naing Oo, head of the state-run Myanmar Investment Commission, told Reuters that FDI had easily beat that to reach \$8.1 billion, thanks to the opening-up of its telecoms sector and the courting of manufacturers and energy firms. "Thirty-five percent of total FDI went into the energy sector, while manufacturing and telecommunications attracted 25 percent each," Aung Naing Oo said. [25]

Throughout the world, the Least Developed Countries (LDCs) post the following broad and interrelated barriers to foreigners are:

- Administrative barriers
- Information Asymmetries and imperfections
- Policies barriers
- Infrastructure short comings
- Constraints of human, social and institutional capital [26]

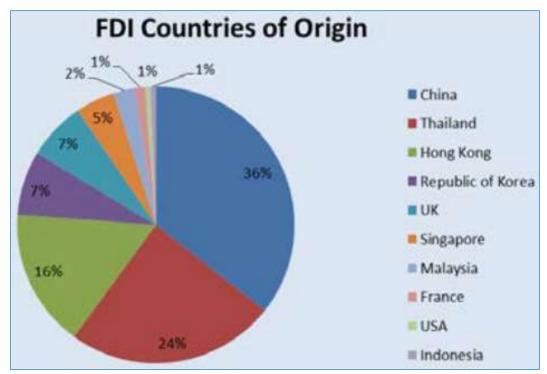


Fig. 8.12: FDI Countries of origin

The following figure shows that the combine FDI share of China and Hong Kong is 48.85%

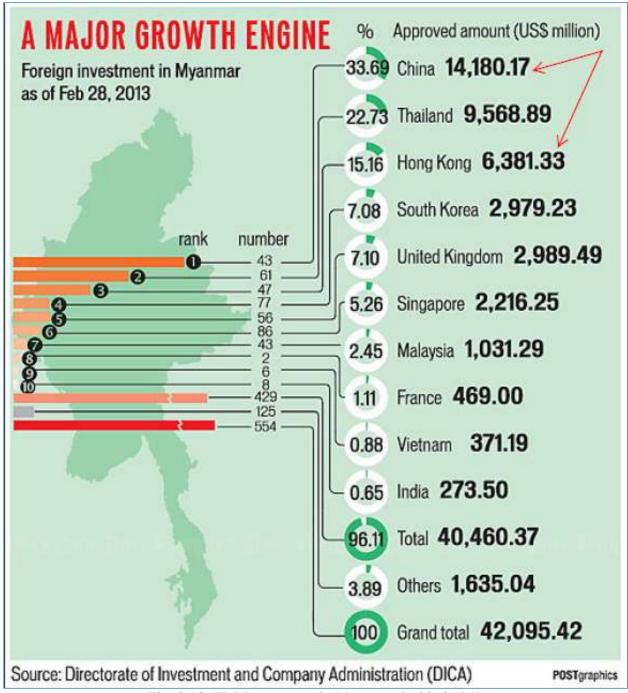


Fig. 8.13: FDI Investment in Myanmar in 2013 [24]

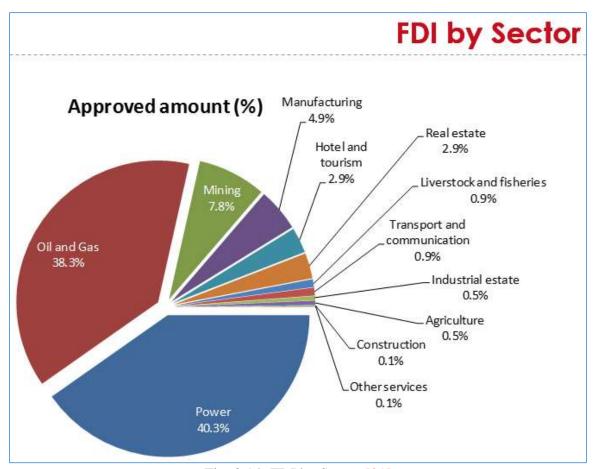


Fig. 8.14: FDI by Sector [21]

8.8. Government Policies

Myanmar has experienced the **rapid changes including legislations** (2014). In relation to the legal changes, there are several **serious criticisms**. First one is the process of promulgation. **The laws are introduced without social consensus or open discussion**. The laws have been drafted by the government and passed by the parliament secretly. **Public society cannot access the contents of the laws until the government officially releases them**. People who may be influenced by the changes do not have a chance to be involved to the process. Even the parliament members do not have enough time to review the drafts, which makes them rubber stampers for the new laws. [145]

8.8.1. Science & Technology Policy

But scientists say the overall scientific climate remains grim, and that while many universities have scientific programmes, facilities are inadequate — such as labs with no equipment. Myanmar's minister of science and technology, U Aye Myint, has said that "financial and technical limitations" make it impossible to implement major reforms at each of the country's 33 technological universities. [112]

The 'UNESCO Science Report 2010' found Myanmar's investment in science from 2000 to 2002 ranged from 0.07 to 0.16 per cent of gross domestic product (GDP). In 2002 it had 4,725 researchers, about 85 per cent of whom were women. **Only 10 to 39 scientific publications with international collaboration were produced annually (between 2000 to 2008)**, with publications mainly in the fields of biology, clinical medicine and earth and space sciences. [112]

Myanmar Science and Technology Minister Dr. Ko Ko Oo indicated that the Myanmar government is currently (2015) drafting laws related to science, technology, and innovation policy. [113]

8.8.2. Industrial Policy

The Ministry of Economy, Trade and Industry or METI, is a ministry of the Government of Japan. **METI has formulated the Myanmar Industrial Development Vision** (2015), which summarizes a future vision for Myanmar's industry and the policies to be preferentially pursued in order to realize the vision. METI will cooperate with Myanmar in its efforts in drafting and implementing concrete policies based on the basic concepts outlined in this vision. On July 3, 2015, Prime Minister Abe hand delivered the Myanmar Industrial Development Vision to Myanmar President Thein Sein, who visited Japan in order to attend the Mekong-Japan Summit Meeting. Moving forward, **METI will support Myanmar in its efforts to formulate its next five-year plan**, and draft and implement specific policy measures, based on the basic concepts outlined in this Vision. [114]

Myanmar is still a predominantly agricultural country. The agricultural sector employs more than 60 per cent of the labor force and contributes about 50 per cent of GDP. **Myanmar did not undergo meaningful changes in industrial structure in the last forty years**. [115]

8.8.3. Tax Incentives and Policies

The Myanmar government is drafting an expanded package of incentives for foreign companies setting up shop in special economic zones there, hoping to draw more investments. It recently revised the law governing the zones and is now working on detailed implementation rules. Both are expected to go into effect as early as this year (2014)... The amended law will apply to areas selected by the government as special economic zones, such as Thilawa, near Yangon; Dawei, close to the Thai border; and Kyaukpyu, where China-led development is underway. [116]

8.8.4. Intelectual Property Right (IPR) Policy

Intellectual property (IP) infringements, **vilified as theft in Western markets, aren't thought of as crimes here**, though the way they're handled could change with new legislation. The country's laws don't yet hit international standards, but the government is working on them (2015). Two decades after Myanmar first joined the World Trade Organization (WTO), draft laws on intellectual property are finally coming along. The four bills, published publicly in July, could make IP infringements a bigger problem for perpetrators, even though many **Myanmar people don't really know about the issue**, according to Myanmar Trademark and Patent Law Firm senior associate U Thein Aung. [117]

With the relaxation of sanctions regimes around the world in 2012, Myanmar (also known as Burma) offers opportunities for both small businesses and the largest and most recognized companies around the world. Large or small, companies are finding that **Myanmar's intellectual property (IP) laws generally do not recognize their trademarks and other property**. It is necessary to take steps locally to establish and protect IP rights. Implementation of a strategy for protective measures should be at the top of the list of actions for companies considering entry into this opening market. [118]

Myanmar/Burma generally does not recognize trademarks or copyrights from other countries. While infringement of IP rights is common, visitors to Yangon or Nay Pyi Taw in 2012 will note the general absence of familiar brands, franchises, cars and product lines. It is like stepping back in time. However, with the re-entry of Myanmar into the international community, and the concomitant investment by foreign companies entering the market, the legitimate as well as illegitimate uses of IP for business are expected to expand. There are certain key steps which companies should take now to plan for future business in this opening market...There is presently no functioning system of patent protection in Myanmar. Companies should be aware of this limitation and discuss with counsel what strategies may be available. [118]

8.8.5. Trade Law and Foreign Investment Policy

The Pyidaungsu Hluttaw (Union Assembly) of Myanmar enacted a number of important laws in 2012 including needed reforms of labor laws, foreign exchange, and environmental conservation. The law that garnered the most attention, by far, was Myanmar's long awaited new Foreign Investment Law (FIL) which came into effect on November 2, 2012, with a number of amendments suggested by President Thein Sein being incorporated in the version passed into law. [119]

8.8.6. Labor Laws

Labor laws in Myanmar, like most other laws, are outdated. There is no single employment law, instead a hodgepodge of laws including the Leave and Holiday Act (1951), Factories Act (1951), Workman's Compensation Act (1923), Employment and Training Act (1950) and others, are used. A new law passed in 2011-the Labor Organization Law-provides a framework for labor unions in Myanmar. [144]

More than 670 labor organizations have been registered in the 2 years since the implementation of the law (2013). [145]

8.8.7. Other Policies

I could not gather most useful information regarding following policies at any website.

- Accreditation Policies
- Admission Policies
- International Student Policy
- International Policy
- Taxation Policy for IBC

• Visa and Immigration Policy

8.9. Role of India

8.9.1. Major Indian Projects in Myanmar

The five Bs that frame India-Myanmar relations in popular imagination Buddhism, Business, Bollywood, Bharatnatyam and Burma teak.

Not many may be aware that India has development commitment of nearly **US\$ 2 billion** to Myanmar including major surface transport connectivity, human resource capacity-building, and border area development projects and programmes. The Government of India is actively involved in over a dozen projects in Myanmar, both in infrastructural and non-infrastructural areas.

8.9.1.1. Education and Training (IT, Entrepreneurship, Language Laboratory, University)

- 1. Establishment and subsequent upgradation of the India-Myanmar Centre for Enhancement of IT Skills (IMCEITS) at Yangon.
- 2. Establishment of a Language laboratory, Myanmar-India Centre for English Language (MICELT), and E-resource centre at the Ministry of Foreign Affairs (MOFA) in Nay Pyi Taw and Yangon.
- 3. Support for an IT Training Programme for 100 Young Myanmar Entrepreneurs at the Infosys Global Education Centre, India.
- 4. Centre of Excellence in Software Development and Training (CESDT) under the ASEAN-India Fund. The Agreement was signed by Dr B.K. Murthy, Executive Director, Centre for Development of Advanced Computing (C-DAC), NOIDA and H.E. U Aung Lynn, Permanent Secretary in the Ministry of Foreign Affairs of the Republic of Union of Myanmar.
- 5. Training for over 100 Myanmar government servants in IT training institutions in India under the ITEC programme.
- 6. IIIT(B) of India is partnering with Ministry of Science and Technology of Myanmar for establishing the **Myanmar Institute of Information Technology (MIIT) at Mandalay** at a cost of **US\$ 31 Million** (Rs 211 Crore), which is envisioned to be a national center of excellence offering graduate, post graduate and doctoral programs.
- 7. An India-Myanmar Industrial Training Centre has been set up by HMT(I) in Myanmar with the assistance of GOI in Pakokku, a second centre is being set up in Myingyan.
- 8. Advance Center for Agricultural Research and Education, Yezin
- 9. India has already provided assistance for establishment of the **Myanmar-India Entrepreneurship Development Centre (MIEDC) (US\$ 0.3 Million)** at the Yangon Institute of Economics (Hlaing Campus) which was set up in 2009 to facilitate the creation of viable and competitive enterprises and strengthen existing ones for global competition. The Centre has imparted training to 3000 participants since inception.

8.9.1.2. IT Sector

- 10. Hardware assistance to the Central Land Records Development Training Centre (CLRDTC) Takkyi Township, Yangon.
- 11. An ADSL project for high speed data link in 32 Myanmar cities has been completed by TCIL.
- 12. ISRO set up and subsequently upgraded a data processing centre for remote sensing applications.

8.9.1.3. School Education

- 13.India has already committed US \$ 2.24 Million for the construction of **21 primary schools** in the Chin State (11) and Naga Self Administered Zone (10) of Myanmar.
- 14. GOI has further committed US\$ 1 million for the establishment of **schools in four townships of Rakhine State** as part of rehabilitation and national reconciliation.
- 15. India has also assisted in the reconstruction of 1 high school and 6 primary schools in Tarlay township, the area worst affected by the severe earthquake that struck north-eastern Myanmar in March 2011.

8.9.1.4. Transport Sector

- 16. Upgradation and resurfacing of the 160 km. long Tamu-Kalewa-Kalemyo road.
- 17. Construction and upgradation of the Rhi-Tiddim Road in Myanmar.
- 18. Trilateral Highway project, with the objective to link Moreh in Manipur to Mae Sot in Thailand through Myanmar.
- 19. The Kaladan Multimodal Transport Project: A major flagship project under construction is the Kaladan multi-modal transit transport project for which construction commenced in December 2010. It aims to link Kolkata and other East Indian ports through coastal shipping to Sittwe on the Arakan coast in Myanmar and provide further connection through the Kaladan river route and road to Mizoram on the Indian side.
- 20. M/s RITES is involved in development of the rail transportation system and in supply of railway coaches, locos and parts.
- 21. A heavy turbo-truck assembly plant set up in Myanmar by TATA Motors with GOI financial assistance was inaugurated on December 31, 2010. TATA motor has transferred technology of truck assembly plant in Magway, Myanmar in association with Myanmar Automobile & Diesel Industries Limited (MADI) with the GOI support. The plant deals with highly flexible chassis & frame assembly line along with a cab manufacturing, painting and trimming activities with a capacity to deliver 1000 vehicles per year.
- 22. In 2013, TATA motors opened its first sales, service and spares showroom in Yangon.
- 23. TVS motors (two wheelers) launched dealership in Mandalay and in other small town.
- 24. Sonalika Tractors, New Holland tractor, Escorts and their farm implements from India have good presence in Myanmar.
- 25. A Air Service agreement to facilitate direct air connectivity was signed during the visit of the Prime Minister in May 2012. Currently Air India is operating 3 services per week on the Kolkata Yangon Sector.

8.9.1.5. Energy Sector

- 26. ONGC Videsh Ltd. (OVL), GAIL and ESSAR are participants in the energy sector in Myanmar.
- 27. In September 2008, Ministry of Electric Power-1 (MoEP-1) and NHPC signed an agreement for development of the **Tamanthi and Shwezaye Hydro-Electric Power project** in Chindwin River valley and NHPC submitted the updated DPR on Tamanthi and is working on the DPR on the Shwezaye project.
- 28. The **renovation of the Thanlyin Refinery** The renovation of the Thanlyin Refinery was financed by US\$ 20 million.
- 29. **Upgradation of the Thanbayakan Petrochemical Complex** The upgradation of Thanbayakan Petrochemical Complex is being financed by another US\$20 million.
- 30. Three leading companies OVL, GAIL and Essar have been active in the energy sector. OVL and GAIL have announced US\$ 1.33 billion investment in China-Myanmar gas pipeline project. Phase I of 200 km Kyaukphyu-Kunming Oil & Gas pipeline worth US\$ 475 million for construction of two parallel pipelines for gas and oil has been awarded to Punj Lloyd. PSC-1 onshore block in Central Myanmar worth US\$ 73 million has been awarded to Jubilant Energy India on the basis of a global tender in 2011.Punj Lloyd Ltd, an Indian contractor is executing a part of Myanmar China Oil Pipeline Project and Myanmar China Gas Pipeline Project along with South East Asia Crude Oil Pipeline Company Limited and South East of Asia Gas Pipeline Company since May 2011 with an estimated total investment of US \$ 475 million.

8.9.1.6. Construction Sector

31. Other projects include revamp of the Ananda Temple in Bagan.

8.9.1.7. Health Sector

- 32. Upgradation of the Yangon Children's Hospital and Sittwe General Hospital.
- 33. Hospitals like Apollo, AMRI and started their operations through local Myanmar agents to boost Medical tourism.

8.9.1.8. Rice Mills

34. Erection of disaster proof rice silos etc.

8.9.1.9. Garments Sector

35. Mr Anand Sharma and President U Thein Sein met in Nay Pyi Taw recently. During the meet India has offered to help in revival of 300 apparel factories in Myanmar along with US\$ 5 million Line of Credit for revival of these factories. The South India Textile Research Association (SITRA) will provide technical assistance in formulation of revival plans for these factories. Private Sector companies will also play a big role in revival and building joint ventures with these closed apparel factories. India will also cooperate with Myanmar in formulating a **common compliance code for standards** and also the best practices in the

factories. The Minister proposed to the Myanmar President a Common Compliance Code – DISHA MYANMAR with technical assistance from AEPC – to enhance compliance standards in Myanmar for exports to developed countries. Sponsored by Ministry of Textiles, and helmed by AEPC DISHA is an initiative to driving industry towards sustainable human capital advancement. DISHA attempts to educate apparel exporting members on a **code of ethics** that covers all critical social and environmental concerns like child labor, health and industrial safety, etc. For capacity building in Myanmar textiles sector, India has offered 2 scholarships for 2 slots under **National Institute of Design (NID)** and **250 scholarships** for textile workers under Integrated Skill Development Scheme. Scholarships have been offered in **National Institute of Fashion Technology** and **Institute of Foreign Trade** also.

- 36. India will also set up India-Myanmar Apparel Sector JVs in **Thilawa SEZ** in collaboration with other international brands. India will also set up a textiles trade show Textiles Expo in Yangon for traditional textiles with Handloom Export Promotion Council (HEPC) as lead council. Enterprise India Show in Yangon as an annual event.
- 37. Further India has also offered US\$ 150 million of credit for project exports for establishing a **SEZ at Sittwe** in Myanmar Buyer's Credit Scheme under National Export Insurance Account (NEIA). The offer assumes that Myanmar Government will give a suitable land for the purpose.

8.9.1.10. Banking Sector

38. Talking about cooperation in banking sector Shri Sharma conveys India's appreciation for the Myanmar Government's approval to allow Indian Banks like United Bank of India to set a representative office in Myanmar. He expressed the hope that the two public sector banks viz., Bank of India and State Bank of India, who have also expressed interest, would also be permitted to operate in Myanmar. Shri Sharma stressed the need for permission to open full-fledged banking services. Also, proposed for setting up a joint venture state-owned bank. [1] [31-42]

8.9.1.11. Interested Indian Companies

In addition to above, various Indian companies have shown considerable interest in investing in Myanmar like

- Birla Corporation
- Avantha Group
- Parry Agro Industries
- Amalgamated Tea Plantations Ltd.
- Lucky Exports, Oberoi group
- ITC Hotels
- Bharti Airtel
- Kirlosker Pumps
- Cairn Energy India ltd.
- Asian Oilfield Services India
- Kanachur Industries India Ltd.
- Royal Solar

- GMR
- JK Paper and Cement
- Shree Cements, etc. [1] [31-42]

8.9.2. Trade Promotion Activities by India

Exchange of visits by various business chambers and participation in each other's exhibitions/fairs has fortified the close and friendly ties between the two countries. Business delegations have been visiting Myanmar regularly and a number of business events are taking place in Myanmar. Indian commercial activities have increased over the last two years in Myanmar which include the following: [30]

- 1. India Product Show 2012 (March) representing 19 companies; NEFIT's car rally from (March 2012) with over 60 participants (including over 35 business community representatives) from Guwahati to Yangon and back; Enterprise India show 2011 organized by CII in November 2011 (after a long gap of 7 years) in which over 60 Indian companies participated and a Seminar on the margins in which 20 leading Indian business companies participated.
- 2. Shri Sanjay Bhudia Chairman & MD, CII National Committee on Exports and Managing Director Patton International Ltd led a business delegation to Myanmar and held meetings with various Ministries in December 2012.
- 3. 18 companies from CHEMEXCIL also visited Myanmar in March 2011 and organized a Buyer Seller Meet at UMFCCI. MIBC and India's Pharmaceuticals Export Promotion Council, (PHARMEXCIL) also organized an Indian Pharma Exposition 2011 and Buyer-Seller Meet in February 2011 to boost partnership and cooperation in the Health sector.
- 4. Similarly hospitals like Apollo, AMRI and started their operations through local Myanmar agents to boost Medical tourism. In the education sector, Myanmar India Business Chamber (MIBC) organized two Education fairs (March 2012 and May 2011) to create Indian education awareness in Myanmar. In March 2011, CII also organized the India ASEAN Business Fair in New Delhi. Myanmar participated in the fair with great enthusiasm and even sent a 12 member cultural troupe during the period to India.
- 5. The Indian Chamber of Commerce (ICC) mounted a delegation to Myanmar of businessmen and policy makers from the north-eastern states of India from 26-31 August 2012. The business group included representatives from different sectors including power, oil, gas, textile, steel, construction, rubber, tea, tourism, teak and timber, IT, telecommunication etc. Later in March 2013, ICC has mounted a business delegation to Yangon and Sittwe and had held B2B and participated in a Business Seminar in Yangon.
- 6. Federation of Indian Export Organizations (FIEO) organized an 'India Show' in Yangon from September 3-7, 2012. The 'India Show' consisted of a Buyer-Seller Meet and display of Indian products. The 30 member delegation mounted by FIEO had representatives from various sectors including solar energy, telecom, textiles, engineering goods, handloom and handicrafts, jute products, hardware, hand tools, spices, garments, artificial jewelry and incense products.
- 7. IMCCI led delegation in September 2012 and had held meetings and B2B with business chambers in Yangon and Mandalay.
- 8. A delegation each from Export-Import Bank (EXIM) and Reserve Bank of India (RBI) visited Myanmar in August and September 2012 respectively to discuss mutual cooperation in banking sector.

- 9. Several commercial activities in the field of agriculture in the form of training courses for farmers in Mandalay and Sagaing Region were also undertaken. In this connection a four days training was held in Kyaukse from 18-21 October.
- 10. A 13-member business delegation from Indo-Myanmar Chamber of Commerce and Industry visited Mandalay from 28 October to 5 November 2012.
- 11. Samir Walia, President 'Frankfinn Air Hostess Training Academy' visited, Mandalay in November 2012 and held discussions with Heads of local domestic Airlines and training institutes for prospects in the field.
- 12. EEPC India delegation led by Rakesh Shah visited Yangon and had held B2B with UMFCCI members on 14 January 2013.
- 13. Bengal Chambers of Commerce (February 2013), Calcutta Chamber of Commerce (April 2013) have mounted business delegation to Myanmar. Calcutta Chamber of Commerce in Mandalay signed MoUs with the Mandalay Region Chamber of Commerce and Industry (MRCCI).
- 14. CII-Western region delegation led by Shri Ninad Karpe visited Myanmar from 15-21 September 2013 and had held discussions with UMFCCI officials and called on Vice President U Nyan Tun and senior Ministers in Nay Pyi Taw.
- 15. An India Product Show-2014 was organized by Indo-Myanmar Chamber of Commerce (Mumbai) from January 17-19, 2014 in Mandalay. Indian companies namely Kirloskar, TVS Motors, Mahindra and Mahindra, Shakti Pumps, Ind Boilers, Sahayadri Industries etc., and over 40 companies participated in show and B2B interaction. Over 40 Artisans of Manipur and Handloom and Handicraft Exhibition with support from the State government of Manipur also participated at Indian Product Display.
- 16. A 12 member farmer's delegation from Mandalay and Sagaing attended the 1st International Agro Horticulture show at Guwahati in January 2014.
- 17. CII organized with the support of Ministry of commerce organized 2nd Enterprise India show in Yangon from 14-16 January 2014 which was jointly inaugurated by CM of Yangon region and Ambassador of India.
- 18. The Consulate General of India, Mandalay organized a Business to Business meeting on February 27, 2014 in collaboration with Electronics and Computer Software Export Promotion Council (ESC) and Myanmar Computer Federation (MCF).
- 19. EEPC-INDEE Myanmar an engineering exhibition was organized by EEPC with the support of Embassy in Yangon from 13-15 March 2014. 109 Indian companies participated at the exhibition. CM of Yangon and MOS Commerce and Industry Dr. S. Nachiappan jointly inaugurated the exhibition.
- 20. Indian Chamber of Commerce in association with Embassy of India and UMFCCI orgnised an India Investrade 2014 in Sedona Hotel from 23-24 July 2014. 55 companies from various sectors participated in the exhibition cum conference and B2b events. CM of Yangon region inaugurated the event on 23 July. Following which a seminar was also organized in Mandalay on 25 July on enhancing border trade.
- 21. FICCI with the support of Ministry of Commerce and Embassy of India organized a Trade and Investment Show from 24-27 September 2014 in Tatmadaw hall in Yangon. Minister of Industry U Maung Myint and Ambassador of India Inaugurated the event. 105 companies from India participated. On the second day 25 September "make in india" launch was also organized at the venue.

- 22. SRTEPC organized a B2B meeting cum exhibition (INTEXPO) in Yangon from 15 to 16 October 2014 at the Parkroyal Hotel, Yangon.
- 23. CII organized 3rd Enterprise India show in Mandalay in October 2014 where over 80 companies participated. CM of Mandalay inaugurated the event.
- 24. TEXPROCIL mounted a delegation to Myanmar from 9-12 December 2014 and held BSMs in Yangon and Mandalay. [30]

8.9.3. Comparison with China

While India has been helping Myanmar build institutional capacity and develop areas such as information technology, this often gets **overshadowed** by assistance from other countries – especially China, with cumulative foreign direct investment in Myanmar **reaching \$14 billion in June 2014**. Chinese trade with Myanmar was **\$6 billion in 2013**, while Indian-Myanmar trade was touching \$2 billion. Indian investment was more than \$270 million as of August 2013, yet it is nowhere near China's investment. Some of the major projects initiated by China includes:

- The Myitsone Dam
- Tarpein Hydroelectric Project
- Kyaukphyu-Kunming Oil Pipeline
- Letpadaungtaung Copper Mine
- The Tagaung Nickel Mine. [40]

The assistance granted by China tends to be **purely commercial in nature**, and the terms and conditions of its loans are much more stringent, while Indian assistance is **more liberal**. [40]

Internationally, the military takeover in Burma and the massive crackdown on pro-democratic forces in 1988 led to Western-led economic sanctions and blockade of loans and aid from international financial institutions. With the result that in early **1989 Myanmar's foreign currency reserves were reported to be down to \$9 million**. The junta had to resort to border trade with China as a lifeline for the Burmese economy. And Chinese assistance usually came in the form of grants, interest-free loans and debt relief. But contrary to popular beliefs that China has been "Myanmar people's most trusted friend," 'a friend in need,' Myanmar has been **highly cautious** and wary of China's overwhelming influence within its periphery. [2]

8.10. Demographics of Myanmar

8.10.1. Demographics of Myanmar

The following table shows that 35% population of Myanmar is young (15-34 age group) and 65% population is under working age group. Providing education, training and employment to this population is a major challenge in front of Myanmar government. There is a wide scope for capacity building and skill development.

Age Group	%		
0-14	29.01		

15-34	34.9
35-64	30.21
65-80+	5.87
Total	100

Table 8.1: Structure of the population of Myanmar as on 01.10.2012 [98]

In Myanmar 50.3% of the total population are women. Thus the women outnumber the men. [174]

8.10.2. Demographics of Mandalay

A 2007 estimate by the UN puts Mandalay's population at nearly 1 million. The city's population is projected to reach nearly 1.5 million by 2025. While Mandalay has traditionally been the bastion of Bamar (Burman) culture and populace, the massive influx of ethnic Chinese in the last 20 years has effectively pushed the Bamar out of the city center. The foreign-born Chinese can easily obtain Burmese citizenship cards on the black market. Ludu Daw Amar of Mandalay, the revered writer and journalist who died in April 2008, had said it felt like "an undeclared colony of Yunnan". Today, the percentage of Chinese, estimated at 40% to 50% of the city (with the Yunnanese forming an estimated 30% of Mandalay's population), is believed to nearly rival that of the Bamar. A sizable community of Burmese Indians also resides in Mandalay. Burmese is still the principal language of the city although Standard Chinese is increasingly heard in the city's commerce centers such as Chinatown and Zegyo Market. English is a distant third language, spoken only by the urban elite.

8.10.3. Education Sector: Dominated by Women

- In 2002 Myanmar had 4,725 researchers, about **85 per cent** of whom were women. [112]
- The country offers many other examples of female achievement. After democratization, businesses and organizations from around the world began offering scholarships to the country's college students. "Among the recipients chosen based on their performance, 80-90% are female," said an official at a Japanese bank providing scholarships. [173]
- With regard to education, the literacy rate of women is 73%. [174]
- With regard to women in the profession, women outnumber men in the field of education and nursing, while 50% of women are doctors. [174]
- Of the 5000 hopefuls who have applied to join the President's Scholarship program, which aims to create an elite cadre of civil service high-flyers by funding their education abroad, more than 4000 are women and only 866 are male. [175]

8.11. Higher Education at Myanmar

Aung San Suu Kyi, gave her appraisal of the junta's legacy of repression when she spoke, via video, at a British Council event on Burmese higher education held at the University of London earlier this year. "Our university system has been almost destroyed by half a century of military rule. Campus life ceased to exist several decades ago," she said... And now change is

in the air for the nation's higher education institutions. The **government has launched a comprehensive review** of the education sector that aims to produce a sector plan by 2014. [120]

In teaching, the **government wants to encourage foreign universities** to run programmes in Burma. Opportunities exist to develop joint and double degrees, but in the short term delivering certificate and diploma programmes may prove to be the best starting point for partnerships between UK and Burmese universities. "These are quick wins," U Zaw Htay, director general for higher education, told us. "We'd like to see these start tomorrow". **International branch campuses are also part of the government's plans**. A **privat**

e universities bill is planned, which will allow overseas institutions to establish joint or whollyowned campuses in Burma. The policy also has the support of the opposition NLD. [121] Meanwhile, a parallel review process is being led by parliamentarians and the NLD to develop and draft the **new higher education bill**. Although no overarching vision has yet been articulated,

- Firstly, freeing university leadership from the direct control of the government;
- Secondly, prioritizing resources to support the restoration of Yangon University as an international-standard research university; and
- Thirdly, enshrining academic freedom not just academics' and students' freedom of speech and freedom to publish, but also allowing university applicants to choose their own disciplines, instead of being assigned subjects according to high school grades. [121]

8.11.1. Overall Scenario

• Myanmar has 163 higher education universities.

three clear policies can already be identified:

- The Ministry of Education controls 66 universities and the remaining 97 universities fall under control of the 12 other ministries.
- Different disciplines are split between different universities, such as medical, technical, agricultural, educational, and economic schools. The universities are run by their corresponding ministry.
- For Science and Technology there are 61 Universities.
- Myanmar is divided into 24 development zones, and the Ministry of Education ensures that each of these zones has at least one Liberal Arts and Science University, one Technical University, and one Computer Science University.
- University entrance derives from students' tenth grade standard examination marks.
- By 2012, 4,892 doctorate candidates have received degrees from doctorate programs in Myanmar. Currently, 2,053 students are attending doctorate programs from eight different universities.
- Doctorate programs invite foreign professors for temporary teaching to increase educational quality.
- All of the universities are state funded.
- State spending on education is among the lowest in the world.
- Ranked as one of the lowest globally for universities.
- Universities in Myanmar remain highly centralized and state run. Student enrollment in university in 2014 was 550,000.

- Universities offer bachelor's degree programs, master's degree programs, and doctorate degree programs. The higher education system follows a 4-1-3 year program with 4 years for a bachelor degree, one year of qualifying classes, and 3 years for a master's degree.
- Higher education in Myanmar has experienced a large expansion since 1988 [10] [43]



Fig. 8.15: Participating Universities in IIE [10]

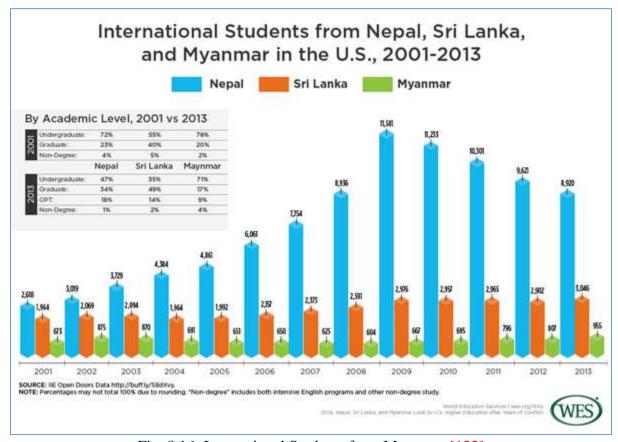


Fig. 8.16: International Students from Myanmar [122]

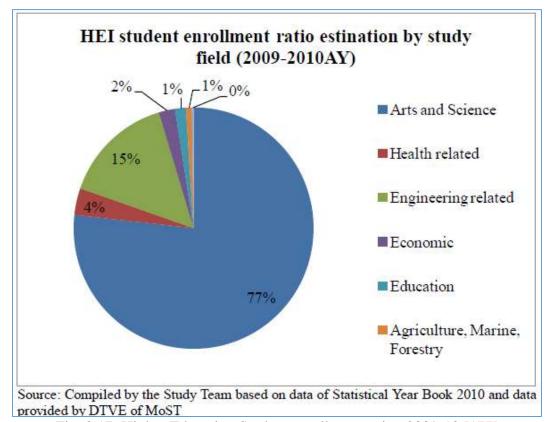


Fig. 8.17: Higher Education Student enrollment ration 2009-10 [177]

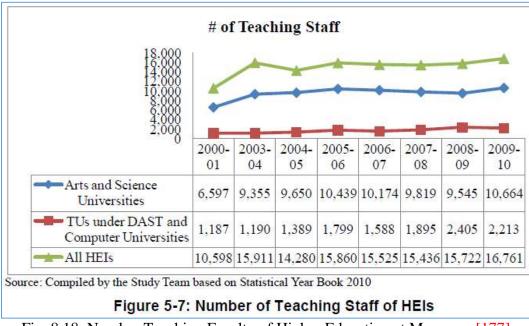


Fig. 8.18: Number Teaching Faculty of Higher Education at Myanmar [177]

	Master Bache		Buchelor		Diploma	i i	Tatal
	M.E.	B.E.	B. Tech Year 2	B. Tech Year 1	AGT I Year 2	AGTI Year 2	Total
Civil	578	2,275	4,150	4,604	8,946	9,266	29,819
Electronic	350	1,727	2,047	2,469	2,775	6,412	15,780
Electrical Power	274	1,801	1,801	1,935	3,320	7,647	16,778
Mechanical Power	253	2,695	2,308	2,740	3,461	9,249	20,706
Mining		49	32	33	32	261	407
IT (Information Technology)	170	847	515	408	655	2,017	4,612
Mechatronics	98	622	367	257	287	1,723	3,354
Chemical	34	208	70	123	69	478	982
Textile	3	46	27	10	46	240	372
Petroleum	10	79	99	67	117	341	713
Metallurgy	14	35	26	20	30	209	334
Bio-Tech	15		38	31	52	102	238
Nuclear Technology		11	17	7	8	71	114
Architecture	36	140	231	310	354	494	1,565
Total	1,835	10,535	11,728	13,014	20,152	38,510	95,774

Table. 8.2: Student enrollment BE/MTech [177]

8.11.2. Research at Myanmar

Research under HEIs has not been actively conducted. According to interviews as well as site observations at several HEIs, the Study Team presumes some of the reasons:

- 1. The lack of research experience because most Ph.D. holders have graduated from HEIs in Myanmar that have not provided enough research opportunities and experience;
- 2. The lack of a research environment, such as sufficient research funding, equipment, research societies and journals;
- 3. The lack of motivation of teaching staff for research because research achievements are not considered as an evaluation criterion. [177]

Table 5-8: Trend of Research/Current/Capital Expenditure of DHEU and DHEL of MoE

(Unit: Million Kyats)

Types	Financial Year of Expenditure	2005/06	2006/07	2007/08	2008/09	2009/10
Upper Myanmar	Research Expenditure	4.48	5.80	8.44	11.17	14.25
	Current Expenditure	1850.00	2420.00	8100.00	7970.00	8192.69
	Capital Expenditure	3486.55	3348.62	5534.56	3459.00	1898.27
Lower Myanmar	Research Expenditure	8.83	10.05	8.60	10.80	9.92
	Current Expenditure	3200.00	4150.00	11859.00	11311.60	12062.49
	Capital Expenditure	4937.82	4091.05	6656.19	7790.40	2900.65

Source: Presentation power point entitled "Some STI Statistics in Myanmar", Dr. Soe Win Director General, DHEU, MoE and Aung Than, Tutor, Department of Statistics, Meiktila Institute of Economics, MoE downloaded from www.uis.unesco.org/../STI-Myanmar.pptx

Table 8.3: Research expenditure of Myanmar (2010): 2900.65 Million Kyats (approximately Rs. 16 Crore) [177]

8.11.3. New Initiatives

- The National Education Law was passed by Parliament in July and signed by President Thein Sein on September 30, 2015. The bill would create a National Education Commission that would have control over the education system by mandating budgets and policies. Since the passing of the National Education Law, there have been student protesting in Yangon and Mandalay claiming that the bill further centralizes higher education. The students demand autonomy for universities. [10] [43]
- The core component of the initiative is the International Academic Partnership Program (IAPP), the flagship program for IIE's Center for International Partnerships in Higher Education. Since 2009, IAPP has assisted U.S. colleges and universities to develop a strategic plan for building mutually beneficial partnerships with counterparts abroad. In addition to Myanmar, the Center has worked with over 80 U.S. higher education institutions to engage with China, India, and Brazil, and is expanding to offer programs focusing on Vietnam and Cuba. Over the course of this year-long program, institutions participate in a number of partnership training activities, such as forming a campus task force, conducting an institution-wide inventory of activities pertaining to these countries, and developing a partnership strategy for the focus country. Each participating institution is also paired with an expert mentor who serves as a guide throughout the strategic planning process. A key component of IIE's Myanmar initiative was a U.S. higher education delegation to Myanmar from February 24 March 1, 2013, which, at the time of publication, is the largest delegation of U.S. universities to travel to Myanmar to date. [10] [43]
- In general, there is an interest in reform and greater international connections, driven in part by a desire to reclaim the historical high standing of Myanmar's educational system in the

region. A hunger for external information and technical support is evident everywhere and at all levels of institutional and civil society hierarchies. [10] [43]

Members of U.S. Higher Education Delegation Make Specific Commitments to Action

As immediate follow-up to the IIE delegation to Myanmar, members of the delegation announced concrete university-led initiatives which will benefit citizens, students and faculty from both countries. Announced at a press briefing at the U.S. Embassy in Rangoon, the commitments include:

- Four American universities are committing to form a consortium to assist university libraries in this country: Northern Illinois University, Rutgers University, University of Washington, and Arizona State University.
- Arizona State, Rutgers, and Northern Illinois Universities have all agreed to host librarians for up
 to a month in order to support the development of academic libraries in local universities.
- Northern Illinois University will fully fund four faculty members to travel to Myanmar to give lectures in the coming year.
- Samford University agrees to sponsor one technology specialist from their faculty to come to Myanmar Institute of Theology to help them upgrade their technological capacity.
- Ball State University will sponsor a political science faculty member to visit Myanmar and give lectures on political science topics.
- Hawaii Pacific University will sponsor up to five English teachers from each semester to come to their campus for short-term and semester-long programs.
- American University will provide two or more fellowships, funded by the Nippon Foundation, to students from Myanmar to complete an online Master's Degree in International Affairs focused on Comparative and International Disability Policy (CIDP) in the ASEAN region. Most of the work will be conducted over the internet, with a two-week residency in Bangkok this August. The degree takes two years and each fellowship is valued at \$60,000.
- Northern Arizona University will host one faculty member from the English Department of a local
 university for up to one month to introduce them to their university's intensive English language
 teaching program, curriculum design and to provide faculty mentorship.
- Rutgers University will support a short-term visit by a humanities professor from a local
 university. Rutgers will also financially support faculty members from its faculties of health,
 pharmacy, and environmental sciences to make short-term visits to give lectures at local
 universities
- Arizona State University will explore the establishment of a joint certificate in the study of religions with Myanmar universities.
- Two UMass Lowell professors will be providing training and lectures starting this summer at the Myanmar Institute of Theology.

Fig. 8.19: USA Delegation Comments [10]

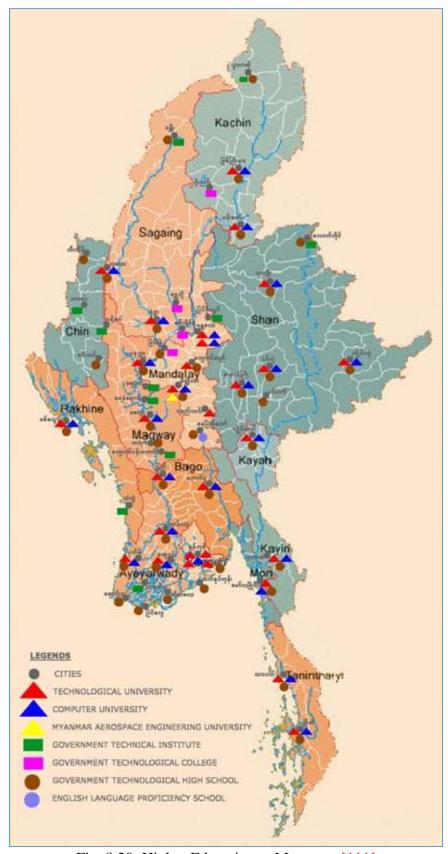


Fig. 8.20: Higher Education at Myanmar [111]

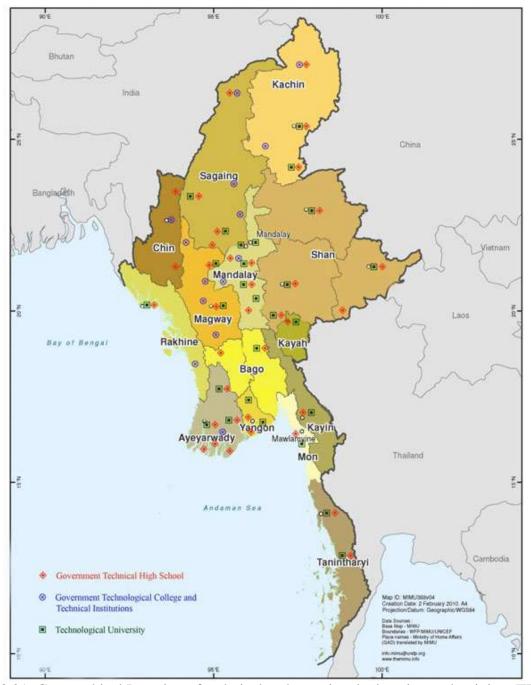


Fig. 8.21: Geographical Location of technical and vocational education and training (TVET) Institutions under DTVE [177]

8.11.4. Problems

 Closed down Universities for 5 Years: The 8888 Nationwide Popular Pro-Democracy Protests also known as the People Power Uprising was a series of marches, demonstrations, protests, and riots in Burma (Myanmar). Key events occurred on 8 August 1988, and therefore it is known as the 8888 Uprising. Due to the student protests in the 8888 uprising, the Myanmar government **closed down universities for two years**. Additional student protests in 1996 and 1998 caused **universities to be closed for another 3 years.** [10] [44]

- Teaching revolves around textbook instruction with little to no research focus. [10]
- After decades of relative isolation, the country has a **long way** to go to build the **framework to develop international ties**. This is an important priority for higher education in particular, but it is also important at many levels in government and civil society. [10]
- There is little to no infrastructure in place to support international academic partnerships. Beyond the challenges posed by an overly centralized educational system, most universities do not have independent administrative units to manage international exchanges or research. Foreign academics have had a difficult time gaining access to visiting appointments or research opportunities in Myanmar. Only the University of Foreign Languages has any foreign students, and only a small handful of foreign faculty have been able to spend any extensive time in country. [10]
- Students, faculty and universities themselves suffer from a **lack of autonomy** and choice. All decisions regarding a student's choice of field of study or university are derived from performance on the national achievement test, administered upon completion of secondary school and depending on geographic location. Similarly, as noted above, access to international fellowships and exchange opportunities have been strictly regulated from the central ministries. [10]
- There currently are no private universities. Myanmar Institute of Theology have been able to register with local authorities as "training schools". [10]
- Education is **valued highly** in Myanmar—in fact it is **on par with national security and national identity concerns**. As a consequence, the field may be **more resistant to outside influences**, and **efforts to change higher education could be taken as "threatening"**. Thus many universities were shut down or significantly diminished in size by limiting access only to graduate students (mostly at the MA level) during the military regime and are only gradually rebuilding now, with very small cohorts of undergraduate "honors" students. [10]
- There is some risk that education could potentially be a **lower priority area for reform** and investment than some other areas of activity. The lack of investment in some areas is evident in poorly maintained physical plants, the poor condition of libraries and laboratory facilities, and limited pedagogic innovation. Teaching in most classrooms is dominated by "call and response" styles, with very limited interaction between students and faculty. Few faculty have terminal degrees. [10]
- There have been little or no standards of accreditation or accountability. [10]
- The **absence of a strong base of human talent**, especially higher end scientific, engineering and managerial resources, is acknowledged to be one of the most important factors constraining Myanmar's economic growth and technological development now and well into the future. [10]
- As noted, there is a tremendous need for upgrading the quality of faculty inside Myanmar's universities. Many existing faculty do not have post-graduate degrees. [10]
- Like the physical infrastructure, most of the curriculum being offered inside Myanmar's universities is seriously outdated. Faculty lack access to the newest books and journals with which to educate themselves, as well as to update their teaching materials. [10]
- The poor state of the internet and the country's overall IT and telecommunications infrastructure in Myanmar is not only a constraint on the country's economy, but also has a

persistent negative effect on the efforts to modernize Myanmar's universities and enhance the learning experience of students across the entire spectrum of the education system. [10]

• Since 1962 research publication has been subject to government regulation. [176]

The state of Myanmar's higher education system was captured succinctly in a recent background paper by the U.S. Agency for International Development that was issued in November 2012:

"While higher education structures and systems are in place, the state of higher education in Myanmar is dire. Decades of Military rule and chronic deficiency of investment in higher education have left the country with insufficient human and institutional capacity to provide quality and relevant higher education services to its citizens and communities. Additionally, the higher education system is burdened by a cumbersome administrative structure, high costs of higher education administration, and inadequate teaching capacity. These are some of the challenges calling for a systematic investment and reform of the higher education system in Myanmar."²

The talent problem on the output side, however, owes its existence to a range of serious deficiencies inside the university sector—foremost among them is the sad state of faculty resources in terms of both teaching and research; a similar gap exists in terms of support staff as well. As one senior administrator commented, "there are chemistry faculty who have not conducted an experiment with proper laboratory facilities and mechanical engineering professors who have yet to handle hands-on equipment."

Fig. 8.22: Problems of Myanmar Higher Education system [10]

The education system has deteriorated to such an extent that it will surely hurt the country's development, adds a Myanmar scientist, Nyi Win Hman. "The end result is that graduates are just people who hold a piece of paper, without really having any useful skills that can be applied in the real world," he wrote in a commentary in the Myanmar Times in August 2012...The little information that is publicly available about science in Myanmar paints a bleak picture. For example, a 2007 study by Agricultural Science and Technology Indicators (ASTI), an Italian research institute, found that in 2003 only 18 per cent of researchers had postgraduate training, among the lowest in Asia. [112]

8.12. Mandalay-Innovation Cluster

The Government of India has established the MIIT at Mandalay, which is centrally located in Myanmar. Let's study the parameters of Innovation Cluster of Myanmar (specially Mandalay).

8.13. Facilities

8.13.1. Digital Connectivity

8.13.1.1. Mobile Penetration

When Myanmar was under military rule, the telecom market was controlled by state-run Myanma Posts and Telecommunications, or MPT. **Only military officials and other privileged individuals were allowed to own cellphones**. MPT's dominance **ended in 2014**, with the entry of two foreign companies: Ooredoo of Qatar and Telenor of Norway. [27]

- MPT has a good coverage throughout Myanmar, providing a wide range of GSM, CDMA, land phone and many services. A lot of people are still using MPT services because its coverage.
 [47]
- Ooredoo and Telenor have lunched services in 2013 and coverage is available in city areas and tourist attraction sites mainly. [47]

8.13.1.2. Internet Penetration

Myanmar has a very low Internet penetration rate **due to both government restrictions on pricing and deliberate lack of facilities and infrastructure**. According to World Internet Stats statistics as of **June 2012**, the country had over 534,930 Internet users (**1.0% of the population, but 9% in 2015**) with the vast majority of the users hailing from the two largest cities, Yangon and Mandalay. Although 42 cities across the country have access to the Internet, the number of users outside Yangon and Mandalay is just over 10,000. In 2015 it reaches from 0.54 Million to 5.5 Million i.e. more than 9% of the total population. In 2012 almost all of the previously blocked websites of opposition political parties, critical political content, and independent news sites were accessible, with only 5 of 541 tested URLs categorized as political content blocked. [27]

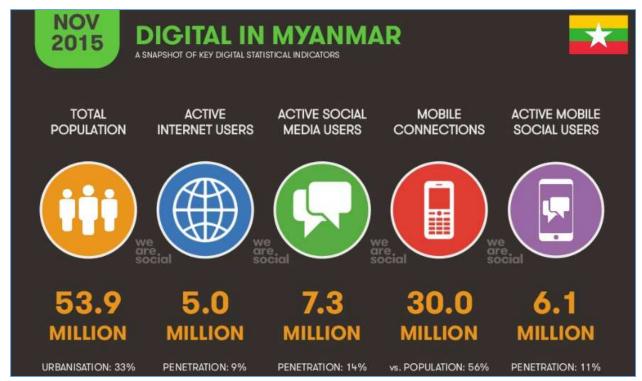


Fig. 8.22: Digital in Myanmar Nov 2015 [28]

Internet availability is spreading fast but connections are often slow and many sites are inaccessible. Accessing internet on the smartphone is more popular locally. Internet cafes exist in Yangon, Mandalay and Bagan, but are getting rarer. Rates are around MYK300/h in Yangon and MYK1000-3000/h elsewhere. Some hotels, allow free access to the internet through Wi-Fi (generally limited to common areas like the hotel lobby). Many of the hotels catering to tourists now have free unrestricted Wi-Fi available. In the past, a lot of websites used to be blocked, but this is no longer the case. Today, the vast majority of the Internet is accessible from within the country. [47]

8.13.1.3. ATM Banking

There are now over 600 ATMS that accept international bank and credit cards located throughout the country – although bear in mind that most are concentrated in Yangon, Mandalay, Nay Pyi Taw, Bagan and Inle Lake. Cardholders can also withdraw local currency from ATMs and use their cards at a growing number of major outlets such as hotels, restaurants, and retailers. Currently only Visa, MasterCard (Maestro/Cirrus), China's Union Pay and Japan's JCB can be used; the biggest providers of compatible ATMs are CB (Co-operative) Bank and KBZ (Kanbawza) Bank. Others include AGD Bank, AYA Bank and United Amara Bank. [45] The problems are:

- However, be aware, we have bad experience with ATM's both in Yangon and in Bagan, at least using Dutch Debit Cards (which we use all over the world to withdraw cash from ATM's). [46]
- First of all, a lot of the ATM's are (temporarily) out of order. Secondly, we only managed to withdraw cash using our Rabobank Debit Card, but never succeeded using our ING-Bank debit card. [46]

- We could only withdraw cash using the ATM of CB-Bank. Never at the ATM's of other banks (KBZ or others). [46]
- The worst is that CB-Bank limits the amount of withdrawal to Kyat 20,000 per time. A fee of Kyat 5,000 is applicable for each withdrawal, i.e. you pay Kyat 25K to get Kyat 20K (an outrageous 20% fee!!). [46]
- Moreover, the rate of exchange was really bad. All in all, including the fee's and the costs charged by Rabobank, the average rate is about Kyat 950 per Euro instead of the nominal rate of about Kyat 1320 per Euro. So a difference (loss) of more than 30%. [46]
 - Unlike most of the developing world, in Myanmar, there are ATMs in nearly every big town, especially in all the major tourist areas. However, due to common power outages and the poor (but improving) civil banking system, ATMs are not as reliable as they are elsewhere. [47]
 - ATMs are generally functional and take Visa/MasterCard as well as debit cards with the Plus logo, but there are reports of troubles with ATM cards from some foreign banks. Travelers are advised to carry some cash in pristine US dollars (soiled notes are not accepted in most shops) as a precaution. There is usually an ATM fee of MMK 5000 (USD 5) associated with the transaction with maximum withdrawal amount being MMK 300,000.
 [47]

8.13.2. Connectivity: Road, Rail, Air, River and Sea

It is connected to the world but the facilities are at moderate level.

8.13.2.1. Road

- The poor road infrastructure, and a mixture of extremely ancient vehicles on the country's roads are all what best describe the road conditions. However, driving habits are not very aggressive. [47]
- Surprisingly, Burma has a mixture of both right-hand and left-hand drive vehicles, with the majority being right-hand drive but driving is generally done on the right side of the roads.

 [47]
- The Myanmar roads have improved, but it still takes long time to travel, and the railways are in a very bad shape. [47]

8.13.2.2. Flight

- There are also privately owned airlines serving the main domestic routes in Myanmar. They are:
 - o Air Bagan (W9) has e-ticketing
 - O Asian Wings has e-ticketing
 - o Air Mandalay (6T)
 - o Mann Yadanapron Airlines has e-ticketing
 - Golden Myanmar Airways (good rates between Yangon and Mandalay on Boeing jets)
 has e-ticketing
 - Yangon Airways (YH)

- o Air KBZ has e-ticketing [47]
- Booking domestic air travel requires patience there seem to be no single site aggregating those airlines, so for each route you'd need a search on each airline website to know the schedule and ticket prices. [47]
- Most domestic airlines fly small planes, typically ATR-72

8.13.2.3. Railway

- Myanmar has an extensive but ancient rail network. Trains are slow, noisy, often delayed, have frequent electrical blackouts, and toilets are in abysmal sanitary condition; many are simply holes in the floor that empty out directly onto the ground beneath the train. Few even have toilet seats. Never assume that air-conditioners, fans, or the electrical supply itself will be operational, even if the train authorities promise so. [47]
- Except for the new bridge and rail line that connects Mawlymaing to points on the western side of the Salween River, the rail network is exactly the way it was in British times.
- The **fastest trains** take 15 hours for the 385km run, an effective rate of **25km/hour**. The quality of the railway infrastructure is generally poor. Most remains in poor repair, and is not passable during the monsoon season. The speeds of freight trains are heavily restricted on all existing links as a consequence of poor track and bridge conditions. The maximum speed for freight trains has been quoted as 24 km/h (15 mph), **suggesting that commercial speeds on this section could be as low as 12–14 km/h** (7.5–8.7 mph). [126]
- The 5,403-kilometre (3,357 mi) meter gauge rail network consists of 858 stations. [126]
- Don't expect to sleep well in a train, the railroad is in a rather bad shape, and mostly resembles driving on a gravel road. Even sitting is not very comfortable. Don't expect anything close even to India, not to mention developed countries. Some overnight trains make a 4-5 hour stop so the people can sleep (in a train). Paying extra for a sleeper is generally not worth it; the constant bounces and sways of the train have been known to thrash passengers against headboards and walls. It is generally more comfortable to simply reserve a seat. [47]
- By far, the most common issue that tourists have with Myanmar's trains is the constant rocking and shaking. Though the British tracks aren't wide enough to comfortably support the train cars, which have exceptionally high centers of gravity, the bouncing, swaying, and other sudden and drastic movements that the cars make as they rumble along the tracks are not indicative of an unsafe train. As in most developing countries, the railway system is not up to European or American standards, but, while the cars' motions may make the journey seem exceptionally dangerous (swaying back and forth while crossing a river has scared many Westerners), rail travel is a perfectly viable way to see the country. Few tourists have ever been injured in railway accidents. Far more have lost their lives in derailments in Thailand or other comparable countries (but far more take the train there too). [47]

8.13.2.4. Bus Services

Buses of all types, from small to big, atrocious to luxurious, run the roads of Myanmar. Since
the ban on importing vehicles was lifted in 2012, the quality of coach transport has improved
drastically. High quality Swedish Scania coaches regularly run the Mandalay-Yangon route
while lesser vehicles can get travelers to other places. Burmese movies and music is almost
always played all night throughout the journey, so bring ear plugs if you want to get sound

sleep. Economy seats in Scania coaches are adequately comfortable, but ask for upper class for even better seats. [47]

8.13.3. Health Services

The general state of health care in Myanmar is poor. The military government spends anywhere from 0.5% to 3% of the country's GDP on health care, consistently ranking among the lowest in the world. [29]

- Myanmar's public health-care system is poorly funded, and the quality of medical education is still abysmal, as is the case with all types of academic education in Myanmar. As a result, most doctors and medical staff are poorly trained, and quality medical equipment is scarce. [47]
- Local pharmacies and supermarkets are plentiful, stocking all sorts of Western medicines, and there is no concept of a prescription. [47]
- With the opening of the country there is now a number of private hospitals built in the major cities, which reportedly provide good medical care. Public medicine, however, remains poor. [47]
- During the past three years, the Myanmar government has tripled healthcare expenditures.
 Spending by consumers will also rise in line with the country's growing economy. The pharma industry was starved during the country's long closure under a military regime, but newly liberalized economic policies have provided room for foreign investors as well as local companies to build their business. [127]

8.13.4. Postal Facilities

Parcels, letters, and postcards tend to reach international or domestic destinations quite quickly and reliably compared to countries such as Bangladesh, Cambodia, or Laos. [47]

8.13.5. Media (TV, Radio, Newspapers, Magazine)

Burma has three free of charge, **state-owned newspapers** that are distributed on a daily basis. From 1965 to 2012, Burma did not have freedom of press and all newspapers were government owned...The 1962 Printing and Registration Act remains in effect, mandating a **seven-year prison** term for publishing without a license...On 1 April 2013, the first date newspapers could be published freely, **four privately owned dailies** – The Voice Daily, Golden Fresh Land, The Standard Time Daily, and The Union Daily – hit news-stands. [28] [64]

Satellite television is no longer illegal and satellite dishes can be seen on many buildings. Local operator Sky Net provides more than 70 channels of local and international origin. [64]

The print, broadcast and online media of Burma (also known as Myanmar) has **undergone strict censorship and regulation since the 1962** Burmese coup d'état. The constitution provides for freedom of speech and the press; however, the government prohibits the exercise of these rights in practice. Burma announced on 20 August 2012, that it will stop censoring media before publication. Newspapers and other outlets would no longer have to be approved by state censors, **but journalists in the country could still face consequences for what they write and say**. [64]

After several years of reforms and improvements, conditions for the media in Myanmar grew worse overall during 2014. Two controversial media laws were passed, and others made their way through the parliament, even as a number of harsh laws dating to the era of military rule remained on the books. While the media sector continued to be vibrant, independent outlets struggled for financial sustainability, and journalists faced increased pressure in the form of criminal prosecutions, travel restrictions, and physical violence. [65]

8.13.6. Energy Sector

Currently, more than a quarter of Myanmar's people live below the poverty line, and **over 70 percent of the people do not have access to electricity**. In rural areas, where the majority of the poor live, only 16 percent of households have access to grid-based electricity. [101]

There is no national grid and 70% of what power there is, comes from **hydroelectric dams**. A few months into the **dry season, capacity drops sharply**, resulting in **frequent and long-lasting power cuts**. Per capita power consumption is only one-sixth of that in Indonesia, and one-20th of Thailand's. [102]

Of 396 cities in Myanmar, 224 cities, or 57pc, have access to electricity. Of the country's 60,000 villages, less than 20,000 – or **one-third** – **have electricity**. In total, according to the Ministry of Electric Power, only around **26pc of the population of Myanmar have access to electricity**. [103]

Electricity is still a luxury for many parts of Myanmar, which is burdened by an inadequate and decaying electrical grid among other power supply problems. In 2014, The Yangon Electricity Services Board (YESB) was sometimes supplying factories with only 18 hours of electricity a day in the hottest months of the year, said the Myanmar Times. Myat Thin Aung, the chair of the Management Committee for Hlaing Tharyar Industrial Estate at Yangon's largest industrial zone in Hlaing Tharyar Township, said, "...the amount of electricity provided for Yangon's industries was sometimes zero." Last May, around 100 seafood factories were forced to shut down for two weeks because they could not access the electricity they needed to keep products frozen. Hundreds of tons of food were left to spoil as a result. [104]

The expected "gold rush" to capture economic opportunities in Myanmar has not necessarily materialized in the way Myanmar watchers expected. Senior government officials acknowledge that there remain numerous challenges to fostering an investor-friendly business climate, including improvement in regulatory and legal frameworks, human resources and financial capacity, and infrastructure. Foreign investment has been slow, but is still significant. Foreign direct investment (FDI) totaled US\$3.6 billion from April to September last year (2014) nearly as much as the entire previous fiscal year. The bulk of the investment has been in labor-intensive industries such as manufacturing, construction, and tourism, as well as a growing platform in the telecommunications and financial services sectors. FDI will almost certainly increase this year and next, particularly as major announcements related to oil and gas tenders, solar power projects, and other energy sector investments signal a new influx of business engagement. [100]

The ADB conducted an initial assessment of Myanmar's energy sector in 2012; this was the first recent effort to ascertain the scope and scale of the sector and begin to collect hard data. The assessment confirmed the state of energy usage and of the industry in the country: Myanmar's current per capita electricity consumption was-and continues to be-amongst the lowest in Asia. Energy typically is supplied by biomass, such as fuelwood, charcoal, agricultural residue, and animal waste, and estimated electrification rates were at 67% of households in Yangon and 16% in rural areas. The current installed capacity of electricity remains at 3495 megawatts (MW), generated from 20 plants: 19 hydropower plants which generate 2660 MW of installed capacity (76% of Myanmar's power), and 11 gas and steam plants that provide 835 MW. Energy-related infrastructure, through years of neglect and lack of financing, was found to be dilapidated and needing enormous work. The ADB concluded in part that Myanmar "lacks the capital needed to develop the sector" and that it was "essential that strong, enforceable environmental and social safeguards be firmly in place." [100]

The government has since made power generation a priority, and is open to foreign investors who can help rebuild the sector. The Myanmar National Electrification Plan aims to achieve 100% electrification by 2030. According to the Ministry of Electric Power (MOEP), full electrification would require that more than 7.2 million households be connected over the next 16 years. Myanmar is working on 17 new power plant projects that are due for completion by 2016, 10 others were completed between 2013 and 2014, and there are plans to construct another 87 power plants that can supply 54,608 MW of installed capacity. President Thein Sein in his monthly radio address, in January stated, "As of 2014, we have managed to provide electricity to 243 townships out of the 398 townships from the national power grid and the remaining 155 townships by other alternative ways... Needless to say, regular supply of electric power is an essential component in developing a country's economy. Furthermore, electricity is also a crucial infrastructural need for education and healthcare sectors. As such, we have tried to the best of our ability to improve the performance of the electricity sector." [100]

8.13.7. Stock Exchange

Former pariah state Myanmar will launch its first stock exchange on Wednesday (9 Dec 2015), marking the next stage in the rehabilitation of a country basking in the glow of strong foreign inflows and a new pro-business regime. Reportedly a \$24 million investment, the **Yangon Stock Exchange (YSX)** was founded by the **state-owned Myanmar Economic Bank, Daiwa Securities and Japan Exchange Group**, a company that operates the Tokyo Stock Exchange. [125]

"The opening of the YSX is not going to be a giant leap forward, it's **just a small step in the right direction**," remarked Adam Jarczyk, Asia Pacific practice leader at strategy consulting firm Frontier Strategy Group. For stocks markets to play a role in the economy, **rules and regulations need to be put into place**, he explained. "Several areas in Myanmar still remain nebulous; there aren't any rules on disclosures, shareholder voting or annual general meetings (AGMs)". Furthermore, **initial public offering (IPO) requirements seem stringent** for a market that has suffered years of dictatorship. [125]

Since the Yangon Stock Exchange will likely only draw a **handful of companies** at the start, there are concerns that it could suffer the same fate of its neighbors. After launching in 2011, the

Cambodian Stock Exchange (CSX) only has two listed companies to date while the Laos Securities Exchange (LSX) has a total of four listings. Both markets remain largely off the radar for investors due to their lack of liquidity. Vietnam's Ho Chi Minh Stock Exchange remains the region's most robust frontier bourse with over 300 stocks and a combined market capitalization of \$19.2 billion since launching in 2000. Their expects the YSX to catch up with Vietnam's within three years but experts say that's too ambitious. [125]

8.13.8. Banking and Insurance Sector

Myanmar is in the process of rewriting regulations for its financial services sector.

- The Banking crisis that began in late 2002 and lasted through 2003 left a lasting impact on Myanmar's economy. The crisis in Myanmar's banking sector led to the closure of three banks: AWB, Mayflower, and Myanmar Universal Bank. This marked the start of a decade of credit crunch for Myanmar, making it predominantly a cash-based economy. [105]
- In a January 2013 report, the International Finance Corporation (IFC) estimated that **less than 20% of the population has access to financial services**, with **only 5% of the population using formal banking services**. Most people use informal ways to save (e.g. gold), to borrow (e.g. friends and money lenders) and to transfer money (traditional agents). A couple of state owned banks, such as Myanmar Agriculture Development Bank and the Myanmar Economic Bank are engaged in financial inclusion, but commercial banks focus on the upper segment of the market. [105] [146]
- The banks are not only limited in their reach, but also the availability of banking credit. But it is not because of a lack of a profitable spread. While there is a cap of 13% per annum on lending rates, average deposit rates are very close to the stipulated minimum of 8%. The difficulty in obtaining credit is due to the miniscule deposit base and conservative lending approach. [105]

8.13.9. Insurance Sector

- Myanmar private insurance market taking baby steps. Most of Myanmar's population of around 60 million are uninsured, making it one of the least developed insurance markets in the world. [105]
- In May 2013, 12 local firms were approved to begin providing insurance services. Four are general insurance firms and eight are life insurance firms. [105]

8.14. Funding

"The scientific base is zero at the moment," says U Aung Myint, a former professor in the department of marine science at Mawlamyine University in central Myanmar. "People who are doing academic research have no funds at all, and the quality of research cannot be good," he told SciDev.Net in Yangon, Myanmar's former capital. Salaries for researchers remain low while research facilities are poor or non-existent, scientists here say, and centralised management has led to an inward-facing research culture that discourages innovation. [112]

Not much information is available on Internet on following issues:

- Venture Capital (VC) Fund
- Foreign Direct Investment (FDI) specially for education sector

8.15. R&D Labs, SEZ, Parks

No information is available on following topics:

- Government R&D Labs
- Industrial R&D Labs
- Multinational Companies' (MNC) R&D Labs
- Non-Government Organization's (NGO) R&D Labs

8.15.1. Special Economic Zone (SEZ)

Myanmar soon began to further facilitate the establishment of special economic zones (SEZs). In 2011, Myanmar established the Central Body for the Myanmar Special Economic Zone, a regulatory body responsible for overseeing foreign investment in the country. The Myanmar SEZ Law and the Dawei SEZ Law were also passed in 2011, which established several SEZs throughout Myanmar to encourage economic growth and foreign investment. There are currently three SEZs under development in Myanmar:

- Dawei SEZ
- Thilawa SEZ
- Kyuakpyu SEZ [106]





Fig. 8.23: All SEZ Projects are nearer to Yangon and far away from Mandalay [107-108]

8.15.2. Technology and Software Parks and IT Sector

Myanmar ICT Development Corporation Limited (MICTDC) is a key player in ICT development in Myanmar. MICTDC takes a very significant role for government and private collaboration. MICTDC is a consortium of 50 private companies established in 2001 in order to promote ICT development in Myanmar. Myanmar ICT Development Corporation Limited (MICTDC) established the **first ICT Park in Yangon in 2002**. Yangon ICT Park provides broad band connectivity, reliable power, nature ICT Human resources, promotion of ICT business local and global level and incubation for the new start-up ICT entrepreneurs. [109]

"The tech market here has been **small**," said Tun Thura Thet CEO of Myanmar Information Technology (MIT), whose company employs **300 people** but is considered large by local standards. **Only about 10 local software firms operate in the country**, he estimated. [110]

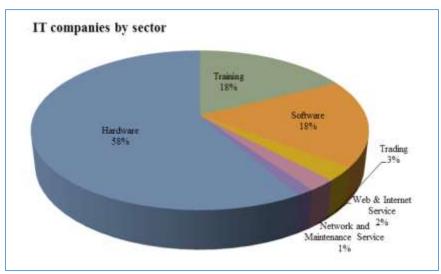


Fig. 8.24: Myanmar – IT Companies by sector [111]

The Myanmar ICT market is still largely **dominated by hardware companies**, due to the relatively **low usage of ICT in business and industry**. The software market in Myanmar is still largely **underdeveloped**, with relatively **few companies operating in this space**.

- At the moment, the finance sector seems to be an early adopter of technology, with banks installing increasingly secure and progressive systems.
- Within the trading and tourism sectors, IT usage is limited to the larger players such as major airlines and foreign-owned hotels which offer online booking systems, and big supermarket chains using inventory management solutions.
- However, most of the largest sectors in the country- such as agriculture, manufacturing, education, and health- employ very little software solutions if at all. Nevertheless, the demand for sophisticated applications is expected to spike as the country's various industries grow and require more developed solutions, be it custom-made applications or licensed comprehensive systems. [111]

8.16. Manufacturing Sector, Market Research & Conditions

The Industrial sector of Myanmar is in developing stage. Need to include the detailed information on following topics, which is beyond the scope of this book.

- Manufacturing Sector
- Market Research
- Marketing Conditions
- Supply Chain
- Sales

8.17. Overall Status of Myanmar

The SWOT analysis of Myanmar is as follows.

Myanmar: Strengths, Constraints, Opportunities and Risks

STRENGTHS

- Strong commitment to reform
- Large youthful population, providing a low-cost labour force attractive to foreign investment
- Rich supply of natural resources land, water, gas, minerals
- Abundant agricultural resources to be exploited for productivity improvement
- Tourism potential

CONSTRAINTS

- Weak macroeconomic management and lack of experience with market mechanisms
- Underdeveloped financial sector
- Inadequate infrastructure, particularly in transport, electricity access, and telecommunications
- Low education and health achievement
- Limited economic diversification

OPPORTUNITIES

- Strategic location
- Potential of renewable energy
- Potential for investment in a range of sectors

RISKS

- Risks from economic reform and liberalisation
- Risks from climate change
- Pollution from economic activities
- Tension from internal ethnic conflicts

Fig. 8.25: SWOT Analysis of Myanmar [21]

The following table shows the overall status of Myanmar.

SN	Parameters of National Ecosystem	Grade		
1.	Relationship of Home and Host Country			
2.	Geographical Location of Host Country			
3.	Internal Problems of Host Country			
4.	Climatic conditions of Host Country	A		
5.	Law and Order situation and Crime rates of Host Country	A		
6.	Customs, Traditions, Language Spoken, Cost of Leaving, Culture of Host Country	В		
7.	Foreign Relationship and Influence of other nations on Host Country	В		
8.	Economical status of Host Country	C		
9.	Regulatory Mechanism	В		
10.	Science & Technology Policy	В		
11	Industrial Policy	В		
12	Laws	В		
13	Tax Incentives and Policies	В		
14	Intellectual Property Right (IPR) Policy	C		
15	Trade Law	В		
16	Foreign Investment Policy	A		
17	Role of Home Country in economic developments of Host Country	В		
18	Demographics	A		
19	Status of Higher Education System of Host Country	C		
20	Digital Connectivity	В		
21	Transport	C		
22	Health Services	C		
23	Postal Services	В		
24	Media	C		
25	Energy Sector	C		

26	Stock Exchange	С	
27	Bank Funding		
28	Wenture Capital (VC) Fund		
29	Foreign Direct Investment (FDI)	В	
30	Government R&D Labs	C	
31	Industrial R&D Labs	C	
32	Multinational Companies' (MNC) R&D Labs		
33	Non-Government Organization's (NGO) R&D Labs	C	
34	Special Economic Zone (SEZ)	В	
35	Technology and Software Parks	C	
36	Manufacturing Sector	C	
37	Market Research	C	
38	8 Marketing Conditions		
39	9 Supply Chain		
40) Sales		
41	Human and Other Resources	C	

Table 8.4: Overall scenario of the Host Country "Myanmar"

With the help of all the three analysis, the Business Plan can be developed for specific region of Myanmar. Actual development of Business Plan needs minute details about many factors. Thus I have not included case study for Business Plan in this book. In next chapter, I would like to identify the Challenges with the help of the three analysis.

Chapter 9. Case Study: Use of Three Analysis to Identify the Challenges for Establishing IIIT University at Myanmar

9.1. Identify Challenges on the Basis of Status of National Ecosystem for Myanmar

The "C Grade" parameters of National Ecosystem for Myanmar are listed in the following table (modified version of table 6.4 of previous chapter) along with corresponding probable challenges.

SN	Parameters of National Ecosystem	Grade	Challenges
8.	Economical status of Host Country	C	Government funding will be difficult
			Difficult to get funding from industry
			Government may give less priority to higher
			education
14	Intellectual Property Right (IPR)	C	Without IPR culture it is difficult grow Incubation
	Policy		Center's activities
			Less Patent revenue
21	Transport	C	Without these basic facilities it is difficult to grow
22	Health Services	C	Difficult to attract global talent
24	Media	C	Poor transport facility can hamper all the
25	Energy Sector	C	collaborative activities.
			Without good Health facility, nobody can attract
			global talent.
			Media plays vital role for creating brand name. If it
			is not in a proper shape, then it can create lot of
			hurdles for publicity drive.
			Undeveloped Energy sector can hamper all external
27	7 . 7 .:	~	the academic activities.
27	Bank Funding	C	Poor talented students may not get educational loan
20	V	C .	facility
28	Venture Capital (VC) Fund Government R&D Labs	C C	Progress of Incubation Center will be affected Progress of Incubation Center will be affected Progress of Incubation Center will be affected
30	Industrial R&D Labs	C	Difficult get support from industry to develop self-
32	Multinational Companies' (MNC)	C	sustainable institute
32	R&D Labs (MNC)	C	Less industrial exposure to student and staff Piccontact Allichies to staff Piccontact Allichies to student and staff Piccontact Allichies to staff Piccontact Allichi
33	Non-Government Organization's	С	Difficult to establish industry supported Research Crowns which is a healthern of IUT.
33	(NGO) R&D Labs	C	Groups, which is a backbone of IIIT
35	Technology and Software Parks	С	
36	Manufacturing Sector	C	
37	Market Research	C	1
38	Marketing Conditions	C	
39	Supply Chain	C	
40	Sales	C	
26	Stock Exchange	C	
41	Human and Other Resources	C	It can hamper overall performance of IIIT
19	Status of Higher Education System of	C	Then it will be difficult to get good local faculty.
	Host Country		The IIIT will be solely dependent up on foreign
			faculty. The project operational cost will be
			increased.
	Table 0.1: "C Cuada" nana		Difficult to provide state of art support services Distinguish Francisco Franc

Table 9.1: "C Grade" parameters of National Ecosystem for Myanmar

9.2. Identify Challenges on the Basis of Requirements of IIIT Model

I have already explained the generalized model of IIIT in my book "Secrets of Success of IIIT Model - Can Rejuvenate & Ignite Engineering Education in India". The same Model of IIIT is extended to MIIT by IIIT-B. The overall scenario of Host Country can affect the demand of IIIT Model. For establishing MIIT at Mandalay (Myanmar), I have shown the difficulty levels in the following table.

1. Self-Sustainable Industry Supported IIIT Research University 2. Must be located in Metros or in the middle of IT Industry Hub 3. 40% Income Generation through industry oriented Research & Technology Transfer 4. Government provides only Land and Buildings either directly or through PPP model 5. Intensive Search for internationally renowned faculty by conducting interviews at USA 6. 40% to 75% faculty with PhD from World Renowned Universities & remaining from IIT / High IISc 7. Industry supported Research Centers, Labs, Chair Professors, Scholarships & Research Grants 8. During Internship, opportunity to do research and project work at many foreign universities Modera 9. Controlled by BOG, which consists of renowned persons from academics and IT industry Low 10. Not having departments, organizing structure around Research Groups / Centers / Labs High 11. Involving industry as partner, involving them in curriculum design and teaching too High 12. Building strong international linkage through internationally qualified faculty High 13. More weightage to coding and problem solving. Establish "Coding Culture" Low	Difficulty
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13. More weightage to coding and problem solving. Establish "Coding Culture" Low	High
	High
14. US University style salary structure and service conditions	Low
	High
15. International Curriculum with high degree of flexibility Low	Low
16. Nurturing Innovative Minds through Innovation Culture Low	Low
17. Business Innovations through Incubation Center Low	Low
18. Strictly merit based admission process Low	Low
19. Fruitful international collaborations Low	Low
20, Active Alumni involvement Modera	Moderate
21. Visionary Vice Chancellor Modera	Moderate

Table 9.2: Challenges for establishing IIIT as per requirement of IIIT Model

From above table, the parameters with "High Difficulty Level" are listed in the following table along with corresponding probable challenges.

SN	Requirement of IIIT Model	Difficulty	Challenges
		Level	
1.	Self-Sustainable Industry Supported	High	• It's a major challenge. If financial model gets
	IIIT Research University		affected then it can change entire scenario of the
			institute.
2.	Must be located in Metros or in the	High	• The IIIT Myanmar is not located insight
	middle of IT Industry Hub		Innovation cluster (like Metro Cities or Industrial
			Hub in India). Thus it is difficult to achieve the
			growth like IIIT-D, IIIT-B or IIIT-H
3.	40% Income Generation through	High	Hamper financial status of IIIT. Need to find out
	industry oriented Research &		other sources of income generation.
	Technology Transfer		

5.	Government provides only Land and Buildings either directly or through PPP model Intensive Search for internationally renowned faculty by conducting	High (after 5 years) High	If Industry is unable to support IIIT then institute need support from government for longer duration. It will affect the performance of IIIT.
6.	interviews at USA 40% to 75% faculty with PhD from World Renowned Universities & remaining from IIT / IISc	High	
7.	Industry supported Research Centers, Labs, Chair Professors, Scholarships & Research Grants	High	IIIT will be over dependent up on government funding, student's fees and other source of income.
11.	Involving industry as partner, involving them in curriculum design and teaching too	High	
10.	Not having departments, organizing structure around Research Groups / Centers / Labs	High	It is most important requirement of IIIT. It can't be compromised.
12.	Building strong international linkage through internationally qualified faculty	High	Need to exert more to achieve this goal.
14.	US University style salary structure and service conditions	High	The IIIT is a Research University and thus it is most important factor for growth of IIIT.

Table 9.3: IIIT Model parameters with "High Difficulty Level"

9.3. Status of National Ecosystem: Identify Implications on Various Aspects of University

Once you know the status of National Ecosystem, it is easy to identify its implications on various aspects of the new IIIT University like:

- 1. Constraints for Financial model
- 2. Effect on Project Cost
- 3. Support from Home and Host Countries
- 4. Effect on Organizing structure
- 5. Faculty Recruitment pattern
- 6. Problems for establishing culture of innovation
- 7. Academic freedom
- 8. Collaborative framework
- 9. Restrictions from regulatory mechanism
- 10. International laws
- 11. Political interference etc.

9.4. Combined List of Challenges

Once we know the status of National Ecosystem of Myanmar, it is easy to identify its implications with respect to various aspects of the new IIIT University. Considering the present status of Myanmar and the expectations of IIIT Model, the challenges of MIIT are as follows:

9.4.1. Constraints on Financial Model

The poor Industrialization and weak Economic Status of Host Country are major constraints for financial model of IIIT. That is, sufficient industry and government funding may not be available.

9.4.2. Effect on Project Cost

Weak Energy Sector, Banking Sector, Industrial Sector can increase the project cost substantially.

9.4.3. Support from Home and Host Countries

Poor Economic Status of the Host Country increases the dependency on Home Country. In addition to this, for many issues, like regulatory aspects, the support of Host Country is badly needed.

9.4.4. Effect on Organizing Structure

The norms of Host Country, Support from Industry etc. can affect the Organizing Structure of IIIT. The IIITs are organized around Research Groups and not around departments. It is a tough task and need very specialized manpower, which is challenging task at Myanmar.

9.4.5. Faculty Recruitment Pattern

Status of Higher Education System, Regulatory Mechanism, and Existing Collaborative Framework of Host Country can affect faculty recruitment pattern.

9.4.6. Problems for Establishing Culture of Innovation

The Culture, Customs, Traditions, Status of Higher Educations, Communication Facilities etc. can affect the growth of Innovation Culture.

9.4.7. Academic Freedom

The regulatory mechanism, Political Scenario, Prevailing unwritten norms etc. can affect Academic Freedom of the institute. In higher education sector of Myanmar, the academic freedom is missing. The government is introducing various reforms. Gradually situation will change.

9.4.8. Collaborative Framework

The existing trends for Collaborative arrangements of the Host Country can affect the Collaborative Framework of IIIT.

9.4.9. Restrictions from Regulatory Mechanism and Government Policies

The Accreditation Policies, Admission Policies, International Student Policy, International Policy, Taxation Policy, Visa and Immigration Policy etc. can affect the overall development of IIIT.

9.4.10. Attracting Global Talent: Students

Overall Education System is not in a Good Shape. The school education is not up to the mark. Thus there is possibility of short supply of talented students for UG and PG courses.

9.4.11. Global Talent: Faculty

Considering the overall higher education scenario of the Myanmar, I think, it is challenging to search good faculty with PhD qualifications from premier institutes of Myanmar.

9.4.12. Freedom to Appoint Foreign Qualified Faculty

Considering the overall scenario of the nation, attracting Foreign Qualified Faculty will be a challenging task.

9.4.13. Freedom to Adopt the US University Style Salary Structure and Service Conditions

The present political and economic scenario wouldn't permit to adopt the US University style salary structure and service conditions.

9.4.14. Government Research Funding

In India, for premier institutes, the government always try to provide sufficient research funding through various schemes. It is a challenging task for underdeveloped country.

9.4.15. Self-Sustainable Industry Supported IIIT Research University

The Indian IIITs are struggling very hard to achieve the goal of "Self-Sustainability". It's time consuming process. At Myanmar, minimum 10 year span may require to achieve this goal.

9.4.16. Industry Supported Research Centers, Labs, Chair Professors etc.

Considering the present economic scenario, it is challenging task at Myanmar.

9.4.17. 40% Income Generation through Industry Oriented Research & Technology Transfer

Considering the present economic scenario, it is challenging task at Myanmar.

9.4.18. Involving Industry as Partner

Considering the present economic scenario, it is challenging task at Myanmar.

9.4.19. Internal Disturbances

The Protests, Ethnic Clashes or Civil Wars can affect the working of the institute.

9.4.20. Digital Communication Facilities

The government is trying to improve the Digital Communication facilities but still it is not at par with India. The IIITs are highly dependent on digital communication facilities and thus it can affect the working of the institute.

9.4.21. Education: Valued Highly in Myanmar

Education is **valued highly** in Myanmar—in fact it is **on par with national security and national identity concerns**. As a consequence, the field may be **more resistant to outside influences**, and **efforts to change higher education could be taken as "threatening"**. This scenario may affect the development of the institute. [10]

9.5. Strategy to Meet the Challenges

9.2.1. Required Visionary Leader, not Administrator or Manager

To handle this project there is a need of Visionary, Polite, Firm and Diplomatic Leader, who has knowledge, convincing power and capability (not mere administrator or manager)

- To manage the support all the stakeholders of National Ecosystem for the growth of the IIIT University.
- To establish the research and innovation culture.
- To attract Global Talent.
- To establish collaborative network to attract funds from various sources.
- To establish two-way relationship with industry and international academic organizations.
- To create Brand Name of the institute.

9.5.2. Need Strong Support from Home and Host Governments

The Government of India has already funded and implemented the MIIT project. In addition to this, very strong support from Government of Myanmar is needed to meet the above mentioned challenges.

9.5.3. Huge Efforts to Get Support from Industries from Myanmar and India

There is a need of strong tie-ups with FDI supported industries in Myanmar. I feel that to make this project successful, there is a need to acquire strong support from Indian Industries involved in various projects at Myanmar.

9.5.4. Revenue Generation Strategy for Moving Towards Self-Sustainable University

In my opinion, considering current economic situation, in short range, it is difficult to get strong financial support from Government as well as from Industry. The IIIT Myanmar must focus on other sources of funding. The possible options for Revenue Generation are:

- 1. E-learning program like WILP
- 2. Incubation Center
- 3. Foreign Students (even from India)
- 4. Academic Industry Partnership Courses
- 5. Non-Degree Programs
- 6. Short Term Credit Programs for other Universities
- 7. STTP and Workshops for Industry and Academia
- 8. Consultancy
- 9. Research for Local Businesses
- 10. Software Development Division
- 11. Foreign Research Funding
- 12. Income from Patents
- 13. Dual Degree Programs

Spare Capacity Utilization and Cost Saving

- Accommodation and Renting Spare Premises
- Alternative Energy Sources like Solar
- Movie Theatres
- Internet Business

Like other World Class Universities, encourage the "On Campus Business". For example:

- Campus Catering Service
- Mall
- Book Stores
- Partner With Booksellers
- Partner With Discount Smart Card Company
- Custom publishing
- Insurance etc.

7.4.4. Remarks

I have included hundreds of best practices for funding in my book namely "Funding Techniques of World Renowned Universities".

9.5.5. Industry Interface Development

Following table highlights all the activities for developing strong industry institute interface. In Phase I the current feasible activities have been mentioned and in Phase II the activities, which can be initiated after the sufficient industrial growth, have been mentioned.

SN	Activities for Developing Strong Industry Interface	
Phase	Phase I: Considering Present Scenario at Myanmar	
1.	Industrial visits of students	

2. Guest Lectures from Industry, Visits of industry executives and practicing engineers to the Institute for seeing research work and laboratories, discussions and delivering lectures on industrial practices, trends and experiences. 3. Visits of faculty to industry for study and discussions or delivering lectures on subjects of mutual interest. 4. Industry active to industry fields 5. Industry Directed Certifications 6. Industry Based R&D Projects for PhD, MTech, BE 7. Industry Tie ups / Memorandum of Understanding (MOU) 8. Industry Oriented Technical Exhibitions 9. Assistance In-Campus Selections 10. Testing Laboratories for Industry 11. Joint Collaborative Conference, Seminars and Workshops 12. Interdisciplinary Industry Oriented Programs 13. Entrepreneurship Development Program 14. Rural Technology Development Center 15. Professional consultancy services by the faculty to industries 16. Continuing Education 17. Identify industry problems and provide solutions 18. Collaborative Educational Programmes. Human resource development programmes by the faculty for practicing engineers 19. PG Degree programs for Practicing engineers at institute 20. Short-ctrum assignment to faculty members in industries and Sabbatical level assignments to the faculty members 10. Access to library and other infrastructure 21. Access to library and other infrastructure 22. Participation of experts from industry in Curriculum Development 23. Industry Institute Sharing of Research Laboratories 24. Establishment of Industry-Institute Partnership / Interaction Cell 25. UG or PG projects/dissertation work in industries under joint guidance of the faculty and experts from industry • Need for student orientation to industrial work culture among the students • Current Industrial practices and their integration in technical education and their implementation aspects • Current Industrial practices and their integration in technical education and their implementation aspects • On-the-joid descriptions of technical per	2.	Cust I satures from Industry, Visits of industry appartition and practicing angingue to the Institute for		
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35.	Joint Innovative laboratories along with few leading universities to form industry-university-innovative	
	cluster (long-term relationship with funding)	
36.	Joint Interdisciplinary and Intra-disciplinary research laboratories along with few leading universities to	
	form industry-university-interdisciplinary research cluster (long-term relationship with funding)	
37.	Long-term strategic partnerships with a universities for Technology Transfer through Business and	
	Technology Incubation Center in specific specialized industrial areas	
38.	Commercialization of R&D results	
39.	Students Evaluation for Campus Placement	
Phase	II: After Sufficient Industrial Growth at Myanmar	
40.	In-Plant Training for students	
41.	Career Guidance to students from industry	
42.	Industry supported Center of Excellence or Specialized R&D laboratories at institute	
43.	Industry sponsored research	
44.	Creation of industrial chair to support research	
45.	Faculty training in industry	
46.	Alumni (associated to industry and business) Involvement	
47.	Feedback on institute pass outs from employers	
48.	Scholarships/fellowships instituted by industries at the Institute for students.	
49.	Professorial Chairs sponsored by industries at the Institute	
50.	Joint Industrial Research Laboratories (long-term relationship with funding)	
51.	Joint Industry Research PhD programs on large scale in specific specialized industrial area (long-term	
	relationship with funding)	
52.	Huge fundraising activities like equity market, venture capital etc. for creating state of art infrastructure	
	(with funding)	

Table 9.4: Activities for developing better Industrial Interface

9.6. Every Coin has Two Sides

9.6.1. Easy to Establish Brand Name

The Higher Education System in Myanmar is almost destroyed. There are no competitors. The situation in neighboring countries like Cambodia and Laos is not very encouraging. Thus it is easy to establish the brand name of IIIT, not only in Myanmar but in entire South-East Asia.

9.6.2. Capacity Building: Dire Need

At Myanmar, the reforms are introduced after 5 decades. Everybody wants that the country should grow. The capacity building is the dire need. Under such favorable situation, the IIIT can grow with tremendous speed, if proper strategy is adopted.

9.6.3. Developed World: Willing to Cooperate in Development Process

Recently, the US and other European nations have lifted the economic sanctions on Myanmar. They have shown enough interest for the development of Myanmar. There are lot of opportunities for international collaborations and international funding. Only efforts in right directions are needed.

9.6.4. Support from India and Myanmar Governments

It's a joint project of two governments. The Government of India is providing strong support for 5 years. Initially the funds will flow from both the directions. The IIIT can take advantage of this situation to achieve faster growth rate.

9.6.5. Need of Customized IT Solutions and Not Totally New Solutions

In Myanmar, all the sectors like **Industry**, **Banking**, **Health**, **Tourism**, **Mining**, **Garments**, **Energy**, **Media**, **Stock Market**, **Railway**, **Airlines**, and **Pharmaceutical** are in developing stage. For faster growth, each sectors needs robust IT support. In the field of IT, India is already far ahead of Myanmar. In India, for almost every sector the IT solution base is ready. Thus for industrial R&D, the IIIT Myanmar need not develop altogether new IT solutions. The customization of existing solutions can be used to solve the purpose, which is comparatively an easy task. Thus IIIT can penetrate in much faster way in all the sectors and it can lead to huge opportunities.

9.6.6. Mandalay is Economic Hub of Upper Burma

Mandalay is the **economic hub of Upper Burma** and considered the centre of Burmese culture. A continuing influx of Chinese immigrants, mostly from Yunnan, in the past twenty years, has reshaped the city's ethnic makeup and increased commerce with China. Despite Naypyidaw's recent rise, **Mandalay remains Upper Burma's main commercial, educational and health center**. Much of Burmese external trade to China and **India** goes through Mandalay. [124]

The Mandalay can't be compared with five Metro Cities of India. But it is second major city of Myanmar. The IIIT at Mandalay can certainly take advantage of this and can grow.

9.6.7. Sudden Huge Expansion Leads to Lot of Opportunities

The Myanmar was suppressed for five decades and all of a sudden, with galloping speed, expansions are taking place at every front. The 50 years vacuum may be filled up within next 5 to 10 years. This leads to huge vacuum at technical front and enormous growth opportunities for field of IT. The IIIT can take full advantage of this situation.

9.7. Bitter Truth: Growth of University is Proportionate to Growth of Respective Country

Phil Baty, Editor, Times Higher Education Rankings stated that "The World University Rankings top 200 is unquestionably a **rich-world list**, **dominated by the economic powerhouses** of the US, the UK and Western Europe,..." [133]

Article published by Times HE World University Ranking stated that "The overall World University Rankings, published each October, are **heavily dominated by the US**, and the **developed world**. Only five institutions from the 22 emerging economies appear in the top 200 of the overall rankings" [134]

The following table shows the list of countries having Top 200 Ranking World Class Universities as per Times Higher Education World University Ranking 2014. This analysis shows that only rich countries are having top 200 ranking world class universities. In this list only China is not Developed nation. Remaining all 25 countries are developed nations. China's GDP (PPP) per Capita is USD 11,904, which is lowest in the list, but still it is 2.2 times higher than India. The wealthy nations can afford the huge financial burden of WCU.

SN	Country	Number of top 200 WCU as per Times Higher Education World University Ranking 2014	Per Capita GDP (PPP)	Developed Nation
1.	China	2	11,904	N
2.	South Africa	1	12,504	Y
3.	Turkey	1	18,975	Y
4.	Spain	1	32,103	Y
5.	Israel	2	32,760	Y
6.	Republic of Korea	4	33,140	Y
7.	New Zealand	1	34,227	Y
8.	United Kingdom	31	36,209	Y
9.	Japan	5	36,315	Y
10.	France	8	36,907	Y
11.	Finland	1	38,251	Y
12.	Taiwan	1	39,600	Y
13.	Belgium	5	40,338	Y
14.	Denmark	3	42,790	Y
15.	Canada	7	43,207	Y
16.	Republic of Ireland	2	43,304	Y
17.	Germany	10	43,332	Y
18.	Netherlands	12	43,404	Y
19.	Sweden	5	43,455	Y
20.	Australia	7	43,550	Y
21.	Austria	1	44,168	Y
22.	United States	77	53,143	Y
23.	Hong Kong	3	53,203	Y
24.	Switzerland	7	53,705	Y
25.	Norway	1	65,461	Y
26.	Singapore	2	78,744	Y

Table 9.5: World Class Universities, GDP (PPP) per Capita and status of Developed countries [130-132]

In my opinion, establishing IIIT at Myanmar is not difficult task but "Replicating IIIT-Banglore at Myanmar" is a very challenging job. The Higher Education Institutes are small part of National Ecosystem and grow along with it. The IIIT can grow along with overall progress of the Myanmar. Fortunately, the conditions at Myanmar are improving rapidly, which can reinforce the development process of the IIIT at Myanmar. I think, if all goes well then 7 to 10 years will be required to build IIIT at par with premier institutes of South-East Asia.

Chapter 10: "Education Hub" – The Dream Destinations of the World

"An education hub is a planned effort to build a critical mass of local and international actors, which are strategically engaged in cross border education, training, knowledge-production and innovation initiatives." [249]

10.1. Three Generations

Any study of higher education shows that academic mobility has been taking place for a very long time. Scholars and knowledge have been moving around the world for centuries. But, late in the 20th century, the movement of programmes and higher education institutions across borders became more popular and numerous. By 2005, some countries began to develop a critical mass of foreign providers, programmes, students, and the third generation in the form of education hubs, cities, zones. The purpose of following Table is to summarize the highlights of each of the three generations. [231]

Crossborder Education	Primary Focus	Description
First Generation	Student/People Mobility Movement of students to foreign country for education purposes	Full degree or for short-term study, research, field work, internship, exchange programmes
Second Generation	Programme and Provider Mobility Movement of programmes or institutions/companies across jurisdictional borders for delivery of education	Programme Mobility Twinning Franchised Articulated/ Validated Joint/Double Award Online/Distance Provider Mobility Branch Campus Virtual University Merger/Acquisition Independent Institutions
Countries attract foreign students, researchers, workers, programmes, providers, R&D companies for education, training, knowledge production, innovation purposes		Student Hub Students, programme providers move to foreign country for education purposes Talent Hub Students, workers move to foreign country for education and training and employment purposes Knowledge/Innovation Hub Education researchers, scholars, HEIs, R&D centres move to foreign country to produce knowledge and innovation

Table 10.1: Three Generations of Cross Border Education [231]

10.2. Education Hubs

Jane Knight, University of Toronto, defined an Education Hub as follows "An education hub is a planned effort to build a critical mass of local and international actors strategically engaged in education, training, knowledge production, and innovation initiatives."

Education Hub can be defined as "A designated region intended to attract foreign investment, retain local students, build a regional reputation by providing access to high-quality education and training for both international and domestic student, and **create a knowledge-based economy**. An education hub can include **different combinations** of domestic/international institutions, branch campuses, and foreign partnerships, within the designated region. Education hubs represent the **third generation of cross border activities** emerging onto the landscape of our more globalized world." [82]



Fig. 10.1: New Education Hubs or Zones or Knowledge Cities of the World [84]

To become more competitive in the international higher education market, several Asian countries are establishing themselves as **education hubs**. From **Singapore to South Korea**, **Hong Kong to Malaysia**, and elsewhere in the region, higher education hubs are emerging across Asia. Driven to become more international in their policies and practices, many countries are seizing on higher education as a way to do it, and **are moving aggressively**, if not always successfully, to make it work. Even Western countries, which have long led the way with higher education internationalism, are looking to learn new strategies and tactics from a model that views higher education as "a product that can be marketed like any other" to provide "a focus of national development harnessing the international mobility of students and globalized credentials," Richards asserts." [84]

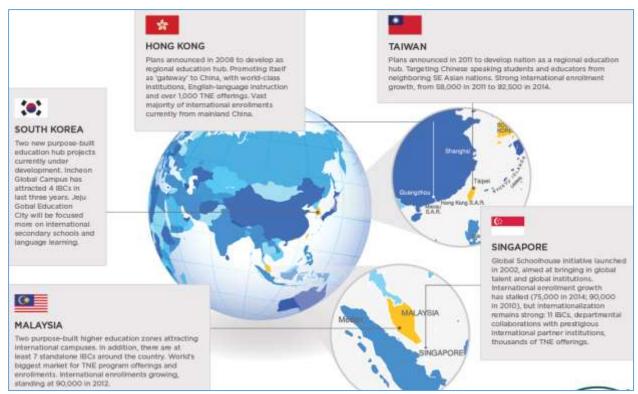


Fig. 10.2: International Education Hubs in Asia [148]



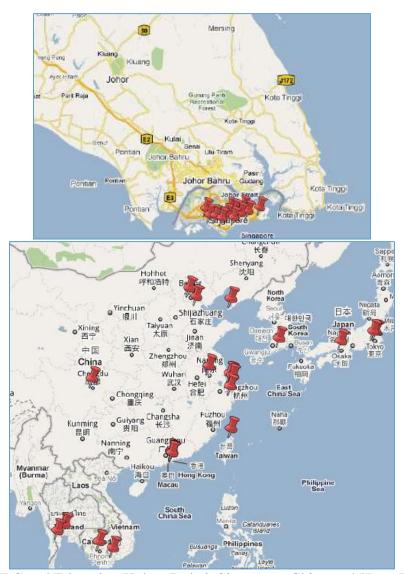


Fig. 10.3: IBC and Education Hub at Dubai, Singapore, China and Hong Kong [221]

In 2010, there are only six countries around the world which are seriously trying to position themselves as an education hub and there are others who may be just using the term hub as a branding label. There is no single model or one size fits all approach for establishing an education hub. Each country has its own set of drivers, approaches, and expectations. It is worth noting that to date, all education hub countries are relatively small and share an interest in shifting from a natural resources or manufacturing economy to one that places more emphasis on knowledge and service industries. [82]

Jason E. Lane, State University of New York (SUNY) Albany stated that "the surge of recent hub development is all about economic competitiveness and international reputation.....when you look at where plans for these **hubs** are coming from, it's **from economic development agencies**, **not education agencies**. They want to **foster their own workforce development**. They have seen the United States, United Kingdom, and Australia build themselves up by importing the best and brightest from foreign countries, and now they are working **to reverse that trend.**" [83]

It is understood that countries have **different objectives**, **priorities**, **and take different approaches** to developing themselves as a reputed center for higher education excellence, expertise, and economy. However, given higher education's current preoccupation with competitiveness, global branding, and rankings, one is not sure whether a country's plan to develop itself as an education hub is a fad, the latest branding strategy, or in fact, an innovation worthy of investment and serious attention. [82]

A clear message from this overview is that the hubs are at **different stages of development**, have **different rationales**, **different priorities**, **different strategies**, **different sponsors**, and **different expectations**. One model does not fit all, but for a country a clear set of rationales, objectives, strategies and identified outcomes is important. Positioning a country as an education hub is not an ad hoc or single activity enterprise. An education hub is more than an international student marketing campaign or an internationalization strategy. It involves a **strategic approach to developing a critical mass of international and local actors who are engaged in cross border education, training or knowledge/innovation activities. [85]**

All approaches to education hub development, regardless of the type of hub, require policy development or reform. For the recruitment of international students this can include setting admission standards, granting scholarships, quotas, visas and work permits. For foreign providers and programs the areas they will wish to see clarified are quality assurance, a national qualifications framework, partnership requirements, financial arrangements and student selection criteria. Investors in knowledge/ innovation production will be interested in policies involving international patents, trade law, foreign investment etc. [85]

Attention needs to be given to the selection of education programs offered. This is to ensure alignment with identified labor needs, prevent significant duplication of programs, and avoid unnecessary competition between and among local and foreign providers. [85]

The in-depth case studies show that "one size does not fit all". A variety of factors drive countries to prepare and position themselves as an education hub. They include:

- Income generation
- Soft power
- Modernization of domestic tertiary education sector
- Economic competitiveness
- Need for trained work force
- Most importantly a desire to move towards a knowledge or service based economy.

In response to these different motivations, three different types of education hubs are being developed:

- **Student hub**: Some countries see hubs as a means to build a critical mass of foreign students and providers to generate income as well as modernize and internationalize their domestic higher education institutes.
- **Skilled Workforce hub**: Others want to be a hub to train foreign and local students and employees as part of a skilled labor force
- **Knowledge** / **Innovation hub**: Other countries focus on attracting foreign students, institutions, and companies to build a vibrant research, knowledge, and innovation sector to lead them into the knowledge economy. [82]

10.3. Prominent Education Hubs

The concept of hub is currently very popular. Countries are trying to position themselves as hubs for finance, communication, transportation, manufacturing, fashion, education etc. Cities are doing the same thing. But to date, there is no definition of a regional education hub, there are no indicators or even characteristics of a regional education hub, and there is no assessment of what makes a hub successful and sustainable. In short, there has been little analysis of these new cross-border education developments. It appears that 'education hub' is a term being used by countries in the Middle East and South East Asia who are trying to position themselves as regional hubs for networking, student recruitment, education and training and in some cases research and innovation. The notion of region is central to these new developments as countries are trying to attract students primarily, but not exclusively, from the region and secondly working on raising their profile and competitiveness in their region. [213]

Six countries—United Arab Emirates, Qatar, Bahrain, Singapore, Hong Kong and Malaysia—are included in this brief review of regional education hubs. Of interest is that there are clear commonalities as well as stark differences among them in terms or rationales, approaches and sponsors. All of these countries are relatively small in size and population and are in the process of moving from a natural resources based or manufacturing dominated economy to a knowledge led economy. A key factor is the desire for the country to be seen or positioned as a regional education hub—not an education city or zone within a country. A salient feature is the presence of a national plan and investment to enable the country to serve as an education hub. It is this feature which distinguishes them from initiatives in larger countries like China, India or the United States where specific geographic areas are being promoted as hubs not the country as a whole. [213]

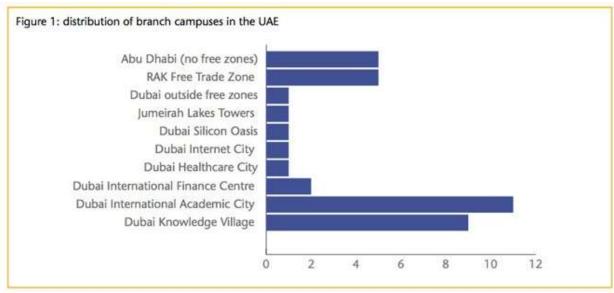


Fig. 10.4: Distribution of 37 IBCs in UAE [305]

10.3.1. Singapore

- In 2003 Singapore Education was launched as the umbrella brand to lead developments toward establishing Singapore as a premier education hub. [213]
- In the following year, 2004, the Global Schoolhouse project was announced by the Singapore Economic Development Board and promoted by the Singapore Tourism Board. Edu-tourism and edu-nomics appear to be a high priority for this small nation state void of natural resources or a vibrant manufacturing sector. It is thus committed to become a world player in the knowledge economy, and the Global Schoolhouse project is a part of the overall strategy. [213]
- Plans to attract foreign institutions to Singapore started in **1997** with Singapore's goal of attracting 10 world class universities by 2007. In fact, **they surpassed their expectations**. [213]
- Singapore has been one of the most successful nations (it is a city-state) at creating a truly successful knowledge and education hub. Its Global Schoolhouse Initiative (GS) has become the model for many other education hubs in the area and around the world. The GS launched in 2002 as a means to enrich education in Singapore by "introducing a diverse mix of top tertiary institutions and programs that complement EDB's industry development efforts." Currently, the GS offers programs from (hosting or collaborating with) Johns Hopkins University, MIT, Georgia Institute of Technology, University of Pennsylvania, INSEAD, University of Chicago, Technische Universiteit Eindhoven, Technische Universität München, Carnegie Mellon University, Stanford University, Cornell University, Duke University, Karolinska Institutet, University of New South Wales (RIP, 2007), ESSEC, University of Nevada, Las Vegas, IIM Bangalore, SP Jain Centre of Management, New York University, DigiPen Institute of Technology, Queen Margaret University. [82] [84] [86]
- It has become home to over **1,200 private education organizations**, **44 pre-tertiary schools** and **16 leading foreign tertiary institutions**, offering international curriculum. The aim of the Global Schoolhouse is to "develop a vibrant community of tertiary, pre-tertiary and corporate training institutions to make the city-state a global talent hub." By broadening its educational offerings, GS has attracted over **86,000 international students** and has advanced innovation by promoting faculty collaboration with **over 7,000 MNCs** and **100,000 SMEs** in Singapore. In 2009 it was home to 12 foreign branch campuses and in 2010 approximately 1,120 cross border education program arrangements were operational. [85] [87] [213]
- The Global Schoolhouse is the official name of the Singapore initiative to develop a regional educational hub of students, scholars and research expertise. The Global Schoolhouse is Singapore's multifaceted and ambitious initiative to establish itself as an education hub. The three major objectives driving this project include:
 - o Recruitment of "foreign talent,"
 - o Economic development through foreign investment, and
 - o Attracting research and development firms as well as multinational companies specializing in the knowledge economy and service industries. [82] [213]
- The education sector contributes about **3% of Singapore's GDP** and provides jobs for more than 57,000 workers. Its **GDP contribution is projected to reach 5%** and employment in the sector to exceed 70,000 by 2015. [88] [213]
- The major objectives and expected benefits driving this project include
 - o First, recruitment of 'foreign talent',
 - o Secondly, economic development through foreign investment and

- Thirdly, attracting research and development firms as well as multinational companies specializing in the knowledge economy and service industries. [213]
- The Global Schoolhouse is a multi-faceted and ambitious project. It includes providing
 - o Secondary and university level education
 - Corporate training
 - o E-learning opportunities
 - o Education services such as the preparation of standardized tests for the region. [213]
- The focus on tertiary education is clear as it aims to improve the quality and capacity of Singapore's higher education sector by
 - o Inviting and providing financial support for 'world class universities' to establish programs, research partnerships and a branch campus in Singapore.
 - o Recruiting 150,000 international students from Asia and beyond by 2015, and
 - o Modernization of the domestic higher education institutions through international partnerships with elite universities from the around world. [213]
- It is worth noting that the Global Schoolhouse initiative is focused on supporting **both teaching and research** at higher education institutions. **This distinguishes it from other regional hubs** which are mainly oriented to the recruitment of international students and foreign universities for training, profit and profile purposes. [213]
- In fact, the 2006–2010 national research and development agenda for Singapore is supported by a US \$8 billion fund. The establishment of a US \$600 million Campus for Research Excellence and Technological Enterprise is part of Singapore's long term approach to create sustainable research expertise rather than relying on short-term commercially driven research and development projects. [213]
- To achieve the objectives and targets for the Global Schoolhouse, reputable universities have been invited from China, USA, Australia, France, India, Germany and the Netherlands to offer niche programs according to their individual strengths. The higher education institutions include: Stanford, INSEAD, MIT, University of Chicago Graduate School of Business, Wharton Business School, Indian Jain School of Management, New York University School of Arts and the DigiPen Institute of Technology. [213]
- Two well-known institutions have withdrawn from the Global Schoolhouse Project in the last 2 years: the Bio-Medical Research facility of John Hopkins University from the USA and New South Wales University from Australia. The reasons are varied but the latter institution cites low enrolments, high start up costs and the need for high faculty commitment as major issues.
- The most recent developments include the establishment of Singapore University of Technology and Design in collaboration with Massachusetts Institute of Technology and Zhejiang University from China. It is to be operational in 2011. [213]
- By offering an interdisciplinary program based on a tripartite model with its American and Chinese partners Singapore demonstrates it agility to creatively build education and research partnerships with international universities and further its progress to becoming a regional education hub. [213]

10.3.2. United Arab Emirates: Dubai



Fig. 10.5: UAE and Middle East



Fig. 10.6: UAE seven emirates: Abu Dhabi (capital), Ajman, Dubai, Fujairah, Ras al-Khaimah, Sharjah, and Umm al-Quwain.

This country of 2.4 million inhabitants, of which 30% are under 18 years of age, is in the process of moving from an oil based economy to a knowledge/services oriented economy. This requires major investments to develop the necessary infrastructure and to attract businesses from the region and beyond. A key priority is having skilled and professional workers to support the growing knowledge economy. Of the seven emirates making up the United Arab Emirates (UAE), three-Dubai, Abu Dhabi, Ras al Khaimah—are currently active in recruiting international universities, faculty, students and knowledge industries. This analysis focuses on only one of the Emirates, that of Dubai. [213]

Dubai sees higher education as a critical sector to developing brain power for their new knowledge based economy. Fundamental to their strategy is the recruitment of reputable international higher education institutions that can lend their brand equity, offer their already established academic programs, and provide experienced faculty to teach national and international students. It is somewhat surprising that higher education institutions are being primarily recruited as business partners to educate and train future knowledge workers and **less for their research and innovation expertise**. [213]

- The DKV has attracted 15 international universities from Australia, India, Pakistan, Iran, Russia, Belgium, UK, Ireland, and Canada. DKV is hosting Boston University, Harvard University, London School of Business & Finance, Michigan State University, Rochester Institute of Technology. It is also home to approximately 150 training institutes and learning centers, HR development centers, professional training institutes, R&D organizations, and e-Learning companies. [82] [86] [87]
- Dubai International Academic City (DIAC) is the world's only Free Zone dedicated to Higher Education. DIAC aims to develop the region's talent pool and establish the UAE as a knowledge-based economy. DIAC is the premier destination for Higher Education in the region, located on a fully-appointed 18 million sq ft. campus with state-of-the-art modern facilities. DIAC currently has 21 of the UAE's 37 International Branch Campuses (IBC's), from 10 different nationalities, which is the largest number in any one location in the world. DIAC is host to a community of over 20,000 students from 125 nationalities and have access to over 400 Higher Education programmes.
- Dubai International Financial city has been one of the fastest growing financial hubs in the Middle East and one of the largest importers of foreign academic programs. To help achieve its mission, the DIFC created the DIFC Center of Excellence with purpose of becoming "hub for excellence and professional development and education." To achieve this goal, the Center has partnered with several leading business schools to offer a variety of MBA degree programs. Programs have their own offices and offer their own degrees, but share academic space. [87]
- In addition to this they have established Dubai Health Care City and Dubai Silicon Oasis.
- The Dubai International Academic City (DIAC) is being developed by TECOM Investments, a leading investment and holding company in UAE.
- DIAC was formally launched in 2007 and builds on the successful creation of the Dubai Knowledge Village (KV), established in 2003.
- Together they house over 25 international universities of higher learning. The universities come from different parts of the world including the US, Australia, India, Pakistan, Iran, Russia, Belgium, and the UK. Examples of higher education institutions include the University

- of Wollongong, Michigan State University, St Petersburg State University of Engineering and Economic, Harvard University's Medical School Branch, Boston University, London Business School, University Lyon, Rochester Institute of Technology and Murdoch University.
- Total enrolment in 2008 was estimated at 11,000 students representing 102 nationalities, thus indicating small enrolment rates for most DIAC tenant universities.
- Academic programs range from 1 to 4 years and include engineering, computer science, finance, media, fashion and design, biotechnology, environmental studies, quality management and business management programs.
- The plans for the future include expanding to 40 universities which will cater to students from the Middle East, North Africa and Asia.
- The 2008 world economic crisis put the aspirations of UAE to be a regional education **hub in question**, **but it appears not in jeopardy**, as the number of foreign universities establishing branch campuses and offering foreign programs is **steadily growing** in spite of the **struggles to attract sizeable numbers of students**. At greater risk, is recruiting a continuously increasing number of foreign students from the region and training them as skilled labor for the service and knowledge industries that Dubai is building. [213]
- The vast majority of young people in the United Arab Emirates (UAE) are the **children of expatriate workers**, many of whom have been born and raised in the country, and **this group is excluded from the public education system**. Historically, they studied in international schools and, for those seeking tertiary education, **they went to university overseas, often in their parent's home country**. Foreign universities began to establish themselves in the United Arab Emirates, **primarily to provide higher education to the expatriate population**, although they are open to all students, including Emiratis. [229]

10.3.3. Malaysia

- The Malaysian Ministry of Education's mission is "to transform Malaysia as an international hub of higher education excellence by 2020", and indeed, "Intensifying internationalization" is one of the seven "strategic thrusts" to make this vision a reality. Currently, the nation is working with not one but two educational hubs, EduCity at Iskandar and Kuala Lumpur Education City. Malaysia already acts as a magnet for cross border education activities as in 2008 there were **70,423 foreign students** and **3,218 incoming programs** and five branch campuses. [84-85]
- The purpose of Educity is to provide high quality education and produce a skilled workforce to support foreign companies located in commercial zones of Iskandar in the State of Johor, Malaysia. Educity is planning to house 8 international branch campuses which will offer full degree programs in selected fields such as business/financial studies, creative multimedia, engineering, logistics, hospitality and medicine. It has just completed new facilities for the UK's University of Newcastle School of Medicine and the University of Southampton will follow suit in 2012. [85]
- To respond to the pressing need for more human capital necessary for the knowledge economy, the plan is to gain greater access to the regional education market especially India, China, and Indonesia. Secondly, the strategy includes the development of the necessary research infrastructure to position Malaysia as a regional centre of excellence and the central node for an international network of academic institutions, companies and services. The hub will offer education from Cambridge Business School, Epsom College, and Universiti Sains Malaysia to

those in the region with an expected student population of nearly **30,000**. Malaysian education hubs are drawing in thousands of students, so many that the nation is struggling to keep up with demand, but that hasn't slowed **plans to draw in 200,000 international students by 2020**. [84-85]

- Two new initiatives in Malaysia indicate the seriousness with which Malaysia is working towards establishing itself as a regional education hub.
 - o The first is the development of **Educity in Iskandar** Malaysia, a major new multidimensional development next to Singapore and
 - The second is **Kuala Lumpur Education City** (KLEC), another strategic education initiative incorporated into a new commercial and residential project in the Klang Valley south of Kuala Lumpur.
- Iskandar Malaysia is an **economic free zone** being established in south Malaysia next to Singapore and will include
 - Industries
 - Residential areas
 - Port facilities
 - Medical park
 - o National and state government area
 - o Tourist attractions and
 - o Educity
- Iskandar Investment Bhd (IIB), backed by the government's investment organization (National Kazanah Bhd) is responsible for developing Educity.
- IIB plans to have eight international universities offer programs in selected fields such as
 - o Business/financial studies.
 - o Creative multimedia,
 - Engineering,
 - o Logistics,
 - Hospitality and
 - o Medicine.
- Students from the region who see Malaysia as a **low cost destination** to get an internationally recognized degree will be recruited. The foreign higher education institutions and students will be co-located and share common teaching, research, administration, sport facilities.
- Newcastle University in UK is the first foreign institution signed on to be part of Educity. It is scheduled to open its branch campus in 2011 and will offer medical degrees that are recognized by the British Medical Council. The Dutch Maritime Institute will be the second foreign university to offer its program and foreign qualification. Educity will also have international primary and secondary schools such as Britain's Marlborough College to attract international students especially those from its neighbor Singapore.
- Educity aims to provide high quality education and produce a skilled workforce to support foreign companies located in commercial zones of Iskandar Malaysia. It also plans to support academic-industry collaboration through joint research laboratories and design centres. These are impressive intentions but the challenges of recruiting the right mix of foreign universities, researchers, and R and D companies to work in a new cross-cultural environment should not be underestimated. Both social and economic motives drive the new KLEC enterprise. On one hand, there is a pressing need to invest more into developing the human capital necessary for Malaysia's knowledge economy and on the other hand, KLEC

- aims to showcase Malaysia as an environment-friendly, energy efficient and networked knowledge based regional centre.
- The plan is to gain greater access to the regional education market especially from the three Asian population giants, India, China, and Indonesia.
- Secondly, the strategy includes the development of the necessary research infrastructure to
 position Malaysia as a regional centre of excellence and the central node for an international
 network of academic institutions, companies and services. KLEC Ventures, a private
 investment firm is managing this initiative and expects to attract 8 foreign universities and
 several local higher education institutions.
- Research will have a central place in KLEC as plans include a research park involving independent or university-affiliated international research institutes in the areas of life sciences, biomedical engineering, educational and media technologies. KLEC is an example of an ambitious multi-use commercial, academic, residential complex. It is a sign of the times that education institutions are becoming anchors in these profit making ventures that seek to position a country regionally in the twenty first century knowledge economy.
- But can these ambitious plans be realized especially in light of the fact that Educity has similar plans and nearby neighbors like Singapore and Hong Kong, are all working towards increasing the numbers of international students in their country. [213]

10.3.4. Qatar

- The hub offers courses at nearly all levels of education, from elementary school (through Qatar Academy and The Learning Center) all the way up to doctoral programs, in an attempt to instruct students in fields of critical importance to this Gulf country's economic well-being. Currently Qatar Education City is hosting Carnegie Mellon University, Georgetown University, Northwestern University, Texas A&M University, Virginia Commonwealth University, Weill Cornell Medical College etc. [82] [84] [86]
- More than a decade ago Qatar developed its strategy for **Qatar Education City** (QEC). The idea originated with the Emir and the Qatar Foundation was mandated to implement the ambitious plan.
- As of 2009, QEC is a 2500 acre well-equipped complex fully functioning with seven foreign universities offering a variety of undergraduate and graduate programs. The institutions are co-located each with their own state of the art building but sharing some common facilities thus creating a campus like setting for the students. Six American Universities have established their operations in Qatar Education City, and as of late 2008, the Imperial College of London has plans to set up a branch campus (OBHE 2008).
- The critical factor for selection is an internationally recognized curriculum and expertise in disciplines which are central to broadening Qatar's range of higher education programs.
- Given that each university has a **niche area of curriculum**, there is **no overlap or competition** in academic programs among the international higher education institutions (HEIs) operating in Qatar Education city.
- It operates on a differentiated academic model which is responsive to the clearly articulated Qatar priority to develop human resource requirements for the twenty first century knowledge economy.
- The American universities currently operating in Education City include Virginia Commonwealth University, Weill Cornell Medical College, Texas A&M University, Carnegie

Mellon University, Georgetown University School of Foreign Service, Northwestern University.

- All institutions maintain admission standards equal to their home campus which has presented some challenges to enrolling qualified Qatari students, especially males.
- At the current time, enrolments are half domestic students and half regional/international.
- In 2009, The Qatar Science and Technology Park (QSTP) was launched as a complementary
 initiative to Qatar Education City. It is anticipated that by 2012 it will be fully operational with
 the tenant international companies such as Microsoft, General Electric and Shell conducting
 commercially oriented research and development in collaboration with the academic
 institutions and researchers from QEC.
- It is estimated Qatar has invested more than **800 million US dollars to date in the QSTP** and **over 2 billion US dollars in QEC**. This illustrates the sizable investment Qatar is making to transform itself into a regional education hub and grow the knowledge economy. Whether it is a sustainable model is yet to be seen but it is doubtful that it is an approach that can be replicated by other countries given the enormous investment made to date. [213]

10.3.5. Bahrain

- In 2007, Bahrain announced plans to develop itself as an education hub, hoping to establish itself as the premier destination for higher education in the region. The country already has relationships with McMaster University, American University of Beirut, Hanover University, and the University of Westminster, with the construction of new facilities, more international schools are soon to join. [84]
- In late 2006, Bahrain announced its intention to establish a world class higher education city at a total cost of \$1 billion. The Bahrain Executive Development Board (BEDB) made the announcement after agreeing to jointly undertake this major initiative with the Kuwait Finance and Investment Company. It has a projected enrolment by 2015 of 25,000 students. These are ambitious plans and high expectations for a small state like Bahrain and for a Kuwaiti multinational company.
- An announcement in late 2008 that Sorbonne University of Paris would be the first tenant of Higher Education City indicates that it is en route to attracting respected institutions.
- The drivers and anticipated benefits of the Higher Education City include:
 - o To provide a technologically skilled workforce for the current and future labor market in Bahrain and the region,
 - o To encourage innovation;
 - o To leverage increased direct investments into the Kingdom,
 - o To reposition the Kingdom as a regional specialist centre in higher education.
- Plans include the establishment of laboratories, an international centre for research, a branch of a US based university and a specialist academy.
- The courses offered will focus on three areas of study: engineering, business and science disciplines.
- To date, Bahrain has three branch campuses offering medicine from the Royal College of Surgeons in Ireland, technology from the New York Institute of Technology, and computer science from Philippines' AMA Computer University.
- As of 2008 Bahrain has less than 800 international students enrolled in domestic or foreign institutions located in Bahrain.

- It has a steep challenge ahead to compete with its neighboring countries which started their regional education hub initiatives more than 6 years ago.
- Bahrain has also launched a Science and Technology Park to attract regional and international businesses working on new technologies such as renewable energy, environment, information and communication, and clean technology. It is intended that the Higher Education City will complement and contribute to the work of the Park by training the necessary skilled and professional knowledge workers as well as providing ongoing professional development opportunities. Bahrain Education City and the related Science and Technology Park are not fully operational yet. The plans are ambitious but whether they are achievable is yet to be determined. [213]

10.3.6. Hong Kong

- Hong Kong has also signaled its intention to become a regional education hub. The Chief Executive's 2004 Policy Address announced a plan "to promote Hong Kong as Asia's world city" which includes building Hong Kong's capacity to serve as a regional higher education hub. The University Grants Commission (UGC) supported the vision of Hong Kong as 'the education hub of the region because of its strong links with Mainland China, its geographical location, its internationalized and vibrant higher education sector, and it's very cosmopolitan outlook'.
- A key theme in the UGC policy paper, which has relevance for their hub model, is the development of an interlocking system where the whole higher education sector is viewed as one force, with each institution fulfilling a unique role, based on its individual mission and particular strengths. Differentiation of role and international competitiveness of each institution's teaching and research strength are identified as the backbone for domestic reform and an important feature for the hub.
- Attracting **international students** for study and work in Hong Kong is the **main engine driving** the development of the hub.
- There is no major plan to invite foreign institutions to establish branch campuses, instead foreign students will be accommodated by increasing the admission quotas assigned to domestic institutions. The impact on the enrolment of domestic enrolments is unknown. Since the announcements in 2004 and 2007, more scholarships have been provided for international students and the Immigration policies have been liberalized. Changes have focused on relaxing employment restrictions for nonlocal students both during and after their study programs. New graduates are able to stay on for 12 months as locally engaged employees. A particularly interesting aspect of the immigration reform has been a change in regulations for international graduates who left Hong Kong after their studies but who wish to return for employment purposes. This has major implications for the multitudes of Mainland Chinese graduates. The aim of these changes is to strengthen Hong Kong's human capital and competitiveness, enhance the quality of the workforce and of course, make Hong Kong more attractive to international students. Have these policy announcements and reforms made a difference? A recent study indicates that the vast majority of estimated 9,900 non-local students come from the mainland. For example, 92.6% of the University Grants Committee funding for international students went to Mainland Chinese students. With less than 8% coming from other countries in the region one can question whether Hong Kong is serving as a regional hub or perhaps better described as a gateway for students from the mainland.

- As of 2010, there were 1,120 different programs being offered by foreign universities—mainly from Australia and the United Kingdom but Hong Kong has less experience in establishing branch campuses which recruit international students in addition to domestic students.
- Overall, Hong Kong is still in the early stages of taking the necessary steps and investments
 to position itself as a regional education hub. Furthermore, Hong Kong is operating within
 a region where there is strong competition from neighboring countries to be seen as a regional
 education hub for research excellence, recruitment of bright international students and faculty,
 development of successful partnerships with foreign universities, and an overall strong profile
 as a centre of education activity. [213]

10.3.7. Jeju, South Korea

South Korea is on a mission to become an education destination not only from South Asia but also for the world. They're off to a good start with a new project called Jeju Global Education City that began construction in 2009. Part of the development plan for the Incheon Free Zone in South Korea is to attract international branch campuses in the Songdo Global University Campus. In 2009, it was reported that 15 foreign universities were exploring establishing a branch campus. All of the 15 but the University of Pavia (Italy) are based in the United States. The institutions reported to have been interested in opening a campus include Duke University, Columbia University, Boston University, George Mason University, Stony Brook University (State University of New York), the University of Illinois at Urbana-Champaign, Carnegie Mellon University and the University of California-San Diego. [87] [84]

10.3.8. Panama: City of Knowledge

Founded in 1998, the educational hub brings together universities, technology, and businesses, with the idea that the facility would help bring more economic prosperity and high-tech projects to the Latin American region as a whole. The country has offered a number of fiscal incentives to top universities to encourage them to bring branch campuses there, and now several schools offer degrees through the city, including McGill, U Penn, Florida State, Saint Louis University, Iowa State, and the School for International Training. [84]

10.3.9. Colombo, Sri Lanka

Sri Lanka isn't an education hub just yet, but the nation has made that goal one of the most important to its national development plans. The Ministry of Higher Education in Sri Lanka announced that it wants to construct the most cost effective education hub in Asia, establishing itself as a regional knowledge and education hub in the region by 2015. [84]

10.3.10. Botswana (Africa)

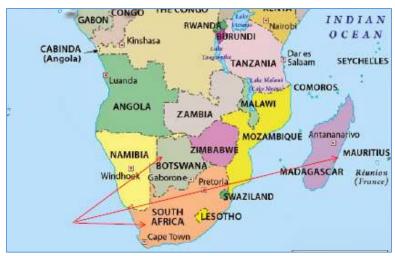


Fig. 10.7: Education Hubs in Africa: Botswana, Mauritius, South Africa

An interesting feature of the Botswana situation is that the education hub plan is one of six so called economic diversification hubs: the other five are Health, Innovation, Agriculture, Diamonds and Transport. They differ in size, complexity and scope. For example the Innovation Hub is essentially a cluster of technology firms and knowledge-based institutions located in Gabarone, the capital city, while the Education Hub is more of a national strategy to make the whole of Botswana a regional centre recognized internationally as a preferred destination for international students, scholars and trainees. [85]

An interesting feature of the Botswana situation is that the education hub plan is one of six so called economic diversification hubs: the other five are Health, Innovation, Agriculture, Diamonds and Transport. They differ in size, complexity and scope. For example the Innovation Hub is essentially a cluster of technology firms and knowledge-based institutions located in Gabarone, the capital city, while the Education Hub is more of a national strategy to make the whole of Botswana a regional centre recognized internationally as a preferred destination for international students, scholars and trainees. The rationale driving this vision for the education hub is its role in the promotion of economic diversification and sustainable growth. It has a strategic function of attracting international students, educating them and then supplying a skilled workforce to the other five hubs. Botswana is in the very early stages of its plan to become an education hub. A number of new policies and initiatives are underway to promote its development. The first is capacity building of local institutions in terms of strengthening the quality of programs and absorptive capacity for more international students. All domestic institutions are encouraged to forge new partnerships with foreign universities for collaborative programs and student exchanges. A target of 5% regional/international students in domestic institutions by 2016 has been set and is accompanied by a revitalized promotion and recruitment program. [249]

10.3.11. South Africa

International Branch Campuses are not very successful in South Africa for reasons that go beyond the high number of governmental requirements. These include

- The lack of financial support from local governments
- Few scholarships for students
- A lack of investment from the private sector. [261]

There are currently only three branch campuses left in the country:

- Bond and Monash from Australia
- De Montfort (UK)
- Netherlands Business School

These International Branch Campuses do not receive financial support from the local government; the Ministry of Education places very strict restrictions on IBCs; and there is a very rigorous accreditation process that International Branch Campuses must follow before they can open their doors in the country... Unlike students in other developing countries, South African students receive fewer scholarships to pay for their education. This makes it very difficult for students to pay the fees required to study at a private university or an International Branch Campus. [261]

International education providers have much more difficulty recruiting students in Africa due to many factors, including

- A poor business model
- Being unable to comply with the large number of local regulations and restrictions
- Being unable to adapt to the constantly changing local regulations. [261]

Monash University, the largest university in Australia, is one of the most prestigious universities in the world and was the first foreign university to establish an IBC in South Africa in 2001. With 3,500 students enrolled a decade after it was created, the South African Monash IBC has shown itself to be extremely successful in meeting government mandates, offering degrees in social science, business and economics, information technology, and health and human science. A degree from the Monash University IBC is a valuable asset for anyone pursuing a professional career. The South African Monash IBC was able to flourish given all the difficulties IBCs face in Africa by creating an independent sustainable money-stream. According to David Robinson, the Vice Chancellor of Monash University, the South African Monash IBC does not receive any financial help from the South African government or the Australian government. Instead, it is expected to generate its own revenues from student fees, primarily from international students with scholarships from their governments. [261]

South Africa is in a very good position to host international students given the following factors:

- The country's location and proximity to many other sub-Saharan African nations
- The country's universities use English as the primary language of instruction which is an asset in the current global economy
- South Africa's institutions of higher learning charge lower tuition fees than those of developed nations
- There is a relatively low cost of living in South Africa
- Students acquire internationally recognized academic qualifications.
- Professors and lecturers in South Africa are paid well, and are eligible for governmentsponsored research funding, creating stability in the teaching staff

South Africa a very attractive destination for international students, a fact that is revealed in its rankings. South Africa is ranked among the **top ten countries** for higher education in the world

and is one of the **top five countries** in the world for its enrollment of international students...It is worth noting that South Africa does not suffer from many of the problems that plague other countries. There is

- No political instability
- No religious restriction
- No immigration complexity.

All of this makes South Africa a relatively safe and supportive country for local and foreign students. [261]

The number of international students at South Africa's 23 public universities grew from 12,557 in 1994 to nearly 54,000 in 2006, representing 7 % of the student population. The majority of international students come from different parts of the African continent, especially from the Southern Africa Development Community (SADC)59. South Africa sees hosting students from the rest of Africa as a way of contributing to the continent's human resource development and also as a way of helping to stop the "brain drain" problem the continent experiences when talented students leave Africa to study abroad. [261]

10.3.12. Mauritius (Africa)

A reported 30 international institutions and groups are involved in some capacity in tertiary education in Mauritius, and the government has set a goal of attracting 100,000 international students over the next decade. Given that there are currently just 1,000 international students on the Indian Ocean island, some might consider that a pretty lofty goal, even more so when one considers that there are just 50,000 local students within the higher education system. Nonetheless, the nation is well placed to make significant inroads into meeting its goals, sitting as it does at the crossroads between Africa, Europe and Asia. [295]

Mauritius is a small multi-cultural, multi-lingual country of 1.3 million people that enjoys political and social stability. Fully 50 percent of school leavers currently enroll in higher education, and the government has a goal to increase that to 70 percent within five years. The island enjoys relative wealth compared to its African neighbors and it is focused on developing human capital both domestically and internationally. The country has close historical ties with Europe, particularly the United Kingdom and France, while relations with China and India are strong for both historical and commercial reasons. [295]

Combined with its touristic appeal as a sun-drenched tropical island, the government believes the nation is well situated to act as a bridge between African and Asian students looking for an international education and mainly European universities looking to export their services. Currently, most transnational education provision on the island is being delivered by British and French institutions, along with a couple of Indian tertiary institutions with operations on the island. The focus of the government's recruitment efforts will be in Africa where it sees significant opportunity and need. [295]

Looking to the future, the centerpiece of the government's efforts to attract international students and universities is **Medine Education Village** – an integrated higher education, research and lifestyle development that is currently under development. Current tenants at completed sections of the development include **France's prestigious ESSEC Business School**, the **Sorbonne-**

ASSAS International Law School, and Centrale Nantes – a prestigious French 'Grande Ecole.' Together, these three schools comprise a new sub campus at Medine called the International Campus for Sustainable and Innovative Africa, offering undergraduate and graduate programs in law, engineering and business. [295]

Other institutions that currently lease space at Medine include the VATEL International Business School of Hotel and Tourism Management, SUPFINO International University, and ESCP Europe Business School, one of France's oldest and most prestigious management schools. Located on the Pierrefonds section of the development – the first to be completed – these three institutions offer bachelor's and master's programs in hotel management and tourism, computer science engineering, and management strategy. [295]

The TALENTS training center opened in 2011 on the Pierrefonds campus, offering a blend of vocationally and professionally oriented courses in addition to executive leadership and management training through Hemsley Fraser, a UK-based short-course provider. [295]

Outside of the Medine campus, there are 11 public institutions and approximately 50 private institutions offering programs through a mix of local provision, distance learning and international franchising agreements – mainly with British institutions. There are also a number of international branch campuses on the island, of which three are from the UK: Middlesex University (2010), the University of Wolverhampton (2012), and, most recently, Aberystwyth University (October 2015). [295]

For the past three years, the government has hosted the Mauritius International Knowledge Investment Forum, a platform for sharing ideas and also marketing the island to potential investors and institutions. Last year the forum was moved from Mauritius to London where Mark Simmonds, the UK Minister for Africa, told the conference that there are currently 15,000 students, a third of higher education students in Mauritius, working towards British qualifications from 25 awarding bodies. According to an article in University World News last year, the market in Mauritius is worth **US\$12 million a year for the British education sector**. [295]

The 100,000-student goal seems like a lofty one for Mauritius, but the island does look well placed to make significant progress on its hub-status plans over the next decade. [295]

10.4. Comparison of Education Hubs

For feasibility study, there is a need of information on several important elements which include:

- Policies and regulations related to registration and accreditation of the foreign institutions
- Working visa or immigration laws for foreign students and
- Professionals, funding and collaborative research arrangements between universities and private sector firms
- Foreign investment conditions
- Intellectual property rights and patent law [213]

The following chart compares few education hubs.

	Bahrain	Qatar	UAE	Hong Kong	Singapore	Malaysia
Name	Higher Education City	Education City	Dubai International Education City	Regional Education Hub	Global School house	Regional Education Hub
Announce date	2007	1998	2003 2007	2004	2004	2007
Sponsor/organizer	Bahrain Economic Devt Board	Qatar Foundation	Dubai Holdings/TECOM Investments	Hong Kong Trade Devt Council	Singapore Economic Devt Board	KLEC Ventures; Iskandar Investments
Status*	Planning stage-3 branch campus	Operating with 7 branch campus	Operating with more than 25 branch campus	Very few branch campus	Operating with more than 12 branch campus	Not fully operational-5 branch campus
	Est 800 Int students	Est 3000 Int students	Est 12,000 Int students	Est 10,000 Int students	Est 86,000 Int students	Est 70,000 Int students
Rationales						
Skilled workforce	••	••	•••	:• :	***	••
Grow knowledge economy	•••	• •	•••		••) • •
Foreign direct investment	•••		•••		••	••
Improve domestic		••		***	••	77
Regional status/ competitiveness	•••	••	•••	•••	•••	•••

^{•••} Very important, •• medium importance, • low importance

Table 10.2: Comparison of Education Hubs [213]

Few important aspects of various education hubs are:

- Dubai International Academic City elicits competition between branch campuses rather than the collaborative environment found at branch campuses in Qatar.
- International branch campuses in Qatar pursue a more public mission.
- Qatar filters international branch campuses toward specialized educational outcomes, reduces competition, and increases coordination between universities.
- The original aim of the Qatar Foundation was to recruit a single foreign institution that was highly regarded in multiple disciplines; however, several top-tier universities were recruited instead, each specializing in a specific discipline.
- Branch campuses would acquire significant influence over the country in the near future, and noted the delivery of standardized curricula may not be germane to the Qatari culture.
- In South Korea it is forbidden for offshore campuses to generate profit.
- A recent report (2012) by the Observatory on Borderless Higher Education noted **37 branch campuses** are planned to open within the next three years, **none of which in the Middle East**. While the reason for this finding is unclear, the challenges associated with recruiting American faculty remains a viable explanation.
- 19 per cent of the global IBC pool has chosen the UAE as their secondary habitat.
- Qatar supplies free utilities (i.e., cable, internet, gas and electricity) to all its residents. Qatar also offers expatriates free public health care and schooling for children, free housing within proximity to Education City, and income tax breaks in the United States depending on how long they stay overseas one administrator reported that the first 90,000 United States dollars earned by American expatriates is tax free. [268] [271]
- The two diagrams below show the number of students at IBCs in six countries. UAE hosts the most IBCs and students overall but IBCs located in Malaysia have a larger average number of students in each IBC. [296]

Updated from Knight (2010a)

^{*} Estimated numbers of students as of 2009 is for illustrative purposes only. Because a variety of sources were used the consistency of definitions for international students is not verified

The following graphs gives vital information about number of students and country origin of students of few education hubs.

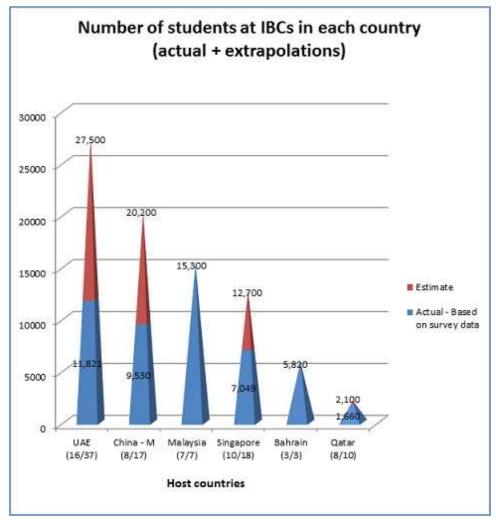


Fig. 10.8: Number of students at IBC in each country (Actual + Extrapolations) 2012 [296]

For the same six countries, the diagram below shows where IBC students originate. UAE, Singapore and Qatar attract students from other countries to a greater extent than IBCs located in Malaysia; in China the IBCs are almost entirely for the large domestic market. [296]

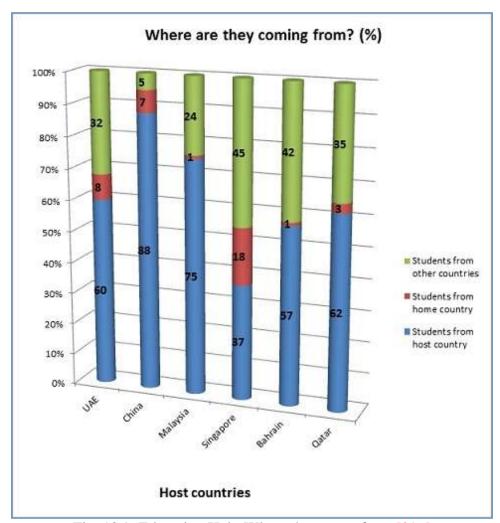


Fig. 10.9: Education Hub: Where they come from [296]

The following chart illustrates the contrast between the world market share of provider countries, by both number of IBCs and number of students. **Australia had 6% of the IBCs in the world in 2011 but 25% of the students**. This information helps to decide the prospective location of IBC. [296]

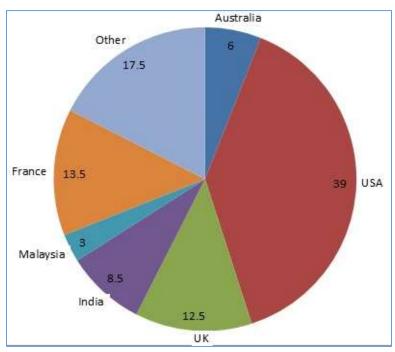


Fig. 10.10: Number of IBC as share of world total 2011 [296]

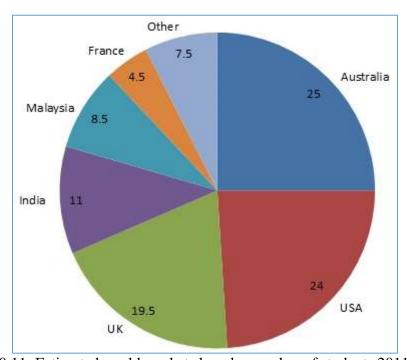


Fig. 10.11: Estimated world market share by number of students 2011 [296]

In 2013 the British Council published a much more detailed and campus-focused investigation into the most promising TNE markets for UK HEIs. It excluded online and distance learning. Their summary projections on where TNE opportunities will be found are given in following Figure. [312]

Group 1 Well above average	Group 2 Above average	Group 3 Average	Group 4 Below average	Group 5 Well below average
Hong Kong	Qatar	Botswana	Brazil	Nepal
Malaysia	South Korea	Bahrain	Indonesia	Sri Lanka
Singapore		China	Mexico	
UAE		India	Nigeria	
		Mauritius	Pakistan	
		Oman	Poland	
		Spain	Russia	
		Thailand	Turkey	
		Vietnam		

Table 1.1: British Council 2013: TNE 'Opportunities matrix groups [312]

10.5. Education Hub: Different Meanings and Classification

A pertinent question arising from the analysis is whether the concept and term 'regional education hub' adequately captures and recognizes the individualities of the various hub initiatives. The answer is **probably no**. A more discerning nomenclature is needed to acknowledge the different motivations, priorities, and expected outcomes. It is clear that

- Some countries see hubs as a means to build a critical mass of international students for income generation, internationalization and modernization purposes;
- Others want to be a hub in order to attract both students and foreign higher education institutions in order to provide a skilled labor force for a service or knowledge oriented economy;
- While other countries focus on attracting foreign students, institutions and companies to build a vibrant research, knowledge and innovation sector to lead them into the next decade. [213]

In order to capture these differences and allow for a more nuanced understanding and exploration of regional education hubs, a typology of three categories of hubs is suggested. The three types of hubs include

- Student hub: The Student Hub is the most focused and probably most prevalent type of education hub. The key aspect is the recruitment of international students to the country for the purposes of
 - o Internationalization and modernization of domestic higher education institutions
 - o Revenue generation
 - o Building international profile.

In this scenario it is **primarily local higher education institutions** that are recruiting the students to their individual campus, although **in some cases foreign branch campuses are involved**. A national recruitment strategy and requisite policies are in place, but for the most part individual institutions are recruiting students to their own campus and programs. The goal is to reach a national targeted number of international students and to build a reputation as an attractive place for international students to get a high quality education. [213]

• Skilled workforce training hub: The Skilled Workforce Training Hub differs from a student hub in that international students are being recruited and foreign universities are invited to set up branch campuses in order to develop a skilled work force of both domestic and foreign

students. International private training/education companies are also encouraged to offer academic programs and professional development opportunities aimed at international and national students. The driving key objectives are to

- Educate and train students to be skilled labor/knowledge workers for a knowledge and service led economy
- o Provide increased access to education and professional development for both international and domestic students as well as locally based employees, and
- Establish geo-political status in the region. In many cases, the majority of education/training institutions and companies are collocated in one zone in order to share facilities and promote collaboration amongst themselves and with industry. [213]
- Knowledge and innovation hub: The Knowledge/Innovation Hub broadens its mandate beyond education and training to include the production and distribution of knowledge and innovation. Foreign universities, research institutes, companies with major research and development activities are attracted through favorable financial incentives to establish a base in the country and to collaborate with universities and training/education companies to develop applied research, knowledge and innovation. The primary objectives are to
 - o Help build a knowledge and service based economy
 - o Educate and train skilled labor for knowledge/innovation
 - o Attract foreign direct investment, and
 - o Increase regional economic competitiveness.

Collaboration among the key players—foreign and local education institutions, industries, research centres, and companies—is a key factor to building a knowledge and innovation hub. [213]

Chapter 11: Case Study: Intricacies & Challenges of Setting-Up TAMU Qatar

Dr. David A. Stanfield has done wonderful Research on IBC namely "Texas A&M University at Qatar". I would like to quote few points from this 300 pages document. One must refer this important document before establishing IBC. [209]

International Branch Campuses:
Motivation, Strategy, and Structure

Author: David A. Stanfield

Persistent link: http://hdl.handle.net/2345/bc-ir:103560

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11.1. Background of Texas A&M at Qatar (TAMUQ)

Texas A&M University's (TAMU) flagship campus in College Station, Texas USA was founded as an all-male military institution in 1876 and has grown to become a research-intensive institution that now boasts a student enrollment of over 50,000. [209]

- Texas A&M University USA (**TAMU**) signed a contract with the Qatar Foundation for Education, Science and Community Development on May 25, 2003 to establish and operate an international branch campus in the tiny Gulf state of Qatar just outside the capital city of Doha in an education hub aptly named Education City.
- Texas A&M provides Bachelors of Science degrees in chemical, electrical, mechanical, and petroleum engineering.
- Across all departments, the campus employs **78 faculty** at all levels (lecturer, senior lecturer, assistant professor, associate professor, and full professor) and a **staff of more than 350**.
- Although only an infant as compared to the main campus in Texas, the Qatar campus has grown considerably since its founding **11 years** ago. In May of 2014, TAMUQ celebrated its **500th graduate**, and each new class consistently enrolls over 100 students.
- The institution has spent considerable effort developing a robust research infrastructure.
- To date, TAMUQ faculty have received over \$220 million in research grants from Qatar National Research Fund (QNRF).
- Many of these research projects involve collaborative work with faculty from the main campus.
- Faculty to student ratio of 20 to 1
- The institution prides itself on **engagement** with the **community** and **local industry**.
- During the 2012-2013 academic year, TAMUQ hosted ten international academic conferences.
- Consultation with local oil and gas companies. [209]

11.2. Inception Timeline of TAMUQ

The creation and development of Texas A&M in Qatar did not happen overnight. In fact, the process was quite lengthy, involved many actors, and required numerous steps. [209]

After several years of contemplation and negotiation, Texas A&M University signed a contract with the Qatar Foundation for Education, Science and Community Development on May 25, 2003 to establish and operate an international branch campus in the tiny Gulf state of Qatar just outside the capital city of Doha in an education hub aptly named Education City. The detailed activities are as follows:

SN	Date	Activity
1.	Dec 2001	The conversation began when a member of the provost's staff was asked to review a letter
		sent to Texas A&M's president from the Qatar Foundation asking the University to
		consider establishing a branch campus in Qatar. Texas A&M receives many requests for
		international collaboration, but this request was unusual because the partner was offering

		to pay for everything, so the administration agreed to respond with a request for additional information.
2.		This led to a visit in December of 2001 by "a three member delegationto begin initial discussions on a partnership between Texas A&M University and Qatar Foundation".
3.	Summer 2002	The fact that Texas A&M was not the Qatar Foundation's first choice did not seem to deter the process from moving forward. In the summer of 2002, Texas A&M's then president Dr. Ray Bowen, authorized an eleven-member delegation to visit Qatar on a fact-finding mission.
4.	Fall of 2002	Texas A&M underwent a significant shift in leadership.
5.	Nov 2002	The interim provost, Dr. David Prior, "led a 20-member delegation to Qatar to begin assessing the academic and financial needs of establishing the Qatar campus"
6.	Dec 2002	Now a year after the initial process had began, Texas A&M officially decided to pursue an agreement with the Qatar Foundation to establish a branch campus in Qatar. According to a staff member involved in the process, there were three primary conditions that had to be met in order for the project to be approved. The Texas Higher Education Coordinating Board required the first two. No state money could be spent on the project and in order to offer Texas A&M engineering degrees, the curriculum had to remain the same as in College Station. The third condition related to admissions standards, which had to stay the same as the home campus. There was some concern that the Qatar Foundation might attempt to exert influence over what applicants were admitted.
7.	Jan 2002	The "former Department Head of Petroleum Engineering of Texas A&M University, was named Coordinator of the Qatar Project and led a four member delegation to Qatar to finalize the details of the term sheet"
8.	Mar 2003	After much negotiation, President Gates presented and received approval on the agreed-upon terms from the Texas Higher Education Coordinating Board and the Texas A&M University Board of Regents in March of 2003.
9.		A group of seven Texas A&M representatives then met with a Qatar Foundation delegation at the St. Regis Hotel in New City to finalize the terms of the agreement.
10.	May 2003	Over the next few months, a final ten year agreement, including the previously agreed upon terms, was drafted and signed on May 25, 2003.
11.		Descriptions of the inception process revealed several important ideas about the elements necessary to successfully enter a branch campus agreement. Specific themes—highlighted below—included the cultivation of campus buy-in, elements of successful negotiation, and a number of factors listed in a model designed as a checklist universities should use when considering international engagement.
12.		In the U.S. context, governance is shared among three primary constituencies: the president, the faculty, and governing board. The importance of practicing shared governance principles during the inception of Texas A&M at Qatar did not go unnoticed. Many institutional stakeholders were involved in the inception process, and the lead actors believed that in order for the Qatar campus to be successful there had to be widespread involvement and buy-in among relevant campus constituencies. In particular, faculty at a number of institutions engaging in branch campus projects have been vocal about their lack of involvement.
13.		The Texas Higher Education Coordinating Board was another key stakeholder that required attention from the planning group. Although the Coordinating Board had a set of requirements that A&M had to follow in order for the Qatar campus to be approved,
14.	May 2003	Texas A&M University has a strong tradition of student involvement in governance, so the administration also realized the importance of including student leaders in the inception process.
15.		When entering negotiations Texas A&M had three non-negotiables: 1. The branch campus must be fully-funded and not use state tax dollars, 2. The admission standards had to be the same as the home campus, and 3. Curriculum content must be materially the same.
16.		In essence, the Qatar Foundation agreed to cover all employee salaries, operating costs, and building expenses. The initial ten-year agreement was reportedly worth roughly \$960

	-
	million (Rs. 6624 Crore). This budget included salaries, operating expenses, and an annual
	\$10 million discretionary management fee paid to the main campus.
	They basically wanted us to come over and teach and we said no, we want to teach and do research they kept trying to avoid the graduate education and they kept trying to avoid
	the research Although not formally included in the original agreement, TAMU ultimately signed the contract with confidence it could be negotiated further in the not-too-distant future.
	The challenges experienced during negotiation were often attributed to cultural differences, as described by this TAMU administrator involved in the process. We were exhausted after these long [negotiation] sessionsThe Arabs are the best negotiators in the world.
	TAMU staff perceived that the Qatar Foundation did not fully understand the key components of American higher education. One interviewee attributed this to a lack of experience with high quality tertiary education, "The only experience that the Qataris had was with Qatar University which was not a quality institution at all."
	They said well, we need you to deliver the undergraduate program first before we could get the [graduate] education. We kept saying, "you don't have the research, we can't get the faculty there and there is no future for this campus." And then we, to some extent pushed them, and as a result they developed the Qatar National Research Foundation.
Sept 2003	Classes started [209]
	Sept 2003

Table 11.1: Inception Timeline [209]

11.3. Internationalization Strategies

In an article on internationalization strategies, John Davies (1995) discusses six factors that institutions should consider to inform the decision-making and formation process. Although the model was not designed specifically for IBCs, it proved to be useful in identifying and examining the factors that informed Texas A&M's decision to open a branch campus in Qatar. In this study, these decision factors are distinguished from the broader motivations or rationale that encouraged the institution's interest in opening a branch campus. This model helped to explore and comprehend the next, more practical step, when an institution decides whether or not they have the ability to successfully engage in an international project of this nature. [209]

11.3.1. Internal Factors

First, an institution should contemplate how well the said project aligns with their mission.

- Institutions examine their strengths and weaknesses in current programs, personnel, and finances to decide whether they can effectively support a new international initiative.
- Though the Qatar Foundation offered to pay all expenses, money cannot fully cover the impact of time spent by senior administrators engaged in the inception process. Multiple interviewees attest to the significant time the president, provost, vice president for research, and other high-level faculty and administrators spent working on this project.
- Institutions to consider what departments and individuals will be involved in the project. TAMU administrators clearly weighed multiple options when determining which departments and individuals would be involved in the branch campus. [209]

11.3.2. External Factors

- Perceptions of imagine and identity: whether the institution was concerned about how Texas A&M was perceived by the branch campus' target audience in Qatar and around the Gulf...no participants described whether they considered how well American higher education was received in general in the region.
- Trends and opportunities in the international market place:
 - Qatar's connection to the oil and gas industry was also likely perceived to be a market place opportunity.
 - Texas A&M was on the forefront of the new trend of opening international branch campuses.
 - By starting a branch campus at this early stage, there was potential to gain some advantages through first-mover advantage,
- Competitive situation:
 - o Texas A&M's potential competitors were Qatar University's College of Engineering, other regional engineering institutions, and other Education City institutions.
 - o In terms of competition with the other American universities in Education City, one could reasonably assume the risk was low since they were offering medical and design degrees, which do not typically attract the same students as engineering.
 - A&M is still a good fit here because it's engineering based, and in this part of Asia and the Middle East, engineering is one of the top professions that parents want their kids to get into.
 - A final competition-based consideration was the question of whether students would prefer to attend an American institution in their home country or region, or study abroad in the U.S., UK, or other Western countries that allow a more robust cultural immersion experience, among other benefits. Although not mentioned specifically in research interviews, the literature notes that students choose to enroll at branch campuses in order to stay closer to family, for cultural reasons, to save money, and for convenience.
 [209]

11.4. Motivations: TAMU

For instance, if an institution's primary motivation is to generate revenue by operating a branch campus then administrators should determine tuition fees and design a structure (e.g., faculty to student ratio) that can support this goal.

1. International aspirations:

- a. Texas A&M had international aspirations long before the Qatar Foundation pitched the idea of a branch campus.
- b. The Qatar campus had the potential to be a study abroad destination for main campus students where they could spend a semester or a year in a culture very different from their own.
- c. Opportunity for global exposure.
- d. Global brand recognition.
- e. To enhance international student recruitment
- f. To increase revenue through full-fee paying students

- g. Another benefit to cultivating global brand image is the ability to form connections with new companies, thereby increasing employment opportunities for graduates.
- 2. Opportunity and connections:
- 3. Research growth: not formally promise research grants in the contract.
- 4. Financial drivers [209]

11.5. Motivations: Qatar

- 1. Quest for a top-quality program
- 2. The need to change the current higher education system to meet the needs of a developing knowledge economy
- 3. Quality
- 4. Reputation
- 5. Enhance their global
- 6. Prestige
- 7. Sponsoring students to study abroad was also problematic due to the risk of brain drain
- 8. The fact that, culturally-speaking, many parents were uncomfortable sending their daughters to live alone overseas. [209]

11.6. Initial Period (4 to 5 years)

- The initial group of Qatar campus personnel was hired from the main campus.
- The Wild West approach created tension with the main campus. Recruiting faculty proved significantly more challenging than anticipated and struggles would remain despite various fixes.
- Sense of entrepreneurism and lack of rules and standardization
- Early decisions were seemingly good decisions at the time and were driven by issues of an immediate nature.
- There was a general lack of strategic planning and long-term vision driving decisions but, as many participants suggested, everything was new, so there was virtually no previous knowledge on how to start such a project.
- Unsurprisingly, some early decisions would prove to be shortsighted and carry unanticipated consequences.
- TAMUQ personnel had little top-down oversight and main campus policy and procedures were often ignored.
- Lack of connection and control from the main campus stemmed from early leadership challenges on the Qatar campus.
- At least some staff were following main campus policy and procedures, but they made adjustments along the way without documenting or communicating the changes back to the main campus.
- Like the personnel operating almost entirely independent from the main campus, this approach also proved problematic because several years later, once the Qatar campus started aligning

- more closely with the main campus there was a lack of documentation explaining why decisions and processes were made and modified.
- We all took on every possible role. Early faculty and staff seemed genuinely committed to the success of the Qatar campus and were willing to contribute in any number of ways, stretching well beyond what they were hired to do. [209]

11.7. Challenges of Recruiting Faculty

- Recruiting qualified faculty for the Qatar campus would prove even more challenging than anticipated. A primary strategic goal of the Qatar campus was to maintain the academic and student experience as close as possible to the main campus.
- Hiring faculty from the main campus was an area of strong agreement between Texas A&M and the Qatar Foundation in the inception and early years.
- The initial hiring model was to bring main campus faculty to Qatar on a rotating basis for a semester or year at a time and to hire a core group of faculty (as many as possible from the home campus) that would stay in Qatar for a longer term.
- If faculty were constantly rotating, they would not develop a commitment to the Qatar campus' mission, and students would not have the opportunity to build consistent, ongoing faculty connections.
- Attracting faculty from the main campus has proved more difficult than originally anticipated.
- TAMUQ has relied heavily on hiring faculty without teaching experience on the main campus, which has caused some discontent for both A&M and the Qatar Foundation.
- Over time what happens is that TAMUQ started looking for hired guns. People with no
 relationship to the university but are looking for a nice post. We do have quite a number of
 staff who have had some main campus ties, but almost no faculty anymore who have main
 campus ties.
- Once you start just hiring international faculty they may be teaching the same course but they're not, it's not the same cultural affect.
- Qatar Foundation wants TAMUQ to increase the number. Currently, only 15 percent of the TAMUQ faculty have experience on the main campus, and in the new ten-year agreement, QF added a goal of 50 percent. According to one senior-level administrator an increase this significant would be almost impossible; however, QF is offering financial incentives to TAMU for every new faculty hire with main campus experience.
- Texas A&M attempted to create incentives to attract faculty beyond personal intrigue. The primary incentive was a salary increase of 30 percent, which proved successful in some cases and not in others. A correlation exists between the importance of this salary increase and academic discipline. Here was a mistake in perception that the 30 percent salary increment would attract people.
- The first two years of the Engineering curriculum consists of general education requirements, which only necessitated liberal arts and science faculty. They proved fairly easy to recruit. For those of us in English, Political Science, we're glad to be here. My salary is probably three to four times higher than it would be in the United States
- It's darn hard to get engineering faculty to come here for a significant period of time. We would love to get somebody to come for a year, or two, or three, but an engineering faculty, especially

one that we want to get to come here, are going to be those that are very active teachers but also very active researchers and so they can't pull up stake and leave their laboratories [in College Station], and we can't really make it possible for them to bring their students here.

- Usually when you get a job as an assistant professor in engineering, your first five or six years are establishing your lab, creating a research agenda, getting enough research done, getting grants/money to fund your lab so that you can get promoted. Your mentors would say it's a bad idea to give up that and go as an assistant professor to Qatar. So when you become an associate professor, you're established, you've probably got five to twenty post docs working for you. You're established and things are cranking, that's also a difficult time to move.
- Other incentives such as housing, car allowances, private schooling for children, annual airfare back to the U.S., and tax protection **proved equally unsuccessful** in convincing engineering faculty to consider long- or short-term appointments in Qatar.
- Qatar campus faculty also receive "resource funding" that can be used on travel for professional development or research related purchases. Again, this incentive is seen as important to liberal arts faculty but **less meaningful to engineering faculty**.
- How many people do you know, whether they're faculty or not, that would go to the Middle East and just live there? I mean it's hot, it's barren, full of religious fundamentalists, and you're going into a culture that not only is so different from yours, in many ways it's antagonistic to yours. So you're looking for a special breed of cat. You're looking for somebody who's looking for an adventure.
- "People want to be close to family and if they're only a four hour plane ride from home that's fine. If they're a 24 hour, 36 hour plane ride from home, it's harder to get people to come."
- The Qatar campus has experienced success in hiring another demographic of faculty—those nearing the end of their career. The financial incentives and opportunity for an adventure has proven attractive to these near retirees.
- Sending faculty to Qatar could weaken a home campus department, so Deans would likely protect their faculty and not encourage them to go overseas.
- Several participants explained that some departments use the Qatar campus as "a dumping ground for underperforming or unpopular faculty, those without a place in College Station."
- In order to increase this percentage, a member of the leadership team developed an **innovative plan** that would allow the Qatar campus to hire qualified faculty from the region regardless of whether they had experience teaching at the main campus by **sending each new hire to College Station for a semester to a year**. This idea generated excitement among the Qatar campus leadership team and was seen as a **viable solution to increasing the percentage of faculty with main campus experience**. At least one main campus administrator from the College of Engineering **agreed this idea had potential**. Unfortunately, U.S. government tax regulations may stop the new plan before it ever starts. The tax implications for sending non-Americans to the United States to work for a short duration are significant and would be a significant deterrent to hiring good candidates. [209]

11.8. No Strategic Planning for Initial 6 Years

Prior to 2009 (2003-09), Texas A&M at Qatar did not have a formal strategic plan. When asked what guided their actions during this nearly six-year period, participants cited a number of

guiding forces. In the early years, staff focused on **establishing the basic university operations** in their respective functional areas such as setting up classrooms, purchasing mechanisms, technology infrastructure, and student enrollment services. When asked what type of strategic planning existed in the early years, a member of leadership team said, "**There was no strategic planning**...**they were just managing day to day and pulling it together**, writing, not even writing policies, just developing practices." Although it might not have been identified as such, some form of strategic planning occurred due to external requirements.

I think until the formal strategic plan came up it was more working off what we needed for accreditation purposes in terms of **ABET accreditation** for engineering programs to be compliant with SACS because that's who accredits us as an institution both in Texas and here and the memorandum of agreement. So those would have been the drivers that would have determined mission, vision and all those things that underpin a strategic plan.

According to one participant, the process of establishing a formal strategic plan corresponded with a shift away from the "Wild West" period to fall in line with main campus policies.

Not surprisingly, some faculty and staff exhibited resistance and questioned the necessity of such a process. A faculty member suggested that some of the early Qatar campus personnel that embraced the "Wild West" mentality were generally uncomfortable with increased direction from the upper-administration. [209]

11.9. Research

From 2006 to 2014, Texas A&M at Qatar invested considerable time and energy in developing research and graduate programs with mixed success.

Texas A&M at Qatar's research program has exceeded expectations by all accounts. Globally, most branch campuses are primarily teaching institutions, but TAMUQ and the other IBCs in Education City have managed to develop robust research programs. The main campus personnel involved in negotiating the initial agreement took a risk in trusting that the Qatar Foundation would follow through and develop a national research program. It would take eight years for Texas A&M and QF to sign an official research agreement, but the numbers indicate it was worth the wait.

Over the past ten years, Texas A&M has been awarded over \$160 million (Rs. 1104 Crore) in research grants through these national programs. This funding covered 190 research projects involving 150 researchers, including faculty, full-time researchers and post-docs

The research program here is extremely robust. For instance, we have [received] like 30 percent of all of the QNRF awards. And we've published more than **50 percent of the papers** that [have] ever been published from QNRF funds

A significant percentage of TAMUQ's faculty and staff are not U.S. citizens and many of them use or have access to American equipment and technology that is classified as sensitive by the U.S. government, which makes the campus susceptible to the "deemed export" rule. In response,

Texas A&M must follow a lengthy application process to obtain special licenses that permit foreign nationals access to technology that is considered sensitive. [209]

11.10. Intellectual Property

Furthermore, Texas A&M takes the position that the agreement "reflects the **partnership** between the Qatar Foundation and TAMUQ" because "without QF there would be no TAMUQ; **QF provides facilities, salaries, and support**; and **TAMUQ provides the intellectual resources**"

The increasingly commercial nature of university research has amplified the need to reevaluate policies related to intellectual property. Texas A&M has negotiated an agreement with the Qatar Foundation that **proved controversial with the other branch campuses in Education City**. Texas A&M essentially agreed that intellectual property resulting from projects funded by Qatar Foundation grants would become **property of QF**. In turn, the Qatar Foundation offered to pay for patent **protection and share a percentage of royalties** with TAMUQ and the faculty inventor. To be exact, the inventor would receive 37.5 percent of the net income generated from intellectual property, TAMUQ would keep 29.2 percent to reinvest in research programs, and 33.3 percent would stay with the Qatar Foundation.

- Faculty, of course, would likely have a different perspective. By accepting a grant from the
 Qatar Foundation, TAMUQ faculty essentially agree that their discovery will be property of
 QF, which means they will lose control over how their innovation is used. For instance, if
 QF determines an invention is not commercially viable, they would likely decide not to
 pursue patent protection and licensing, and the faculty member may have no say in the
 matter.
- That's actually the problem here. People do research for three years and QF says, "what did you do for us?"... We publish papers. Qatar's name is all over the world now. We go and present [Qatar] like ambassadors in conferences, but they cannot show you tangible things, cannot show you a company that is a spinoff [that is generating] so many millions because we did research in Qatar. It's going to be a while before that happens. [209]

11.11. Under Graduate

- Participants from TAMUQ's leadership team were clear that the institution hopes to establish more graduate programs **but struggles to get approval from the Qatar Foundation**.
- Undergraduates are not benefitting from all this research to the extent that they should.
- The administrator went on to provide examples of how the institution was "taxed" by graduate education. Departments providing services to students were expected to assist graduate students without additional staffing or budget increases.
- **To retain our faculty** we have to make sure that they have good research programs and this is why we need the graduate programs.
- I can tell you our best researchers are our best teachers (most of the time). But if you look at the superstars in every program, they're superstars in the classroom, they're superstars in

- research, they're superstars across the board... You eliminate the grad program and the research and our best people leave. Then what happens to your undergrad program?
- In fact, **81 percent of undergraduates are involved in research** according to a participant with access to such information.
- The research money pays for so much other stuff, gives us the opportunity to have instrumentation, equipment, and experience that we wouldn't have that we can bring to the undergraduates.
- TAMUQ used money from the academic budget, which was originally allocated for undergraduate programs, to fund research. Faculty began to receive grant approval as far back as 2006, but the research agreement, which included financial conditions such as indirect cost percentages, was not be signed until 2011. Thus, A&M was not receiving grant money from QF during this interim period, but administrators felt strongly that they needed to start supporting research, so they used money in the budget allocated for undergraduate education. As a result, departmental budgets were cut, a hiring freeze was implemented, and no promotions were offered during this period.
- Teaching University or Research University?: Based on all accounts from faculty and administrators involved in the inception of Texas A&M at Qatar, graduate education and research were a priority from the very beginning. So, where did these staff and faculty get the idea that A&M was designed to be a teaching institution? One interviewee claimed that the original Dean and CEO's vision was to build a great teaching university. The Dean was not part of the negotiations with QF, so perhaps he shifted the vision away from that of the inception team. The idea that TAMUQ was originally intended to be an undergraduate institution may also stem from the fact that teaching-focused faculty comprised a majority of the original staff. Research faculty were not hired in substantial numbers until they were needed to teach upper-level courses, which created some animosity with the teaching faculty who claimed they were not focused enough on students. The idea that TAMUQ should be a teaching university—whether true or not—lives on. This fundamental disagreement could harm the institution. For instance, if faculty and staff are skeptical of research and graduate programs, they are unlikely to support institutional leadership in supporting the strategic direction of the University.
- **Major Problem**: The typical model of most research universities is that the **more** you have faculty that are motivated by the research agenda and publications and so forth, the **less interested they are in undergraduate students**. [209]

11.12. Increased Bureaucracy and Leveling Off

- As the organization develops over time you have the accountants and the other kinds of administrators that come in. You get more layers and layers and layers of rules...... Several years later, the growth of the institution began to level off and systems were largely in place.
- An upper-level administrator agreed that the **so-called "renaissance" people that were necessary in the early years became less helpful over time.** He stated that "some people are good maintainers and some people are visionaries, both are equally important. It's when they come along in the cycle [that matters]." The builders are less comfortable with rigid policies and procedures and felt stifled during the leveling-off period. Staff that were

- accustomed to being "jacks of all trades" were forced to concede to more narrow job responsibilities. As one long term administrator stated, "Used to be where a person would do ten things, now because we're bigger and more people they maybe do three things."
- The excitement of the early years described in the previous chapter faded over time. In the latter years, as TAMUQ reached steady state, enthusiasm faded both internally and on the main campus. [209]

11.13. Difficulties in Scaling

- Qatar campus human resources takes on a variety of additional responsibilities. HR staff in Qatar helps employees find housing, assists families in selecting schools, and advises on the immigration process.
- The initial benefits package was quite extensive and not sustainable as the campus grew. According to one account, the administrators were quite worried about being able to attract faculty and staff in the early years, so they implemented a tax policy to protect American employees that was overly generous.
- You know we only have seven faculty, we only have seven Americans over here and we have a huge budget, [so] it's not that big of a deal, but now you have 150 Americans over here and the **tax bill is high**. Cutting back on benefits is never popular. Over the past several years, the operations staff has had the **difficult task of redesigning benefits packages**. [209]

11.14. Community Engagement: Local Industry

- As we started to establish research relationships with industry [but] they really had no concept...because the local concept was to buy technology from somebody else and use it... Their understanding of us...is [that] we were consultants...not from the idea of research funded by them that would lead to new ideas as opposed to just solving a short-term problem. So it was a long-term education process to make that work.
- Merely educating students is not sufficient: If we don't engage with the community [our] impact becomes very slow because...you graduate 400 engineers in ten years. That's great, but that takes a while for everybody in Qatar to see it. But, if you are in the news or offering short courses, open[ing] your facilities, doing open houses, bringing students from schools to see the campus, you can make the impact quickly because Qatar [has] a small population.
- You look at the universities that fail in the region, it's because they didn't have that relationship where they could make people believe that everybody's winning here. That's part of our engagement struggle is to make sure that we can tell the story of why it's important that Texas A&M is here. It's beyond giving degrees.

But the graduate program agreement with QF was not signed until the fall of 2010—five years longer than anticipated. [209]

11.15. Too Many Masters and Frequent Leadership Changes

The two "masters" discussed most frequently by Qatar campus participants were the **main campus** and the **Qatar Foundation**. Both were described as having significant control over Texas AM University Qatar (TAMUQ) in various areas. Further analysis revealed complex dynamics between each. Other entities with important but less overall influence included

• Main Campus:

- o The President, Provost, and Vice President for research, Dean of the College of Engineering and Departments of Engineering College of main campus.
- o In instances where Qatar campus staff members lacked main campus experience and connections, they were less apt to comply with University policy and procedure.
- O It was only necessary for certain positions to have main campus experience. Specifically, the head of finance and human resources need to have main campus experience; whereas, the heads of information technology and other functional areas can be from anywhere.

• Qatar Foundation:

- Texas A&M's Provost might control the annual management fee once it is received, but the Qatar Foundation decidedly holds the purse strings. The Qatar Foundation fully funds and approves TAMUQ's annual budget and as one participant stated, "he who has the gold makes the rules." In reality, the Qatar Foundation only exerts control over TAMUQ in particular areas, primarily those that impact their bottom line.
 - For instance, QF dictates how many students TAMUQ can admit, financial aid distribution, and the number of full-time faculty and staff positions. Additionally, they cover all costs related to facilities and equipment.
 - On the other hand, "they are very hands off when it comes to the academic programs," according to an upper-level Qatar campus administrator.
 - QF shares a similar relationship to TAMUQ as the Texas Legislature does with the main campus. The Qatar campus administration must negotiate their budget with QF every year and justify any increases. Unlike the Texas Legislature in recent years, one senior-level administrator claimed that QF has "been very very accommodating to budget requests." He went on to say, "[the budget] always has a back and forth, but my experience is that if I can make a good, solid case, they'll pay for things." In exchange, they expect TAMUQ to uphold the quality of the main campus, which is why maintaining the same admissions requirements and curricular standards as the home campus is so crucial. The process of transferring quality is not as straightforward as it sounds.
- O Qatar Foundation people come in and say why are you spending this kind of money on this? So part of what's going on here is that there's not just a main campus versus branch campus struggle, there's also an incredibly serious underground fight that goes on between those who are giving the money, the client and those who are executing the contract.
- o For instance, the significant delay in funding research and ongoing inability to start graduate programs are a direct result of QF's lack of approval.
- o In other instances, QF's expectations conflicted. For instance, TAMUQ faces increasing pressure from the Qatar Foundation to admit a higher percentage of Qatari

- students, but there is a lack of Qatari students that meet the admissions standards that QF insists that A&M follow.
- O Although TAMUQ participants across functional areas continually described their relationship with QF as a partnership, without question, they feel like the lessor partner, as this upper-level administrator noted: We're partners with them, but we're definitely the weaker partner, and we never play up or take advantage of the impact that we're having in this country and they need us. Even in every negotiation they make us feel like we're the worst partner in all of Education City. We're the only ones not doing, where everybody else is already complying with this or that, it's just not true. There are enough of us talking at all different levels to know that we're the ones that give in all the time. And so, sometimes I believe that our administration locally and back on the main campus should take a stronger stand... We never push. We figure out a path around to get it, and it's slower and more frustrating.
- o As part of the push for graduate programs, Texas A&M at Qatar has attempted to start a Ph.D. program—a request that QF has denied. Yet, the institution feels strongly about the need for Ph.D. students to achieve their strategic goals, so they developed a creative solution for the main campus to "accept more Ph.D. students on behalf of Qatar,"

• State and Federal Governments:

- o State of Texas, United States government, and Qatari government
- State policies impact a number of academic related areas as well. State law mandates that TAMUQ offer certain courses, whether or not they are applicable to Qatar campus students and the local context.
- State law also dictates faculty workload matters, including teaching hours and research productivity requirements that the Qatar campus must follow.
- Qatar campus is, obligated to observe the same number holidays or limited to observe the same number of holidays
- o In Qatar is common to "differentiate employee benefits on the basis of gender," according to a senior-level administrator. "So, a female would get something different, less than a male.
- O Qatar has health and safety regulations that must be followed in laboratories.
- Additionally, the State of Qatar has a requirement that researchers must seek local institutional review board (IRB) approval, which has proven to be a significant burden on TAMUQ. Texas A&M does not have a biological expert, which is needed on an IRB focused on engineering and science projects, so they are forced to pay Georgetown—another institution in Education City—to facilitate every IRB approval. This is very expensive and time consuming.

• Local Industry:

- A Qatar campus administrator on the leadership team acknowledged that local industry has "a lot of influence." He went on to say, They don't influence what we do academically, but they are major stakeholders, and we have to keep them happy and so it is somewhat unique in that way. [Industry has] much more [influence] than you would find on a main campus in the U.S.
- o In addition to the significant investment companies spend sponsoring Qatari students' tuition, TAMUQ needs them to hire their graduates. Qatar is a small country with relatively few companies that are considered desirable by TAMUQ engineering graduates, so administrators must maintain good relationships with local industry and

- ensure that graduates are meeting their needs. Without good jobs from these companies, TAMU would no longer be an attractive option for prospective students and application numbers would suffer.
- There are other reasons TAMUQ must appease local industry. As part of the Accreditation Board for Engineering Technology (ABET) requirements, TAMUQ has an industrial advisory board who examines each program and determines whether the curriculum covers topics relevant to local needs.

• Governing Boards

- Texas A&M at Qatar technically answers to two governing boards: the Board of Regents that oversees the main campus and the Joint Advisory Board (JAB), the local governing board for the Qatar campus.
- The Board of Regents "has ultimate control over us" and could technically get involved and "say no to anything that we wanted."
- The Joint Advisory Board is a requirement of the agreement signed between Texas A&M and the Qatar Foundation. Broadly speaking, the JAB approves the annual budget and discusses strategic-level issues such as student and faculty recruitment. the JAB is "primarily responsible for ongoing review and evaluation of the success of Texas A&M at Qatar".
- Accreditation Agencies: Texas A&M at Qatar answers to two accrediting agencies and interview participants involved in academic matters were clear that accreditation was crucial to the success of the institution.
 - The Southern Association of Colleges and Schools (SACS) accreditation is the general accrediting body for Texas A&M University, so as a foreign branch campus, SACS also requires an independent accreditation process for TAMUQ.
 - The second accrediting organization is the Accreditation Board for Engineering and Technology (ABET), which provides discipline specific accreditation for the College of Engineering on the main campus and also requires separate accreditation for the Engineering programs on the Qatar campus. Both accreditation processes occurred several years after the opening of TAMUQ in 2003—ABET will not accredit schools until they have graduates.
 - The State of Qatar does not currently require that TAMUQ participate in any form of local accreditation. Other countries in the Gulf, like the United Arab Emirates, do require that foreign institutions comply with local accreditation requirements.

Another challenge in working with the Qatar Foundation is their lack of stability and consistency. Due to **frequent leadership changes** and shifting priorities, QF's expectations tend to shift year to year. A Qatar campus administrator explained: What we did for them last year they may want something different this year. They make a promise, then new people come in, they don't remember that promise. So, you have to be quick on your feet to work with them because they're always changing. [209]

11.16. Teaching and Learning

How would the A&M experience translate in another culture? It turns out, as the literature suggests, that TAMUQ faced a series of complex issues that boil down to the tension between adaptation and replication.

11.16.1. Curriculum

"It's part of the agreement with the Qatar Foundation that we will offer the same curriculum that we have on the main campus," noted a Qatar campus academic administrator. Similarly, an administrator from the main campus stated emphatically that the Qatar campus curriculum was identical to the main campus. These claims are misleading and to fully understand the TAMUQ curriculum requires a close examination at exactly how the curriculum is implemented on the Qatar campus.

- Based on the demands of local industry, the chemical engineering program determined that students did not need the life science courses required in College Station, so they were removed from the Qatar curricular requirements. The Qatar campus does have the freedom to make this type of change but not independently. They must receive approval from the main campus through the chemical engineering curriculum committee. This contractual stipulation conflicts with TAMUQ's accreditation standards, which require that faculty have certain "levels of freedom...and autonomy to make curriculum decisions".
- Since Qatar campus students struggle more with writing in English than speaking in English, a required public speaking course was substituted for a technical writing course.
- In contrast, as a public institution Texas A&M is required by Texas state law to offer several courses, which must be available on the Qatar campus and cannot be substituted. These four courses include the infamous Texas History course, which is part of a requirement that public institutions in Texas must offer two courses in political science (one state and one federal) along with two courses in U.S. history. Though these courses cannot be substituted for a topic more relevant to Qatar campus students, faculty are encouraged to engage students in comparative discussions. [209]

11.16.2. Course Content

Some illustrations were adjusted to align with local industry.

- For instance, a senior Qatar academic administrator shared that a classes covering energy related topics would likely focus on the process of converting natural gas to liquid, which is the primary petrochemical operation in Qatar.
- Similarly, certain learning illustrations that would be helpful for American students may not be understood by Qatar campus students. Humorously, one faculty member was surprised to discover when sharing a classroom illustration that his students had never heard of income taxes because the State of Qatar does not have federal, state, or local income taxes.
- Another participant felt that explaining engineering concepts required less adaptation than other disciplines because the focus is on teaching technical knowledge and processes that are largely the same whether in the U.S. or Qatar.

• In contrast, a business administration course taught in Qatar would likely need significant modifications in order to reflect the local business mores. [209]

11.16.3. Pedagogy

- Another faculty member in social sciences with significant teaching experience in Qatar said
 that certain adjustments were necessary since English was most students' second language. He
 explained that "what would take an average U.S. kid an hour or two to read would take [Qatar
 campus students] four or five hours." In order to keep the workload manageable in courses
 with heavy reading, this lecturer provides more direction regarding the concepts he wants
 students to focus on.
- Second faculty member in Liberal Arts expanded on the challenges of teaching second language learners in Qatar. He was accustomed to teaching international students from East Asia on the main campus: [East Asians] learn [foreign languages] the way Americans do. You get a book, you study the language, you learn to read the language, but you don't have very good speaking skills. It was **completely the opposite when we came to Qatar**, so the way we all had to approach our teaching was much different than we had done before. We were used to Chinese and Korean students who could read our textbooks but couldn't explain anything in class. They could read the books, they could do their work in the chemistry labs, but they could not say a word to us. **But here they could talk, but they could not read a thing**.
- When students are told to focus on certain concepts within readings they may miss the depth
 of learning that results from reading the full text. Furthermore, when instructors tell students
 explicitly what they should grasp about concepts, they may be less likely to develop critical
 thinking skills.
- Academic freedom is another concern that has the potential to impact the classroom experience
 at foreign branch campuses. This is certainly a potential issue in Qatar where laws exist that
 restrict freedom of speech.
 - o For example, an art instructor at Virginia Commonwealth University in Qatar must decide whether to use historically important artwork that would be **potentially controversial** with students and families.
 - o Georgetown's School of Foreign Service in Qatar has more potential challenges to academic freedom due to the sensitive nature of **international affairs**. For instance, criticizing Qatar's royal family could lead to serious consequences for an individual faculty member and the institution.
 - o Students had raised cultural and political concerns in the past that TAMUQ administrators had to address. In an **engineering ethics course**, for instance, students **opposed the idea of being taught ethics because their Islamic faith defines ethical values**. TAMUQ responded by explaining that the institution was not trying to change students' religious values, but universal professional guidelines exist that engineers are expected to follow. In other words, they explained to students that engineering ethics is not about morals; it requires understanding the "rules of appropriate behavior for engineers in the professional context... and [students] can figure out how you make your social customs and your religion fit into that scenario." Apparently, it took considerable time to help students understand this concept, but it is no longer an issue.
 - o Students complained about a discussion on gender roles in an Anthropology class.

 Pressure from students or faculty's own sensitivities to local laws and customs may persuade them to adjust how they explain certain concepts (at best), or convince them to drop entire subjects (at worst). [209]

11.16.4. Student Learning, Development, and Support

- As this comment suggests, **student learning is connected to cultural expectations**. A majority of Qatar campus students—Qatari and non-Qatari—live with their families and in a culture with strong familial values, students face strong pressure to participate in family related activities such as weddings and other social gatherings. Families are often quite large, which leads to greater number of potential commitments.
- TAMUQ's **student demographic consists of a variety of nationalities** and Qatar has a range of **schooling options with different curricula, norms, and levels of quality**. Many families send their children to international schools that follow the same curriculum as their home country. For instance, Indian families send their children to Indian schools and Egyptian families send their kids to Egyptian schools.
- As part of Texas A&M's agreement with the Qatar Foundation, they **must admit a certain percentage of Qatari students**, which is currently around **50 percent**. Fulfilling the quota requires admitting some students that are not sufficiently prepared to be successful at TAMUQ, so the institution developed the Aggie Gateway Program, which is a bridge program designed to supplement students' secondary education. These students "come in with a contract that if they don't pass their courses they will be dismissed from the university,"
- TAMUQ students have an extensive network of academic support structures at their disposal. There is a **centralized tutoring operation** called the **Office of Academic Supplemental Instruction Services (OASIS)** that provides students free access to professional- or peertutoring assistance. Additionally, courses have **significantly more teaching assistants** (TAs) than on the main campus "because of the need to support the second language learner,"
- Students' privileged upbringing and Qatar's social stratification leads to other more serious issues. In Qatar, social stature is strongly correlated with nationality. Qataris are typically the most privileged, followed by Western expats. Arabs from less wealthy countries and most expats from South Asia work in jobs that Qataris and Westerns generally would not consider taking (e.g., service or manual labor jobs). Not surprisingly, problems arise in the classroom when faculty come from nationalities that students consider "lower class."
- A different faculty member stated that "there's a lot more **race and ethnicity issues** that play into the teacher student relationship than we give credit for, and this region is a bargaining culture." [209]

11.16.5. Teaching Development

An administrator on the Qatar campus leadership team admitted that TAMUQ should consider offering faculty development opportunities but argued that it would be **difficult to achieve** due to the **small size of the institution**. He said that the branch campuses in Education City have discussed the idea of opening a joint center on teaching excellence, but the Qatar Foundation funding model would **prohibit** this from occurring because **budgets are allocated to individual branch campuses** and would **prohibit hiring someone to work across campuses**. In spite of

budget challenges, in practice, a joint center of teaching excellence would be difficult to establish due to each institution's varying expectations around teaching and learning. [209]

11.17. Experiences of TAMUQ: Student Services and Campus Life

Unlike the academic side of TAMUQ, student affairs did not face the same pressures to replicate the student experience outside the classroom. Thus, the story of designing and structuring student affairs and campus life is heavy on adaptation.

- Additionally, a majority of the leadership team came with purely academic administration
 experience, so they may not have fully understood or appreciated the value of student affairs.
 Although the Qatar Foundation wanted TAMUQ to recreate the same quality and rigor of the
 main campus, the student affairs side was not on their radar in the early years.
- Most of Texas A&M's student traditions were derived from its military history, many of which
 would not be culturally appropriate or meaningful, and potentially controversial on the Qatar
 campus. Therefore, student affairs administrators needed to decide which traditions to
 encourage and how to adapt them, all while honoring their original meaning.
- Each year as our student enrollment grew our most active [students] continued to be **not the Qatari** students. Qatari students have especially demanding **family commitments** that may not permit time to be involved in co-curricular activities. Additionally, many Qatari families are **religiously conservative**, so the prospect of men and women interacting together on evenings and weekends—a frequent meeting time for student organizations—is uncomfortable and frowned upon. Classrooms are mixed gender as well, but attendance is necessary for academic success; whereas, involvement in campus life is optional and thus discouraged. [209]

Chapter 12: Case Study - Learn a Lesson from Failures: GMU UAE, MSU Dubai, NYU & UNSW Singapore

12.1. Failure of USA IBC: George Mason University at UAE

12.1.1. Persian Gulf Region and Opening of IBC of USA's George Mason University at UAE

- In 2005 UNESCO reported that the Middle East and Arab region as "the least research-and-development-intensive area in the world"
- The Gulf region has less restrictions, regulations, and government oversight on its spending than China and other Asian countries and therefore is more inviting to universities hoping to branch out.
- The emirates of the Persian Gulf are providing funding, having mostly stable government and a safer environment than other areas in the Middle East.
- The Persian Gulf region also revels in its differences from the Middle East around freedom of speech, intellectual capacity, and expression, and has been less strict on regulating foreigner's dress, cultural norms, and gender roles.
- The region has seen a strong influx of foreigners, from areas such as Asia, Europe, Africa, and throughout the Middle East.
- Local governments and NGOs of this region are interested to expand and build upon the region's capacity with hopes of becoming the region's education and intellectual capital.
- Reports estimate recent annual spending on cultural and education fronts at nearly \$20 billion. [188]

All of these examples are reasons drawing American and other universities to the region.

The opening of George Mason University's United Arab Emirates branch campus was regarded as one of the most promising United States educational ventures to begin in the Persian Gulf and Middle East region. Agreements with local and world organizations gave George Mason the opportunity to open a state of the art, world-class campus for full-time students in the Persian Gulf, with the opportunity for the students to transfer to the Virginia main campus, as well as eventual study-abroad opportunities in the Persian Gulf for full-time United States students. [188]

The campus was designed to first offer four-year undergraduate degrees in business, information technologies, nursing, and pharmacy, later adding a two-year master degree in business administration and undergraduate programs in engineering. It would also offer programs through its revolutionary Center for Conflict Analysis and Resolution, the first of its kind in the region. [188]

- Dubbed GMU-RAK (George Mason University Ras Al Khaimah), the school was given approximately **200 acres** near the Emirates Highway
- Agreements with RAK also included the **fully funded and constructed state of the art, world-class campus**.
- Governing body composed of **three** full-time George Mason staff and **three** full-time members of the RAK Human Development Foundation (RAK-HDF).
- The campus was awarded a 'free trade zone' status.
- As a joint venture, and with George Mason overseeing the academics, RAK-HDF had full
 oversight of the campus's budget, infrastructure, salaries, and operating costs. RAK-HDF, a
 collaboration of the region's governing body and a private firm, the ETA Ascon Group, sought

to add to the educational and academic climate of the region but also viewed the branch campus as a monetary investment. [188]

Let's analysis the possible causes of failure.

12.1.2. Poor Planning and Feasibility

George Mason's short stint in the Middle East may serve as one of the best examples of a failed international branch campus, as well as **poor planning**. The university's branch campus in the United Arab Emirates announced its closing just three short years after its official opening and without a single graduate to show for the time, money, and manpower invested. Its nursing program only enrolled two students and had to be shut down before it even began. George Mason University-RAK's temporary vice president Zaid Ansari may have summarized it best: "It's no joke. Anybody who wants to open up a campus here **needs to take a reality check**. We have learned three lessons – **feasibility, feasibility, feasibility**". [188]

Programs were developed and implemented without any prior research or understanding of requirements or need in the region. Having to pull the plug on the campus a mere three years after its founding clearly creates questions in the style, organization, funding, planning, and general consensus of an overseas campus. [188]

12.1.3. Major Issues

Opened a branch campus in Ras Al Khaimah (UAE) Extensive planning & forethought went into this venture Open four years (2005-2009) Only had three years of academic instruction Why did they close? Unexpected 'contractual change' shifted the financial burden Enrollment targets were never met The Aftermath: Students could transfer to the home institution or continue through distance education.

Fig. 12.1: GMU-RAK: Reason for closure [221]

Three issues are the basis of the university's failure

- o Slow enrollment growth
- Funding problems
- o A disagreement with the UAE's government concerning funding

Other areas presenting troubles were with

- Administration
- Academic standards
- School identity

Prior requirement analysis was needed like

- o Prior research of requirements, needs, funding, and control
- o A better hand on marketing, academic programming and communication with the school and program [188]

12.1.4. More Profit

Investors wanted more profit than the university was providing and sooner than the university had expected. [188]

12.1.5. Funding and Disagreements

Much of the university's failure could be traced to problems with funding and disagreements with the Emirates' government that also helped to financially support the campus. George Mason's agreement included the college name brand, academic programs, and support yet it actually provided **none of the startup costs**. The UAE campus was founded with the understanding that **within five years, it would be self-sustaining and fully supported and funded by tuition.** [188]

12.1.6. Initial Problem

Problems began within the first academic year, including a **failure to compensate** professors and employees of the school on time at the closing of the spring semester, with checks, vacation days, and travel expenses home. [188]

12.1.7. Campus Infrastructure

The campus planned and agreed upon between GMU and the UAE government never actually came to fruition; instead, classes were held in prefabricated buildings not even located on the allotted 200 acres, as there were problems running electricity and water through the dunes. Students in the region hoping to attend a transplanted American university instead saw a sheepishly constructed and organized small school. [188]

12.1.8. Low Enrollment Issue

Despite much excitement and press in both the region and the United States about the opening of the campus, **only 30 students enrolled** in the 2005 opening. Only 180 students enrolled at the campus in 2008, far short of the 2000 hoped within the first five to ten years of its opening.

• As for enrollment troubles, George Mason University housed its RAK admissions at home base Fairfax, Virginia, where admissions counselors seemed to not have an understanding of the structure, styles, and culture at the foreign campus.

- George Mason attributes the low numbers to **poor marketing**, and revealed that in hindsight the school should have had control of the marketing from the very beginning.
- Additionally, the university and the UAE and Edrak administrations disagreed whether the student body should be comprised of local students or expatriates.
- The university was also one of the only foreign [American] schools in the Middle East to require SAT scores of incoming students regardless if they had taken international equivalent testing, even though the SAT is not a requirement of many European and Middle Eastern schools.
- George Mason University also required the same TOEFL score the standard test of English as a foreign language as it did for its campuses in the United States, even though the branch university was based in a region of the world where English is not a main or common language.
- Problems with enrollment of students may have been due to the complex procedure with having main campus George Mason in charge of admissions. To maintain credibility in the academe, GMU almost had to require students to meet the same standards overseas as at the home campus – including SAT scores and English skills and comprehension. Yet doing so seemed easier on paper than in reality.
- All of these issues provide additional disconnects from the region, and seemed to discourage students from attending or even applying. [188]

12.1.9. Consequences of Low Enrollment

Low enrollment numbers upset Ed-RAK (RAK Education Company), which then tried to change hiring and reporting within the branch campus. [188]

12.1.10. Flailing Economy and Economic Crisis

With the flailing economy, Ed-RAK also decided to cut its funding from nearly \$8 million to approximately \$6.5 million, while raising expectations of the university to increase its incoming enrollment from then 180 to 300 for the following year. Such cuts in the budget would also effect the educational agreements and standards of the university and its branch campus, adding tensions between the university and its partners. [188]

Economic crisis in the past few years were partly to blame for the tightening of funding for George Mason University's branch campus. [188]

12.1.11. New Vice President Issue

The funding body Ed-RAK decided **to cut funding** of the university and not support the hiring of a new Vice President, continuing to add conflicts and tension between the school and its partners.

Additionally, Ed-RAK attempted to change agreements on academic reporting, which could have ruined agreements with and **canceled the university's accreditation** through the Southern Association of Colleges and Schools (SACS). Ed-RAK insisted on hiring a new academic dean, and having he or she report directly to the funding organization instead of the school's Provost Stearns.

The countries in the Persian Gulf seem to be "driving things from the top". [188]

12.1.12. Local Accreditation

However, as much of the attention that the university paid to maintaining its own accreditation, it did not take into consideration local accreditation and academe outlook. [188]

12.1.13. Lack of Need and Requirement of Region

George Mason's nursing program took nearly three times as long as other nursing programs in the UAE region. [188]

12.1.14. More Expensive

Students at branch campuses in the Persian Gulf might be **more expensive** than actually bringing the students to the college's United States campus. Creating branch campuses was the most expensive approach to expanding education. [188]

12.1.15. Faculty: Not Having Experience of Main Campus

It's also hard to offer a degree supposedly equivalent to the main campus when none of the professors at the branch are from or have experience at the main campus. Creating a transplant campus in the Persian Gulf should include curriculum as well as teaching styles and attitudes, but in fact, no professors from Virginia transferred or even expressed interest in transferring to the United Arab Emirates branch. A staff member at the RAK campus summarized by questioning why the college was actually branching to the UAE in the first place. [188]

12.2. Failure of Australian IBC: University of New South Wales (UNSW) Singapore

12.2.1. About UNSW

- Officially launched in late January, the institution, Asia's first foreign comprehensive university, was originally designed to accommodate as many as 15,000 students by 2020, with stakeholders expecting approximately 300 to enroll during this inaugural semester. [214]
- UNSW Asia, the Singapore-based campus of Australia's University of New South Wales, has announced that after only a few months in operation, it will close its doors at the end of the semester on 28 June 2015. [214]
- Singapore's Economic Development Board paid the university about \$80 million to set up the campus and the university had drawn down just under a quarter of the grant. [214] [219]
- UNSW Asia was to be Asia's first foreign comprehensive university, and many in the international community are questioning whether the closure **might affect Singapore's bid to become a regional centre of higher education excellence**. [214]

Let's analysis the possible causes of failure.

12.2.2. Weak Enrolment Projection

The unexpected closure is largely due to **weak enrolment projections**, which reportedly have made the institution financially unsustainable. UNSW's apparent **failure to understand Singapore's student market** which is perhaps the most compelling factor to have contributed to the closure of the Asian campus. [214]

12.2.3. Unable To Subsidize the Costs

UNSW was **unable to subsidize its costs** even with the high tuition fees being charged by the institution. With fees ranging between approximately US\$17,000 and US\$19,000 per year, UNSW Asia fees were roughly four times more expensive than those being paid by subsidized students at Singapore's local institutions. [214]

12.2.4. Difficult to Get Part-Time Jobs

The government revealed earlier this year that foreign graduates who receive Singapore government scholarships and are bound to work in the city on graduation, were **taking longer to find jobs**. This had led to 'repayment holidays' that weigh on the public purse. [215]

12.2.5. Job Scarcity: Local Hostility towards Immigrants

The climate has changed in the past two years and now there is **rising local hostility towards immigration as jobs have become harder to find**, in part due to slowing economic growth. [215]

12.2.6. Tightening of Regulations on Foreign Institutions

A **tightening of regulations on foreign institutions** has led to a number of international institutions shutting down, while others have abandoned Singapore, finding their operations unviable once Singaporean subsidies ended. [215]

12.2.7. High Cost of Living

Singapore is now one of the **most expensive countries globally** to obtain an undergraduate degree once the high cost of living in the city state is taken into account. **Foreign student numbers have fallen as fees have been rising** – and at a much faster rate than those for locals. [215]

12.2.8. High Cost of Construction

The university had also balked at the **high cost of building a campus in Singapore**, for which it said at the time it would require loans of S\$140 million at 2007 prices. [220]

12.2.9. Operational Cost Increased

In November last year, Tisch Asia, New York University's arts school, shut its Singapore branch, reportedly because of huge deficits due to **high running costs**. [215]

12.2.10. Currency Exchange Rate

Lim clarified in his parliamentary answer last week: "Tisch Asia was established on the basis that it would be financially sustainable after a few years. "However, over time the school realized that its revenues were lower than projected while its costs exceeded earlier projections, mainly due to exogenous factors such as **the appreciation of the Singapore dollar against the US dollar** and **the Singapore construction boom in 2007**." [220]

12.2.11. Geographical Proximity between Two Countries

Indeed, with the expensive tuition fees being charged, students may well have chosen to pursue their studies in Australia, especially given the **geographical proximity between the two countries**. For this reason, rather ironically, UNSW Asia may have been more appealing had it been the initiative of a UK- or US-based institution, or a **country more geographically distant from Singapore** itself. The importance of geography thus seems to be a lesson learnt, as students appear to consider a geographic destination as much as they do a 'brand' name when choosing an institution. [214-216]

12.3. Failure of USA IBC: New York University's Tisch School at Singapore

12.3.1. About Tisch Asia

Tisch Asia, a graduate film and creative arts school in Singapore that is a branch of New York University's Tisch School of the Arts, this month announced that it would close, possibly in 2014. [217]

Tisch Asia, New York University (NYU)'s first campus abroad and also the first graduate arts school in Singapore, will close by 2015 after a series of financial crises and administrative problems over its five years of operation, according to an article by The Nation entitled "Anatomy of a failed campus: what happened at NYU's Tisch Asia?" [218]

In the last few years, NYU has been trying to expand its global presence by opening numerous brand campuses abroad such as in Abu Dhabi, Shanghai, and Singapore, under the NYU's Global Network University program. The establishment of this program aimed to create "portal campuses", bringing access to new knowledge, sharing intellectual experiences, and most importantly, preparing students to be global citizens. One of the several countries with which NYU currently has a partnership with, Singapore is undoubtedly one of its most supportive associates. With a history of almost 140 years under British colonial rule, Singapore has a large diversity of languages, cultures, and religions composed by Malay, Chinese, and Indian ethnicities. English is

selected as common language for business and politics. With these unique features, Singapore encourages diversity and internationalization in education, especially at post-secondary levels. Since 2002, the Singaporean government has worked with the Global Schoolhouse initiative, establishing numerous educational policies favoring international cooperation to attract foreign partner institutions and students. These policies include different types of financial assistance such as subsidies and loans for international and private programs' operations. [218]

Let's analysis the possible causes of failure.

12.3.2. Flawed Business Model

Experts in Singapore said the problem lay with a flawed business model, based on offering the same as what it offered students in New York, at New York prices. [217]

12.3.3. Need of UG Programs

Tisch Asia offered Masters Degrees in film, animation, media producing and dramatic writing, among other non-degree-granting programs. The school did not have an undergraduate program, which typically provides the funding to sustain graduate programs. [215-217]

12.3.4. High Tuition Fees

With tuition fees close to S\$55,000 (US\$45,000), Tisch Asia has for some time had difficulty attracting local students, with most of its student body from overseas looking to experience Asia. [217]

12.3.5. Lack of Creative Industries in Singapore

Another problem is a lack of creative industries in Singapore itself. "The arts are still struggling to gain a real presence in Singapore," Singh said, adding that the kind of work placements and internships common in New York were simply not available in Asia, so the institution could not provide a comparable experience for students as a 'Hollywood of the East'. [217]

12.3.6. Better Specializations but Failed to Attract Students

And there is a view that at postgraduate level, there is a need for a more academic element to attract students in Asia. Local arts institutions such as La Salle College of the Arts in Singapore may not provide the same level of intensity or specialization as Tisch Asia, but have been successful in recruiting students, experts noted. It provides degrees in collaboration with overseas institutions such as London University's Goldsmiths College, and includes a film school named for David Puttnam, a renowned British filmmaker. Singapore's main universities also provide fine arts degrees, though with more theoretical content than the Tisch model, which turns out practitioners. According to Singh, an alliance with a local university with an academic reputation "would have calmed parents" about the merits of a fine arts education and led to higher enrolment. It would also have reduced set-up costs and financial risk. [217]

12.3.7. Unacceptably High Expenses

Despite the willingness of the MOE to forgive NYU's current debt to Singapore and even grant several more million dollars to Tisch Asia, this potential partnership failed due to high demands from NYU's headquarter, represented by President John Sexton. As mentioned in the article, President Sexton demanded \$40 million "upfront as a cash advance just to talk and discuss the possible collaboration". He also wanted the MOE to carry all expenses of the future undergraduate program, pay taxes for using NYU brand name, as well as subsidize \$8 million per year for the existing graduate program in Tisch Asia. Considering these unacceptably high expenses, the Singaporean parliament rejected the collaborative proposal with NYU, leading to the closure of Tisch Asia. [218]

12.3.8. Needs to Consider Carefully the Long-Term Partnership Plan

It is clear that every educational institutions having the so-called "global ambition" needs to carefully consider their long-term partnership plan before opening any programs abroad. "Outsourcing education", therefore, should be considered an important move with both opportunities and challenges, rather than a simple follow-up step of the growing trend of globalization. [218]

12.4. Failure of USA IBC: Michigan State University Dubai

Michigan State University's branch campus in Dubai closed after a two-year effort to create a toptier university. At the time of the campus' establishment, the institution hoped to enroll 400 students by its second year, however, the total number of their enrollment was 85. Michigan State University's president, Lou Anna K. Simon, stated that even though they offered the similar undergraduate program as their American campus and hoped to attract the same type of students, the university had to close its doors due to Dubai's financial meltdown which started few weeks after the branch opened its doors in the Dubai International Academic City due to low enrollment rates and lack of qualified students. Michigan State University was founded through the support of Dubai Holding; a company owned by the Dubai ruling family and founded on a \$5 million loan and grants. MSU's 5 year strategic plan meant that they had to attract between 100 to 200 undergraduate students for each incoming class in order to sustain the five academic programs they were offering. However, during the last months of its operation, it had become clear to administrators that the campus was not able to operate and survive with 85 students across five programs. Therefore, once the university applied to the UAE's National Research Foundation for funds, and was turned down, they reduced their tuition rates by 50% to students who were willing to transfer from other Dubai-based universities. Of the 220 students that applied, only 20 qualified academically. With only 20 students, MSU was unable to survive and applied for a \$3.4 million loan to Dubai Holding, which was declined and the university finally closed down. [265]

While the Dubai financial meltdown had a negative impact on Michigan State University's success, its competitors claim that the institution's failure was due to high tuition rates and the absence of a local track record. The Dubai economic recession did cause some loss of jobs, but mainly amongst younger expatriates in their 20s and 30s who worked in real-estate and

construction, not the mid-level executives and older expatriates who have university age children. The Michigan States University's Dubai campus tuition was \$16,000, which was approximately 23% higher than Heriot-Watt and Wollongong universities. Other universities such as the American University of Sharjah and the American University of Dubai have higher tuition, but they are able to attract a large number of students since they are full campuses offering a variety of academic programs and student service (Mills, 2010). One of the factors that caused the closure of Michigan State University in Dubai was the financial problems the institution was facing in its home campus in the United States. A decline in state revenues, programs cuts, escalating tuitions and frozen salaries, meant that the university couldn't sustain the struggling campus' operation in the Middle East. [265]

Chapter 13: Final Words: War for Talent & Shifting Battle Ground - India Can Become Top Most Player for Hosting IBCs

"India must stop being so defensive. The time for excuses is over. It must embrace the internationalization of higher education, and judge its universities against established global performance indicators"; This was the resounding message that emerged from India's Ministry for Human Resources

Development and Planning Commission, at a "National Policy Dialogue" on university rankings and research evaluation on 23 May 2013, co-organized by the Times Higher Education World University Rankings, Thomson Reuters and the British Council. [311]

13.1. Indian Government: Not Encouraging IBC Activities

IBC are formally **not legal in India**. Legislation to permit their establishment has been stalled in Parliament for more than two years... No doubt many Indian universities have been **dissuaded** from IBC ambitions by the UGC's tough words and media coverage of unapproved operations. [208] [231]

The University Grants Committee, a buffer organization between government and institutions, has been concerned about all manner of branches and franchising, both domestic and international. Much activity is said to go on without the necessary UGC approval, and the organization has gone back and forth between trying to accommodate and shut down unapproved IBCs. Mauritius is a case in point, where the branch campuses or other activities of five Indian institutions, despite being approved by the Mauritius Tertiary Commission, were said by UGC to lack approval in India. This appears to have led to the closure of one branch campus- Eastern Institute for Integrated Learning in Management (EIILM) although the institution is still listed as approved by the MTC. Non-approval is not a mere technicality- any graduate wanting to work in India might find their degree deemed worthless...There is a final strange twist to this tale. Ministry officials recently pointed out that no IBC, approved or otherwise, may offer an Indian degree. This is consistent with the fact that no Indian IBC known to the Observatory emphasizes any kind of formal standing in India, instead citing local approvals. Yet it is odd for India on the one hand to try to control IBC activity but on the other make it impossible for any Indian institution to actually export an Indian degree. Rather than as an annoying distraction, the Indian government might be better off viewing IBCs as valuable innovation, building new affinities for far-flung Indian communities and developing precious cross-border expertise. If India actually encouraged IBCs, using a robust but clear regulatory framework, the gains might start to outweigh the risks. Such an approach might also throw a different light on the potential benefits of IBCs in India itself. It will be interesting to see how India regulates the Mumbai campus of SP Jain Australia. [252]

13.2. India: 5th Largest Player for Hosting IBC

In spite of resistance from Government agencies, **India is a 5**th **largest player** in terms of hosting international branch campuses. [231]

Source Countries	2009	2011
JS	78	78
Australia	14	12
JK	13	25
-rance	11	27
ndia	11	17

Table 13.1: International Branch Campuses (IBC) [71] [193] [194] [231]

SN	Indian IBC Players (Old and New)
1.	Manipal University
2.	BITS Pilani
3.	Institute of Management Technology (IMT) Ghaziabad
4.	SP Jain
5.	IIT-Bombay
6.	IIM Indore
7.	Sri Guru Granth Sahib World University
8.	Dr. D Y Patil Medical College
9.	IIT (Delhi) Research Academy
10.	Bharati Vidyapeeth Deemed University
11.	University of Pune
12.	Mahatma Gandhi University
13.	JSS Mahavidyapeetha
14.	Madurai Kamaraj University
15.	Vellore Institute of Technology University
16.	National Law School of India
17.	Jaipur National University
18.	IIIT-Banglore
19.	Prist International University
20.	University of Petroleum and Energy Studies
21.	Anna University Chennai

Table 13.2: Indian IBC Players (old and new) [208] [253]

13.3. Favorable Environment for Rapid Growth of Hosting Indian IBCs

13.3.1. Huge Demand for International Education



Fig. 13.1: IBC Growth [221]

Adding these to the 37 already identified suggests an increase in the number of IBCs worldwide of 20% (to more than 240) over the next two years. [235] [254]

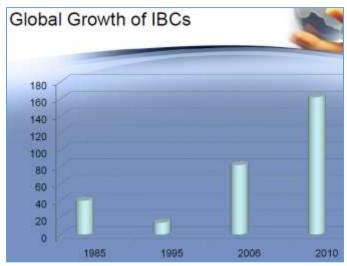


Fig. 13.2: Global growth of IBC (1985-2010) [221]

13.3.2. Indian Faculty: No Dearth of Expertize

Indian Americans comprise 3.1 million people, representing around 1% of the U.S. population as of 2013. [185]

More than 60 percent of foreign-born scientists and engineers in the United States in 2009 were from Asia, according to Census Bureau data analyzed by PRB. Nearly one-fourth were from India, with another one-fifth from China, the Philippines, and Taiwan. That is, **15% US Scientist and Engineers are from India**. [186]

13.3.3. More Students at IBC than International Students at Home Countries

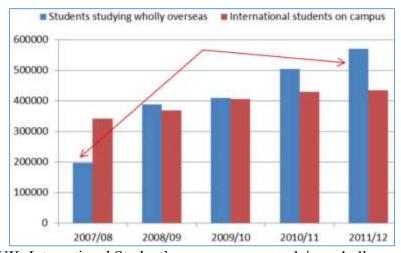


Fig. 13.3: UK: International Student's on-campus vs studying wholly overseas [200]

Today, more number of students are studying at IBC than international students on campus. The above diagram shows this fact.

13.3.4. 'Balance of Trade' in International Student Mobility

The following diagram shows the entire picture of international student mobility. The international student mobility of China and India is in negative direction i.e. students are moving abroad.

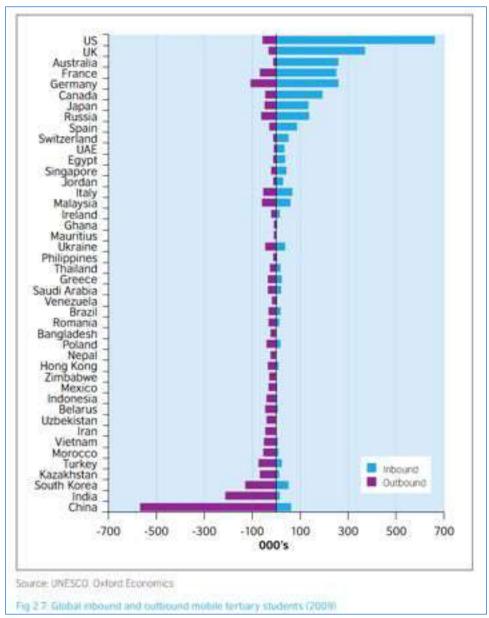


Fig. 13.4: 'Balance of Trade' in International Student Mobility: [298]

13.3.5. Crowded Home Market

A crowded home market is encouraging some institutions to expand abroad. **Shobha Mishra Ghosh of FICCI**, a business lobby group in Delhi, notes that there are a number of private university groups with the "deep pockets" to expand abroad—as a number of them are now doing. The home market is expanding rapidly—by some estimates, as many as 42m Indians may be in

further or higher education by 2020. But the field is crowded: more than 35,000 colleges and 700 universities vie for students. So it makes sense also to **pursue the 28m people of Indian heritage who live abroad**, and the 200,000 Indians who go overseas to study each year. [309]

13.3.6. If there is Demand, then Indian Institutes Can Pay Rs. 20 Million per Annum Pay Package

Best Practices: Success Story of Kota

- Out of the total number of students who made it to the IITs last year (2011), nearly 2,500 of the selected ones were coached in Kota, which makes the success rate of Kota a double-digit 10% as against the national success rate of just about 3%.
- It is estimated that over 20,000 of the total 1.5 lakh successful candidates who qualified for the next level JEE (Advanced) exam were from Kota (2015).
- "The amount spent by IIT aspirants attending the coaching factories is estimated to be around Rs 2,000 crore, which is four times the annual budgetary allocation of the government for the IITs,"
- Kota slowly and steadily grew to be the National Coaching Capital. Kota has transformed from an industrial town to an educational one. Kota have created an eco-system that supports an entire city. It's not only the coaching classes, but ancillaries like accommodation, canteens, cybercafés, stationery shops etc., that earn revenues from students.
- 1.5 lakh students undergoing coaching for medical and engineering entrance exams in Kota
- Currently, there are more than 150 coaching centres, big and small, concentrated in this city of two million people.
- The annual pay package of a teacher ranges between Rs 15 lakh to Rs 50 lakh and may go up to Rs 2 crore in the case of a star teacher. Etoos poached 11 teachers from Resonance at an annual salary closer to the Rs 1 crore mark.
- In many Kota houses you will notice the board, 'To-let for Students only'. This is clearly a city that has been very welcoming to its students.
- When students are admitted to the institute, they start at the same level. Subsequently there are review tests (RTs) and the students are segregated into various batches based on their performance. Batches are named A0, A1, A2, A3, A4, B1, B2, B3 and so on. The teaching methodology is different for all these batches.
- Jai Bhahadur Lal, an owner of a local mess, recollects a time when Kota was nothing more than a small industrial town. "Coaching was an alien concept few years ago. There were no hostels or fancy buildings. The town was barren except for a few residential colonies. JK Synthetics was the largest employer here. When it closed down in 1996, many engineers decided to stay on and start tutoring students. Some of them were from the IITs themselves and as their students started to get through the IITs, their popularity grew, and with it, the local economy," says Lal.
- One such entrepreneur was VK Bansal, an IIT-Delhi graduate who is diagnosed with muscular dystrophy, a degenerative disease without a cure. He started teaching students in his own dining room (1985). Today, Bansal Classes has 11 centres across the country and has recently started its own engineering college. Following Bansal's example, RK Verma, an IIT-Madras graduate, set up Resonance. The institute has recently partnered with HCL to set up 100 coaching centres around the country. Then came JC Chaudhry, graduate of BITS- Pilani, who set up Aakash and quickly expanded to own 96 study centres and 125 exam centres around India. K Goel, another IIT-Delhi graduate, started FIITJEE. And suddenly there was no stopping the industry. Allen Career Institute, Brilliant Tutorials, Career Point, Career Launcher, Paradise, IIT-ians Pace—all came up within two years with one single intention: to rope in as many engineering aspirants as they could. [158-172]

The Kota, Rajasthan has emerged as a National Coaching Center of India. The above table shows the mind-blowing facts about Kota. This table shows that, if there is a demand then institutes can offer Rs. 20 Million per Annum package to attract good faculty. If Indian coaching centers can do such miracles, the Indian IBCs can do wonders.

Saudi Arabia is paying huge packages to attract global faculty. India can also follow the same route.

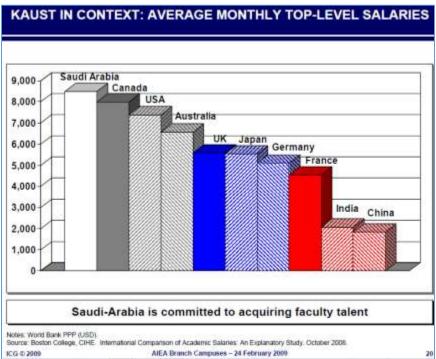


Fig. 13.5: Average monthly top level salaries offered by various countries [245]

13.3.7. Easy Way for Students with Paying Capacity

Indian rich kids with poor grades are an attractive market for Indian institutions' foreign campuses, says Mrs. Ghosh FICCI. An undergraduate course might cost \$13,000 a year in Dubai, triple the rate at an Indian campus. But it may be easier to get on to. [309]

Vinod Bhat, vice-chancellor of the Manipal Group, a chain of six universities, says 60,000 would-be doctors compete for just 190 places each year in the group's mother institution in the southern Indian state of Karnataka; but competition is less fierce at its medical school in Pokhara, in Nepal. [309]

Ranendra Narayan Saha, who runs the Dubai campus of the Birla Institute of Technology and Science, Pilani (BITS-Pilani) also concedes that foreign branches attract rich Indians who would not make it at home. It opened its Dubai branch in 2000 and plans to grow from 1,800 students to 2,500 in four years. Most are Indians, many of them studying engineering or biotechnology, though he wants more diversity. [309]

Mr. Bhat of Manipal, "you have to have the will to look at the world as your market"—while not forgetting the main prize back home. [309]

13.4. FICCI Report 2014 on Indian IBC

HEIs given the high capital expenditure involved

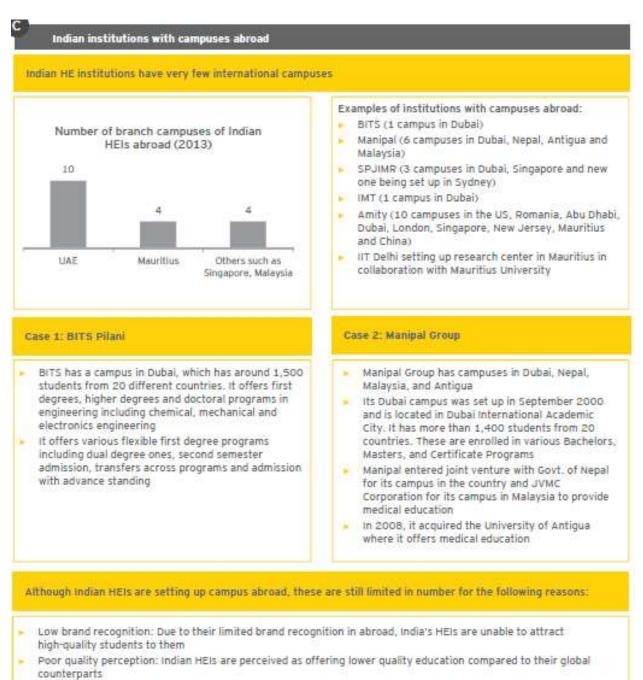


Fig. 13.6: FICCI Report on Indian IBC 2014 [313]

High cost of setting up campuses: Setting up campuses abroad is not a commercially viable option for several Indian

13.5. War for Talent: Shifting Battle Ground

Today is the era of "War for Talent" and the "Battle Ground" is shifting. It calls for new strategies and more attention towards the process of Internationalization.

"India must stop being so defensive. The time for excuses is over. It must embrace the internationalization of higher education, and judge its universities against established global performance indicators"; This was the resounding message that emerged from India's Ministry for Human Resources Development and Planning Commission, at a "National Policy Dialogue" on university rankings and research evaluation on 23 May 2013, co-organized by the Times Higher Education World University Rankings, Thomson Reuters and the British Council. [311]

13.6. Quality through Internationalization and Not through Over Regulated Mechanism

The growth of Higher Education System in most of the developing and underdeveloped nations has been hampered by three major factors.

- 1. Selection Process of Vice Chancellors and Leaders of Higher Education
- 2. Funding Model
- 3. Internationalization, Quality of Education and Regulatory Mechanism I have already covered the first and second factors in my book namely "Secrets of Success of IIIT Model: Can Rejuvenate & Ignite Engineering Education in India". I would like to highlight the third factor, which is a burning issue for the third world nations.

Globalization is an automatic and natural process, which can't be stopped. Whereas Internationalization can be controlled or restricted through laws of the region. The Internationalization and Globalization can replace the old regulatory mechanism by new world order or International regulatory mechanism.

Many underdeveloped and developing countries sincerely trying to improve the quality of education through regularity mechanism. Every coin has two sides. They may get partial success to improve the quality of higher education. But highly regulated Higher Education Sector can pave the way for malpractices and can be slowly converted in to "License Raj". The Internationalization is the biggest enemy of regulatory mechanism. The process of internationalization partially reduces the control of regulatory mechanism over higher education sector. The regulatory mechanism can't stop globalization but strongly resist the process of internationalization to protect their interest. The regulatory mechanism can slowdown almost every internationalization processes except the Cross Border Higher Education Activities, especially IBC. If regulatory mechanism of any country try to control IBC activities then private higher education players of that country can adopt the intelligent route through any other favorable country. Ultimately the internationalization of higher education provides healthy competitive environment and will improve the quality of higher education, which is a goal of every nation. The purpose of this book is to attract the attention of thousands of private higher education players, spreaded all over the world, towards altogether new way of enhancing the internationalization of higher education sector through IBC.

13.7. In Near Future, India can become One of the Top Most Player for Hosting IBCs

The Indian Government could not focus on Internationalization of Higher Education; neither International students and faculty nor IBC. In spite of this, the Indian IBCs are growing. The Indian IBCs are generating huge revenue from IBC. Anand Sudarshan, CEO of Manipal Global, told that "Manipal Global now earns roughly **two-thirds of its revenue from international branch campuses**". [251]

Fortunately the environment for opening IBC is quite favorable for Indian Players.

- There is a Huge Market Potential and Demand for International Education.
- In India, ample amount of human talent is available.
- Crowded home market is encouraging some institutions to expand abroad.
- Many Indian Private Players are expanding their horizon by opening branches across the India. There is a substantial cultural and legal variations in different States of India. This experience can help them to open IBC at Host Country.
- Every player in Indian private education sector is searching new avenues for revenue generation.

Under such situation, within few years, if proper guidance is available, then there will be exponential growth of Indian IBCs throughout the world and India can become one of the Top Most Player for Hosting IBCs.

References

- 1. India Myanmar Relations Chat With Ambassador Rajiv Bhatia, http://voiceof.india.com/india-myanmar-relations-a-critical-review
- 2. Dr. Amrita Dey Fellow, Maulana Abul Kalam Azad Institute of Asian Studies Kolkata, India, "China, US Factor in India and Myanmar Relations", http://rcsd.soc.cmu.ac.th/web/Burma/download.php?filename=paper-Amrita%20Day.pdf
- 3. Narender Kumar, "Border Management with Myanmar: A Strategic Imperative", http://www.claws.in/images/journals_doc/1607981726_NarenderKumar.pdf
- 4. Gottschlich, Pierre (2015), New Developments in India–Myanmar Bilateral Relations?, in: Journal of Current Southeast Asian Affairs, 34, 2, 139–163, http://www.burmalibrary.org/docs21/Gottschlich-2015-%20New_Developments_in_India.pdf
- 5. India–Myanmar relations Wikipedia, https://en.wikipedia.org/wiki/India%E2%80%93Myanmar_relations
- 6. Suparna Banerjee, "India and Myanmar: A model of 'working relation", 16 March 2015 http://indiaspeaksnow.com/india-and-myanmar-a-model-of-working-relation/
- 7. Burmese Indians Wikipedia, https://en.wikipedia.org/wiki/Burmese_Indians
- 8. India Myanmar Relations, http://www.mea.gov.in/Portal/ForeignRelation/Myanmar_2015_07_20.pdf
- 9. A History of the Burmese Conflict: Why People Flee Burma, https://bippaw.wordpress.com/2012/03/02/a-history-of-the-burmese-conflict-why-people-flee-burma/
- 10. Report on the IIE Myanmar Initiative, "Investing in the Future: Rebuilding Higher Education in Myanmar", http://www.iie.org/~/media/Files/Corporate/Publications/Rebuilding-Higher-Education-in-Myanmar.pdf
- 11. Myanmar Wikipedia, https://en.wikipedia.org/wiki/Myanmar
- 12. 2015 Myanmar floods, https://en.wikipedia.org/wiki/2015_Myanmar_floods
- 13. Foreign relations of Myanmar, Wikipedia, https://en.wikipedia.org/wiki/Foreign relations of Myanmar
- 14. Economy of Myanmar Wikipedia, https://en.wikipedia.org/wiki/Economy_of_Myanmar
- 15. Burma, http://www.heritage.org/index/country/burma
- 16. Highlight of this issue: Myanmar Update 2014, Nexia Pulse, 2014, http://www.nexiats.com.sg/index.php?page=Nexia_TS_Nexia_Pulse_Myanmar_Update_2014
- 17. Myanmar GDP Per Capita PPP, http://www.tradingeconomics.com/myanmar/gdp-per-capita-ppp
- 18. List of countries by GDP (PPP) per capita, https://en.wikipedia.org/wiki/List_of_countries_by_GDP_(PPP)_per_capita
- 19. Indonesia's GDP and FDI success story, http://growingcapacity.blogspot.in/2013/05/indonesias-gdp-and-fdi-success-story.html
- 20. Myanmar Profile, http://www.eastbysoutheast.com/country-profiles/myanmar-profile/
- 21. Introduction to doing business in Myanmar, http://www.charltonslaw.com/hong-kong-law/introduction-to-doing-business-in-myanmar/

- 22. Myanmar Services Sector Analysis, http://www.intracen.org/uploadedFiles/intracenorg/Content/Exporters/Sectors/Service_exports/Trade_in_services/Myanmar_ServicesSectorBrief.pdf
- 23. Shyam Narsaria, "Myanmar the Golden Land", http://www.slideshare.net/ipga/myanmar-the-golden-land-mr-shyam-narsaria
- 24. Myanmar gets \$34.2 billion foreign investment in 25 years, http://eu-myanmar.org/myanmar-gets-34-2-billion-foreign-investment-25-years/
- 25. Myanmar 2014/15 FDI swells to \$8.1 bln govt agency, http://www.reuters.com/article/myanmar-investment-idUSL3N0WR25Q20150325
- 26. Dr Thin Thin Kyi, "Foreign Direct Investment In Myanmar", http://www.burmalibrary.org/docs21/Economic%20Development/Thin-Thin-Kyi-2015-Foreign Direct Investment in Myanmar-en.pdf
- 27. Carriers soup up networks as new rivals come knocking, http://asia.nikkei.com/Business/Trends/Carriers-soup-up-networks-as-new-rivals-come-knocking
- 28. Southeast Asia (Sea) Digital In 2015, http://www.slideshare.net/dinhledat/southeast-asia-sea-digital-in-2015-q4-wearesocials
- 29. Health in Myanmar Wikipedia, https://en.wikipedia.org/wiki/Health_in_Myanmar
- 30. Foreign Direct Investment, <a href="http://www.indiaembassyyangon.net/index.php?option=com_content&view=category&id=21_<emid=137&lang=en">http://www.indiaembassyyangon.net/index.php?option=com_content&view=category&id=21_<emid=137&lang=en
- 31. India-Myanmar Relations, http://www.mea.gov.in/Portal/ForeignRelation/Myanmar_May-2014.pdf
- 32. India-Myanmar Relations, http://www.mea.gov.in/Portal/ForeignRelation/Myanmar_2015_07_20.pdf
- 33. Ground Breaking Ceremony for MIIT at Mandalay, 17th June 2014, http://www.mea.gov.in/Portal/CountryNews/2482_PRESS_RELEAS1.docx
- 35. India-Myanmar Relations, http://byjus.com/free-ias-prep/india-myanmar-relations
- 36. Myanmar Bilateral brief, http://www.mea.gov.in/Portal/ForeignRelation/Myanmar_Bilateral_brief_for_website.pdf
- 37. India Myanmar Relations, http://www.gktoday.in/india-myanmar-relations/
- 38. Press Information Beruau, Government of India, http://pib.nic.in/newsite/mbErel.aspx?relid=96493
- 39. India Myanmar: New Trade Relations, http://www.simplydecoded.com/2013/06/11/india-myanmar-new-trade-relations/
- 40. India's 'Look East' Policy Begins with Myanmar, http://thediplomat.com/2014/11/indias-look-east-policy-begins-with-myanmar/
- 41. India-Myanmar Economic Relations, http://ris.org.in/pdf/India%20-w20Myanmar%20Cooperation%2012April2012%20BN.pdf
- 42. Indian Ambassy at Yangon, www.indiaembassyyangon.net
- 43. Higher education in Myanmar, Wikipedia, https://en.wikipedia.org/wiki/Higher_education_in_Myanmar
- 44. 8888 Uprising, https://en.wikipedia.org/wiki/8888_Uprising

- 45. Currency, exchange rates and banks. http://www.go-myanmar.com/currency-exchange-rates-and-banks
- 46. Bringing cash (USD or Euro) or use ATM in Myanmar?, https://www.tripadvisor.in/ShowTopic-g294190-i9408-k7575553-
 Bringing cash USD or Euro or use ATM in Myanmar-Myanmar.html
- 47. Myanmar, http://wikitravel.org/en/Myanmar
- 48. Dr. Ramasami Presentation "India Decade Of Innovations 2010-2020 Roadmap", Oct 2010, http://www.industry.gov.au/science/internationalcollaboration/Documents/DrRamasamiPresentation.ppt
- 49. Antti Hautamäki, Research professor Director Agora Center University of Jyväskylä FINLAND, "Smart cities as platforms for building innovation hubs", BIT's 1st Annual International Conference of Emerging Industry -2013, Shenzhen, China, 6-7 Nov 2013, http://www.slideshare.net/AnttiHautamaki/smart-city-hautamaki-final
- 50. Steve Blank, "Why Facebook is Killing Silicon Valley", 21 May 2012, http://steveblank.com/2012/05/
- 51. VC Investment by region, http://www.aei-ideas.org/2013/05/cloning-silicon-valley-do-governments-know-how-to-create-entrepreneur-and-innovation-clusters/0506cluster/
- 52. Cleantech Innovation Learning from the Proximity of Silicon Valley Ecosystem, 27 Nov 2013, http://www.eai.in/blog/2013/11/cleantech-innovation-learning-from-the-silicon-valley-ecosystem.html
- 53. Business Cluster Wikipedia, https://en.wikipedia.org/wiki/Business_cluster
- 54. Birol Mercan, Deniz Göktas, Economics Department, Konya University, Turkey "Components of Innovation Ecosystems: A Cross-Country Study", International Research Journal of Finance and Economics, ISSN 1450-2887 Issue 76 (2011), http://blog.ub.ac.id/arifhidayat/files/2012/06/Components-of-Innovation-Ecosystems.pdf
- 55. Robert D. Atkinson, "Understanding the U.S. National Innovation System", The Information Technology and Innovation Foundation (IITIF), June 2014, http://www2.itif.org/2014-understanding-us-innovation-system.pdf
- 56. Dr. Charles W. Wessner, Director, Technology & Innovation, The National Academies of Sciences, USA, "Fostering Knowledge & Innovation An Overview of the United States Innovation System", Innovation & Competitiveness Practitioners Workshop, Istanbul, Turkey, 19 April 2004, http://siteresources.worldbank.org/EXTECAREGTOPKNOECO/Resources/CWessner.ppt
- 57. By Vasily Ryzhonkov, "Demand is the cornerstone of successful Innovation Ecosystem", 4 Aug 2013, http://worldbusinessincubation.wordpress.com/2013/08/04/demand-not-the-infrastructure-is-the-cornerstone-of-successful-innovation-ecosystem/
- 58. Nita Sachan, Indian School of Business, Biocon Cell for Innovation Management, Hyderabad, India, "Enhancing Private Sector Investment in R&D, Technology and Innovation", ISB, http://ksiconnect.icrisat.org/wp-content/uploads/2013/05/Final-Enhancing-Private-Sector-Investors.pdf
- 59. "Land O'Lakes CEO Identifies Innovation as Key Success Factor", 13 April 2010, https://www.landolakesinc.com/utility/news/investor/ECMP2-0118560
- 60. Antti Hautamäki, Research professor Director Agora Center University of Jyväskylä FINLAND, "Smart cities as platforms for building innovation hubs", BIT's 1st Annual International Conference of Emerging Industry -2013, Shenzhen, China, 6-7 Nov 2013, http://www.slideshare.net/AnttiHautamaki/smart-city-hautamaki-final

- 61. Research Professor Antti Hautamäki University of Jyväskylä, Innovation ecosystems as platforms for innovative SMEs, http://www.cliqproject.eu/filebank/334-
 Innovation_ecosystem_as_an_innovation_platform_for_innovative_SMEs.pdf
- 62. Presented to Parliament by the Secretary of State for Business, Innovation and Skills, UK, "Innovation and Research Strategy for Growth", Department for Business, Innovation and Skills, UK, Dec 2011, http://dera.ioe.ac.uk/13141/1/Innovation_and_research9780101823920.pdf
- 63. Silicon Valley Trip, http://facweb.cs.depaul.edu/yele/Course/Silicon/index.html
- 64. Media of Myanmar, https://en.wikipedia.org/wiki/Media_of_Myanmar
- 65. Press Freedom, https://freedomhouse.org/report/freedom-press/2015/myanmar
- 66. Burma/Myanmar: Its Conflicts, Western Advocacy, and Country Impact https://sites.tufts.edu/reinventingpeace/2013/03/25/burmamyanmar-its-conflicts-western-advocacy-and-country-impact/
- 67. Sino-Myanmar Relations: Analysis and Prospects, http://www.international-relations.com/CM7-2WB/Sino-Myanmar.htm
- 68. The Influence of Domestic Issues on Myanmar's Foreign Policy: A Historical Perspective , http://nbr.org/publications/element.aspx?id=739
- 69. Universities that set up branch campuses in other countries are not colonisers, http://theconversation.com/universities-that-set-up-branch-campuses-in-other-countries-are-not-colonisers-46289
- 70. Empires and allies, TIMES Higher Education, https://www.timeshighereducation.com/features/empires-and-allies/421485.article
- 71. Colleges go abroad with branch campuses, http://www.usatoday.com/story/news/nation/2013/11/14/colleges-go-abroad-with-branch-campuses/3189495/
- 72. China setting up first university campuses abroad, http://www.arabnews.com/news/455548
- 73. Surge in students studying for UK degrees abroad, http://www.theguardian.com/education/2013/feb/15/surge-in-students-studying-for-uk-degrees-abroad
- 74. "Manipal Education to Set up Manipal International University (MIU)", Telegraph India Newspaper, http://www.telegraphindia.com/external/display.jsp?mode=details&id=24798
- 75. "Manipal Mulls Campus in China", Edu Tech Leader Magazine July 2012, pp. 5
- 76. Charu Bahri, "Global Ambition Local Mooring", Edu Tech Leader Magazine June 2012, pp. 15-24
- 77. International branch campus, https://en.wikipedia.org/wiki/International branch campus
- 78. Qatar Culture & Traditions, http://qatarcultureandtraditions.blogspot.in/
- 79. Roots of American universities grow deeper in Qatar, drawing criticism, http://gulfnewsjournal.com/stories/510548507-roots-of-american-universities-grow-deeper-in-qatar-drawing-criticism
- 80. Qatar Universities, http://welcomeqatar.com/qatar-history/qatar-universities/#close
- 81. U.S. Colleges with Foreign Campuses, http://www.pbs.org/now/shows/420/foreign-campuses.html
- 82. Jane Knight, University of Toronto, "Education Hubs: A Fad, a Brand, an Innovation?", Journal of Studies in International Education, Nuffic, Vol. 15(3), pp. 221–240, 2011, http://quic.queensu.ca/resources/training/files/Education%20Hubs%20A%20Fad,%20a%20Brand,%20an%20Innovation.pdf

- 83. Alan Dessoff, "Asia's Burgeoning Higher Education Hubs", National Association of Foreign Student Advisers (NAFSA), Association of International Educator, July-Aug 2012, http://www.nafsa.org/_/file/_/ie_julaug12_asia.pdf
- 84. "10 Cities Becoming Education Destinations", 15 Aug 2012, http://www.thebestcolleges.org/10-cities-becoming-education-destinations/
- 85. "Sri Lanka as an Education Hub for International Students: The Road Ahead", Report No. 50 South Asia: Human Development Unit, Jan 2012, http://siteresources.worldbank.org/INTSOUTHASIA/Resources/50_Sri_Lanka_as_an_Education_Hub_for_International_Students.pdf
- 86. "Education cities, knowledge villages, schoolhouses, education hubs, and hotspots: emerging metaphors for global higher ed", Global Higher Ed, 16 April 2008, http://globalhighered.wordpress.com/2008/04/16/metaphors/
- 87. Educational Hubs, Global Higher Education, http://www.globalhighered.org/edhubs.php
- 88. Mun-Heng Toh, "Internationalization of Tertiary Education Services in Singapore", ADBI Working Paper Series, Asian Development Bank Institute, October 2012, http://www.adbi.org/files/2012.10.12.wp388.internationalization.tertiary.educ.singapore.pdf
- 89. Universities Look East, Fueling Branch-Campus Boom, http://world.time.com/2012/08/27/universities-look-east-fueling-branch-campus-boom/
- 90. Campus life HERIOT WATT University Dubai, http://www.hw.ac.uk/dubai/campus-life.htm
- 91. Exporting the Ivory Tower, http://fpif.org/exporting-the-ivory-tower/
- 92. IIM Indore UAE Campus makes its presence felt in Dubai, http://insideiim.com/iim-indore-uae-campus-makes-its-presence-felt-in-dubai/
- 93. Heriot-Watt University Malaysia (HWUM), http://postgraduate.my/branch-campus/heriot-watt-university-malaysia-hwum
- 94. Monash University Malaysia, http://www.studysea.eu/universities-abroad-that-teach-in-english/southeast-asia/monash-university-malaysia/
- 95. Swinburne University of Technology Sarawak Campus, http://www.swinburne.edu.my/about/about-swinburne-sarawak.htm
- 96. Will international campuses in South Korea help secure country's first Nobel prize? , https://www.timeshighereducation.com/news/will-international-campuses-south-korea-help-secure-countrys-first-nobel-prize
- 97. American Uni in Korea S. Korea Branch of George Mason University Opens in Songdo, http://www.businesskorea.co.kr/english/news/politics/3604-american-uni-korea-s-korea-branch-george-mason-university-opens-songdo
- 98. Demographics of Myanmar Wikipedia, https://en.wikipedia.org/wiki/Demographics of Myanmar
- 99. Ranking of IIITs in India by the Ignite Engineers team through internal surveys and opinions based on the data available in the internet. No external surveys have been conducted to prepare the same, http://www.igniteengineers.com/ranking-of-iiits-in-india/
- $100. \ \ Myanmar's \ \ Energy \ \ Sector, \ \ \underline{http://www.crossroadsmyanmar.com/focus/myanmars-energy-sector}$
- 101. Bringing more electricity for the people of Myanmar, http://www.worldbank.org/en/news/feature/2013/09/24/bringing-more-electricity-for-people-of-myanmar
- 102. Burma's power supply problems hurt growth, http://www.bbc.com/news/business-24470644

- 103. Electricity problems persist despite progress, http://www.mmtimes.com/index.php/business/9182-electricity-problems-persist-despite-progress.html
- 104. Mandalay power plant deal signed, http://mizzima.com/business-domestic/mandalay-power-plant-deal-signed
- 105. The Banking & Financial Services Sector in Myanmar, https://www.kpmg.com/SG/en/IssuesAndInsights/ArticlesPublications/Documents/Advisory-FS-The-Banking-Financial-Services-Sector-in-Myanmar.pdf
- 106. Special Economic Zones in Myanmar, http://www.aseanbriefing.com/news/2013/06/28/special-economic-zones-in-myanmar.html
- 107. Thilawa Special Economic Zone (SEZ) and the Japanese investment in Myanmar, Feb 2014, http://myanmarreport2014feb.blog.fc2.com/blog-entry-3.html
- 108. Myanmar pins growth ambitions on new economic zones, http://asia.nikkei.com/magazine/20131121-Hang-on,-Yangon/Cover-Story/Myanmar-pins-growth-ambitions-on-new-economic-zones
- 109. MICTDC, http://www.mictdc.com.mm/about-us/
- 110. Decades-old bets in Myanmar's tech industry finally reap rewards, http://www.computerworld.com/article/2497774/windows-pcs/decades-old-bets-in-myanmar-s-tech-industry-finally-reap-rewards.html
- 111. Information and Communication Technology (ICT), http://www.crossroadsmyanmar.com/focus/information-and-communication-technology-ict
- 112. Science competes for attention in Myanmar's reforms, http://www.scidev.net/global/science-diplomacy/feature/science-competes-for-attention-in-myanmar-s-reforms.html
- 113. Dr. Ko Ko Oo, Myanmar Minister of Science and Technology, Pays Courtesy Visit, http://www8.cao.go.jp/cstp/english/highlights/20150318.html
- 114. METI has formulated the Myanmar Industrial Development Vision, 2015, http://www.meti.go.jp/english/press/2015/0703 06.html
- 115. Industrial Development In Myanmar: Prospects and Challenges, http://www.burmalibrary.org/docs14/Industrial_Development_in_Myanmar_Prospects_and_Challenges-balanced.pdf
- 116. Myanmar to expand tax breaks for foreign businesses, http://asia.nikkei.com/Politics-Economy/Polity-Politics/Myanmar-to-expand-tax-breaks-for-foreign-businesses
- 117. Foreign business not turned off by knock-offs, http://www.mmtimes.com/index.php/business/16271-foreign-business-not-turned-off-by-knock-offs.html
- 118. Client Alert, http://www.pillsburylaw.com/publications/protect-your-intellectual-property-rights-in-myanmarburma--key-steps-to-take-now
- 119. Myanmar (Burma) Laws, http://www.internationaltradecomplianceupdate.com/blog.aspx?entry=326
- 120. Hope in Myanmar, https://www.insidehighered.com/news/2013/07/25/signs-home-higher-education-myanmar
- 121. Burma's universities open for business but still seeking academic autonomy, http://www.theguardian.com/higher-education-network/blog/2013/feb/13/international-partnerships

- 122. Nepal, Sri Lanka, and Myanmar Look to U.S. Higher Education after Years of Conflict, http://wenr.wes.org/2014/07/nepal-sri-lanka-and-myanmar-look-to-u-s-higher-education-after-years-of-conflict/
- 123. Cost of Living in Myanmar, http://www.numbeo.com/cost-of-living/country-result.jsp?country=Myanmar
- 124. Mandalay, https://en.wikipedia.org/wiki/Mandalay
- 125. Myanmar opens stock exchange as rehabilitation continues, http://www.cnbc.com/2015/12/07/myanmar-launches-the-yangon-stock-exchange.html
- 126. Myanmar Railways, https://en.wikipedia.org/wiki/Myanmar_Railways
- 127. Myanmar pharma sector expected to grow 10-15%, http://www.nationmultimedia.com/business/Myanmar-pharma-sector-expected-to-grow-10-15-30238674.html
- 128. Fabrice Hénard, Leslie Diamond, Deborah Roseveare, "Approaches to Internationalisation and Their Implications for Strategic Management and Institutional Practice", http://www.oecd.org/edu/imhe/Approaches%20to%20internationalisation%20-%20final%20-%20web.pdf
- 129. Extending the campus, KPMG, https://www.kpmg.com/BE/en/IssuesAndInsights/ArticlesPublications/Documents/extending-campus.pdf
- 130. List of countries by GDP (PPP) per capita, http://en.wikipedia.org/wiki/List_of_countries_by_GDP_(PPP)_per_capita
- 131. The World Factbook list of developed countries, http://en.wikipedia.org/wiki/The_World_Factbook_list_of_developed_countries
- 132. Developed country, http://en.wikipedia.org/wiki/Developed_country
- 133. Phil Baty is editor, Times Higher Education Rankings, "BRICS still finding building blocks", http://www.timeshighereducation.co.uk/world-university-rankings/2013-14/world-ranking/analysis/brics-still-finding-building-blocks
- 135. Frederick E. Allen, "Why Great Innovations Fail: It's All in the Ecosystem", Forbes, 3 May 2012, http://www.forbes.com/sites/frederickallen/2012/03/05/why-great-innovations-fail-its-their-ecosystem/
- 136. Ron Adner, "Case study: The ecosystem behind innovation", http://www.ft.com/intl/cms/s/0/b438457a-7ca8-11e1-9d8f-00144feab49a.html#axzz3DsYi0try
- 137. Ron Adner, Associate Professor of strategy and management at Insead in Fontainebleau, France. "Match Your Innovation Strategy to Your Innovation Ecosystem", Harvard Business Review, April 2006, http://hbr.org/2006/04/match-your-innovation-strategy-to-your-innovation-ecosystem/ar/1
- 138. Katie Jacobs, "Bright sparks: Leadership innovation at General Electric", 25 Sep 2014, http://www.hrmagazine.co.uk/hr/features/1146977/bright-sparks-leadership-innovation-electric
- 139. Business Ecosystem Design, http://www.slideshare.net/janschmiedgen/business-ecosystem-design

- 140. Introduction: Business ecosystems come of age, http://dupress.com/articles/business-ecosystems-come-of-age-business-trends/
- 141. Myanmar GDP, http://www.tradingeconomics.com/myanmar/gdp
- 142. India is now a \$2-trillion economy, http://www.thehindu.com/business/Economy/india-is-now-a-2trillion-economy-says-world-bank-data/article7380442.ece
- 143. Myanmar maintains position on list of world's least developed countries, http://www.mmtimes.com/index.php/national-news/12459-myanmar-maintains-position-on-list-of-world-s-least-developed-countries.html
- 144. Myanmar Labor Laws, http://www.investinmyanmar.com/myanmar-labor-laws/
- 145. Jinyoung Park, "Labour Laws in Myanmar", Asian Labor Update, May 2014, http://www.amrc.org.hk/sites/default/files/field/alu-article/files/ALU%202014%20%2383%20-%20Labour%20Laws%20in%20Myanmar.pdf
- 146. Financial Inclusion in Myanmar: 10 Things You Should Know, http://www.cgap.org/blog/financial-inclusion-myanmar-10-things-you-should-know
- 147. Feasibility Study Establishing a Branch Campus for International Students, http://www.fdu.edu/webresources/doccenter/vancouverfeasibility040930.pdf
- 148. Developing International Education Hubs in Asia, http://wenr.wes.org/2015/07/developing-international-education-hubs-asia/
- 149. Herman E. Daly, University of Maryland, "Globalization versus internationalization- some implications", 14 July 1999, http://www.uvm.edu/~jdericks/EEtheory/Daly_on_Globalization.pdf
- 150. Walmart, http://en.wikipedia.org/wiki/Walmart
- 151. Corporate & Financial Facts, http://news.walmart.com/walmart-facts/corporate-financial-fact-sheet
- 152. Globalization and Competitiveness of Indian Auto Component Industry, http://kabulpress.org/World5.htm
- 153. Venguswamy Ramaswamy, "Convergence in education: Fading campus boundaries through Technology", White Paper, Tata Consultancy Services, http://www.tcsion.com/dotcom/TCSSMB/Download/white%20papers/ConvergenceinEducation-FadingCampusBoundariesthrough_090811.pdf
- 154. Globalization and Higher Education Reforms in Japan: The Obstacles to Greater International Competitiveness, http://www.nippon.com/en/in-depth/a02801/
- 155. Dirk Van Damme, Ghent University, Belgium, "Higher Education in the Age of Globalization", UNESCO Expert Meeting, Paris, 10-11 September 2001, http://www.unesco.org/education/studyingabroad/highlights/global_forum/presentations/van_damme_pp.ppt
- 156. Luciano Galán, The international trade of Higher Education UNICA, http://www.unica-network.eu/sites/default/files/bolognalab_3_Madrid_Complutense.ppt
- 157. Pawan Agarwal, "Higher Education In India The Need for Change", Indian Council For Research On International Economic Relations (ICRIER), June 2006, http://www.icrier.org/pdf/icrier_wp180 higher education in india .pdf
- 158. Kota coaching factory Panic calls: 14-hr days, morning nightmares, http://indianexpress.com/article/india/india-news-india/kota-coaching-factory-panic-calls-14-hr-days-morning-nightmares/
- 159. Inside Kota's IIT factories, India Today Magazine, http://indiatoday.intoday.in/story/inside-kotas-iit-factories/1/455239.html

- 160. The cramming town, http://www.newindianexpress.com/education/edex/article370529.ece?service=print
- 161. How Kota became coaching factory for cracking IIT, http://indiatoday.in/story/How+Kota+became+coaching+factory+for+cracking+IIT/1/67195.html
- 162. How Kota became India's capital for educational coaching, http://www.business-standard.com/article/current-affairs/india-s-garish-free-market-in-education-115123100033 1.html
- 163. In Kota, teachers are rockstars, http://www.livemint.com/Politics/R17a1Mfxzvc9JtUTmsqMmJ/In-Kota-teachers-are-rockstars.html
- 164. The Blockbuster Story of Kota, http://iitandkota.blogspot.in/2014/09/the-story-of-kota.html
- 165. The Kota System: Rs 600 Crore Coaching Industry, http://www.openthemagazine.com/article/nation/the-kota-system-rs-600-crore-coaching-industry
- 166. Revealed: Inside Kota's Rs 300 crore coaching industry, where 1.5 lakh students brave cutthroat competition to crack IIT-JEE, http://www.dailymail.co.uk/indiahome/indianews/article-2313660/Inside-Kotas-Rs-300-crore-coaching-industry-How-students-aiming-crack-IIT-JEE-join-mushrooming-institutes.html
- 167. The dream factories, http://www.businesstoday.in/cover-story/kota-coaching-institutes-brand-iit/story/194170.html
- 168. IIT coaching institute in Kota, http://www.kshitij-iitjee.com/blog/iit-coaching-institute-in-kota
- 169. Coaching Factories Are Dumbing Down The IITs, http://www.outlookindia.com/article/coaching-factories-are-dumbing-down-the-iits/234521
- 170. Success rate of Kota, Delhi and UP students increase in IIT admissions, http://www.embibe.com/100marks/success-rate-of-kotadelhi-and-up-students-increase-in-iit-admissions/
- 171. Education: The tale of Kota, http://articles.economictimes.indiatimes.com/2011-01-05/news/28424579_1_bansal-classes-kota-coaching-classes
- 172. Having it's Kota of success, http://timesofindia.indiatimes.com/city/jaipur/Having-its-Kota-of-success/articleshow/47077227.cms
- 173. Educated and inspired, Myanmar's women take charge, http://asia.nikkei.com/Politics-Economy/Economy/Educated-and-inspired-Myanmar-s-women-take-charge
- 174. Status of Myanmar Women, http://mncwa.tripod.com/mncwa/id8.html
- 175. Women dominate president's scholarship, http://www.mmtimes.com/index.php/national-news/12135-women-applicants-flood-president-s-scholarship-program.html
- 176. Burma Research Society, https://en.wikipedia.org/wiki/Burma_Research_Society
- 177. Data Collection Survey on Education Sector in Myanmar, http://www.cesrmm.org/index.php/en/documents/category/26-other?download=34:cesrphase1surveyoneducationsectorjica-part2
- 178. A Business Plan with a Broadly-Based Research Component for The Proposed University Campus in Lake Havasu City, http://old.havasufoundation.org/extra/bus_pln_draft.doc
- 179. University of Waterloo closes Dubai campus, http://www.theglobeandmail.com/news/national/education/university-of-waterloo-closes-dubai-campus/article5173582/

- 180. Daniel Kratochvil and Grace Karram, "The key to branch campus success lies at home", 2014, http://www.universityworldnews.com/article.php?story=2014110414510190
- 181. 'Chaos and Confusion', https://www.insidehighered.com/news/2015/06/01/report-finds-countries-hosting-universities-other-countries-lack-basic-information
- 182. Report: Transnational education data collection systems, British Council, https://www.britishcouncil.org/education/ihe/knowledge-centre/transnational-education/tne-education-data-collection-systems
- 183. Revealing Review of a Thai Campus, https://www.insidehighered.com/news/2015/04/14/site-review-committee-offers-extensive-recommendations-improving-webster-us-campus
- 184. Enrolment of Indian students in US up by 28%: Report, http://timesofindia.indiatimes.com/home/education/news/Enrolment-of-Indian-students-in-US-up-by-28-Report/articleshow/45162920.cms
- 185. Indian Americans, https://en.wikipedia.org/wiki/Indian_Americans
- 186. More U.S. Scientists and Engineers Are Foreign-Born, http://www.prb.org/Publications/Articles/2011/usforeignbornstem.aspx
- 187. Private universities and branch campuses 'technically insolvent', http://www.universityworldnews.com/article.php?story=20150415055241381
- 188. Branching out: A review of George Mason University's United Arab Emirates branch campus, http://www.academia.edu/1898043/Branching_out_A_review_of_George_Mason_University_s_United_Arab_Emirates_branch_campus
- 189. Shams, F., Huisman, J. (2012), "Managing offshore branch campuses: an analytical framework for institutional strategies", Journal of Studies in International Education, 16(2):106-127, https://www.academia.edu/591637/Managing_offshore_branch_campuses_An_analytical_framework_for_institutional_strategies
- 190. Philip G. Altbach, "The Branch Campus Bubble?", https://www.insidehighered.com/views/2011/07/15/branch-campus-bubble
- 191. Scheme of setting up 20 new Indian Institutes of Information Technology (IIITs) on Public Private Partnership (PPP) modal, http://mhrd.gov.in/sites/upload_files/mhrd/files/upload_document/IIITs-Scheme.pdf
- 192. Headaches for Uclan over foreign campuses, https://www.timeshighereducation.com/news/headaches-for-uclan-over-foreign-campuses/2010068.article
- 193. Managing growth and maintaining standards in international branch campuses, http://monitor.icef.com/2015/02/managing-growth-maintaining-standards-international-branch-campuses/
- 194. Professor Nigel Healey, Pro-Vice-Chancellor (International), Nottingham Trent University "Brave new world: the challenges of managing quality in an international branch campus", 2015,
 - http://www.academia.edu/12271784/_Brave_new_world_the_challenges_of_managing_quality_in_an_international_branch_campus
- 195. Jason E. Lane, Taya L. Owens, Kevin Kinser, "Cross Border Higher Education, International Trade, and Economic Competitiveness A Review of Policy Dynamics When Education Crosses Borders", by ILEAP, CUTS International Geneva and the University of Sussex's CARIS,
 - http://www.academia.edu/17863852/Cross_Border_Higher_Education_International_Trade_

- and Economic Competitiveness A review of policy dynamics when education crosses borders
- 196. Professor Nigel Healey, "Establishing a greater UK TNE presence best practice, challenges and safeguards Understanding international branch campuses", http://www.academia.edu/11355421/Establishing_a_greater_UK_TNE_presence_best_practice_challenges_and_safeguards_understanding_international_branch_campuses
- 197. Professor Nigel Healey, "Managing an international branch campus: dispatches from the front line", http://www.academia.edu/11736058/Managing an international branch campus dispatches from the front line
- 198. Special issue editorial, Journal of Studies in International Education, 2016, Vol. 20, Issue 1, Special issue on transnational higher education, http://www.academia.edu/20269243/Special issue editorial Transnational higher education in the 21st century
- 199. Nigel M Healey, "The challenges of leading an international branch campus: the 'lived experience' of in-country senior managers", http://www.academia.edu/15227089/The challenges of leading an international branch campus the lived experience of in-country senior managers
- 200. Nigel Healey, "The changing global landscape of transnational education", http://www.academia.edu/11409732/The changing global landscape of transnational education
- 201. Nigel Healey, "Universities that set up branch campuses in other countries are not colonisers", http://www.academia.edu/16981034/Universities that set up branch campuses in other countries are not colonisers
- 202. Vicky Lewis, "Embedding marketing in international campus development: Lessons from UK universities", http://www.academia.edu/20291343/Embedding_marketing_in_international_campus_development_lessons_from_UK_universities
- 203. Dr. Michael Clarke, "Comparing 'Apples' with 'Dates': A study of the quality issues and challenges facing an International Branch Campus", http://www.academia.edu/19078748/Comparing Apples with Dates A study of the quality issues_and_challenges_facing_an_International_Branch_Campus
- 204. A more cautious outlook for international branch campuses, http://monitor.icef.com/2015/10/a-more-cautious-outlook-for-international-branch-campuses/
- 205. University Branch Campuses, http://www.topuniversities.com/student-info/choosing-university/university-branch-campuses
- 206. Egle Girdzijauskaitea, Asta Radzevicienea, "International branch campus: Framework and strategy", Science Direct, Contemporary Issues in Business, Management and Education 2013, Procedia Social and Behavioral Sciences 110 (2014) 301 308, https://www.researchgate.net/publication/270546063 International Branch Campus Frame work and Strategy
- 207. Wilkins, S. and Huisman, J. (2012), "The international branch campus as transnational strategy in higher education, Higher Education", 64(5), 627-645, higher education

- 208. A Collection of Recent Reports From the Observatory on Borderless Higher Education, http://www.obhe.ac.uk/who_we_are/Brochures/reportsoverview
- 209. David A. Stanfield, "International Branch Campuses: Motivation, Strategy, and Structure", https://dlib.bc.edu/islandora/object/bc-ir:103560/datastream/PDF/view
- 210. Keanan Barbour-March, Branching out: A review of George Mason University's United Arab Emirates branch campus, http://www.academia.edu/1898043/Branching out A review of George Mason University _s_United_Arab_Emirates_branch_campus
- 211. Philip G. Altbach. "Why Branch Campuses May Be Unsustainable", http://www.universityworldnews.com/article.php?story=20100226130619281
- 212. Nigel Healy, "When is an International Branch Campus?", https://ejournals.bc.edu/ojs/index.php/ihe/article/viewFile/5808/5178
- 213. Jane Knight, Sirat Morshidi, "The complexities and challenges of regional education hubs: focus on Malaysia", Springer Science Business Media B.V. 2011, 62:593–606, http://link.springer.com/article/10.1007%2Fs10734-011-9467-2#page-1
- 214. A miscalculated level of risk? UNSW Asia announces its unexpected closure, The Observatory,

 http://www.obhe.ac.uk/documents/2007/Articles/A miscalculated level of risk UNSW Asia_announces_its_unexpected_closure
- 215. Emilia Tan, Singapore, Rising fees cloud international hub status, University World News 24 October 2014, http://www.universityworldnews.com/article.php?story=20141023131730715
- 216. Zoë Schlanger, "Anatomy Of A Failed Campus: What Happened At Tisch Asia?", 5 March 2013, http://nyulocal.com/on-campus/2013/03/05/anatomy-of-a-failed-campus-what-happened-at-tisch-asia/
- 217. Yojana Sharma, "US branch campus demise is a cautionary tale for Asian ambitions", Issue No:248,

 November
 2012,

 http://www.universityworldnews.com/article.php?story=20121116104624469
- 218. Chi Nguyen, "Tisch Asia A Failure of NYU's "Global Network University" in Singapore", https://educationpostcolonialism.wordpress.com/2013/11/25/tisch-asia-a-failure-of-nyus-global-network-university-in-singapore/
- 219. Harriet Alexander, "Debt climbing for uni's failed campus", 2007.\,http://www.smh.com.au/news/national/debt-climbing-for-unis-failed-campus/2007/06/13/1181414383789.html
- 220. Adele Yung, Yojana Sharma, "Demise of branch campuses exposes reliance on government subsidies", 19 January 2013, University World News, http://www.universityworldnews.com/article.php?story=20130117151151289
- 221. Cross-Border Education Research Team (C-BERT), "The Emergence of a Global Higher Education Marketplace: Successes, Stresses, and Failures in International Branch Campuses", http://www.globalhighered.org/documents/ashe.pdf
- 222. Ivana Chalmers, Northwestern University, "International Branch Campuses and Unique Risk Considerations", URMIA Journal, 2011, http://irc.nacubo.org/Documents/URMIA_InternationalBranchCampuses_FINAL_20110718.pdf
- 223. Rosanna Tamburri, "Universities open campuses in foreign countries, with mixed results", 2013, http://www.universities.open-campuses-inforeign-countries-with-mixed-results/

- 224. Branching out: why universities open international campuses despite little reward, http://theconversation.com/branching-out-why-universities-open-international-campuses-despite-little-reward-46129
- 225. Cyrus Homayounpour, Assistant Professor and Director, ASAD Education Center, George Washington University, "Will They Come If You Build It? The Future of International Branch Campuses", http://evolllution.com/opinions/will-they-come-if-you-build-it-the-future-of-international-branch-campuses/
- 226. Cut the branches, try a safer route, https://www.timeshighereducation.com/features/cut-the-branches-try-a-safer-route/418125.article
- 227. International Trends in Higher Education 2015, University of Oxford, https://www.ox.ac.uk/sites/files/oxford/International%20Trends%20in%20Higher%20Education%202015.pdf
- 228. Darbi Roberts, Professor Kevin J. Dougherty, "Funding Sources of International Branch Campuses in the Arabian Gulf States", Financial Administration of Higher Education Institutions, May 2011, http://www.academia.edu/9059340/Funding_Sources_of_International_Branch_Campuses_i n the Arabian Gulf States
- 229. Nigel Martin Healey, "The challenges of managing an international branch campus: an exploratory study", School of Management, University of Bath, June 2015, http://opus.bath.ac.uk/48944/1/Full_thesis_final_post_viva.pdf
- 230. Jason Lane, State University of New York, "Global Expansion of International Branch Campuses: Managerial and Leadership Challenges", http://www.academia.edu/2692806/Global expansion of international branch campuses Managerial_and_leadership_challenges
- 231. Jane Knight, "Internationalization: Three Generations of Crossborder Higher Education", India International Centre, http://www.iicdelhi.nic.in/ContentAttachments/Publications/DiaryFiles/53511July92012_IIC %20Occasional%20Publication%2038.pdf
- 232. Gabriel Hawawini, "The Internationalization of the Higher Education Institutions: A Critical Review and Radical Proposal", INSEAD, Oct 2011, https://www.insead.edu/facultyresearch/research/doc.cfm?did=48726
- 233. Nancy Maguire, "Overseas Success: Webcast: Hiring for a Global Campus", NACUBO, http://hrhorizons.nacubo.org/newsletter/past-issues/volume-8-issue-1/overseas-success.html
- 234. Megan Clifford, "Assessing the Feasibility of International Branch Campuses: Factors Universities Consider when Establishing Campuses Abroad", Rand Corporation, 2015, http://www.rand.org/content/dam/rand/pubs/rgs_dissertations/RGSD300/RGSD354/RAND_RGSD354.pdf
- 235. International branch campuses: Even more developments, http://www.obhe.ac.uk/newsletters/borderless_report_march_2012/international_branch_cam puses_even_more_developments
- 236. Jason Lane, Kevin Kinser, "How Universities Turned Themselves into Global Franchises", June 2015, https://newrepublic.com/article/121976/university-satellites-export-local-culture-world
- 237. Embassy of India, Yangon, Myanmar, http://www.indiaembassyyangon.net/index.php?option=com_content&view=article&id=67&lang=en,

- http://www.indiaembassyyangon.net/index.php?option=com_content&view=category&layout=blog&id=28&Itemid=132&lang=en
- 238. Book edited by Rachel Brooks, Alison Fuller, Johanna Waters, "Changing Spaces of Education: New Perspectives on the Nature of Learning", https://books.google.co.in
- 239. China launches first state-backed branch campus, http://thepienews.com/news/china-launches-first-state-backed-branch-campus/
- 240. Jonathan Dyson, "More universities attracted to Iskandar education hub", March 2013, http://www.universityworldnews.com/article.php?story=2013031508355321
- 241. "Malaysia to offer foreign universities greater incentives to open branch campuses, but why has no new branch campus opened since 2000?", <a href="http://www.obhe.ac.uk/documents/2004/Articles/Malaysia_to_offer_foreign_universities_greater_incentives_to_open_branch_campuses_but_why_has_no_new_branch_campus_opened_since_2000_"
- 242. Upcoming Branch Campuses in China, http://www.hanoverresearch.com/insights/upcoming-branch-campuses-in-china/?i=k-12-education
- 243. Global ambitions in higher education, http://www.universitybusiness.com/article/global-ambitions-higher-education
- 244. Stephanie Braudeau, More university partnerships between the UK and China, http://www.iu.qs.com/2013/12/more-university-partnerships-between-the-uk-and-china/
- 245. Branch Campuses ,what works, what doesn't work, and the road ahead, The Illuminate Consulting

 Group,
 http://s8143581d93790b15.jimcontent.com/download/version/0/module/375307303/name/%28icg%29%20aiea%20branch%20campus%20presentation%20-%2009%2002%2024.pdf
- 246. The shape of things to come: higher education global trends and emerging opportunities to 2020, British Council, Going Global 2012, https://www.britishcouncil.org/sites/default/files/the_shape_of_things_to_come_-
 higher education_global_trends_and_emerging_opportunities_to_2020.pdf
- 247. Jason E. Lane, Kevin Kinser, "A Snapshot of a Global Phenomenon: The results of the first global survey of IBCs", A Paper presented at the 2011 Annual Conference of ASHE, https://www.academia.edu/10330177/Results_of_the_CBERT_Survey_of_International_Branch_Campuses
- 248. "Branch Campus Development Marketing expertise required", http://www.academia.edu/9216523/Branch campus development marketing expertise required
- 249. Sri Lanka as an Education Hub for International Students: The Road Ahead, Jan 2012, http://siteresources.worldbank.org/INTSOUTHASIA/Resources/50 Sri Lanka as an Education Hub for International Students.pdf
- 250. E. Han Kim, Min Zhu, Charles T. Clotfelter, Editor "American Universities in a Global Market, Chapter 2: Universities as Firms The Case of US Overseas Programs", Publisher: University of Chicago Press, http://www.nber.org/chapters/c11596.pdf
- 251. Yojana Sharma, "Indian university expands overseas branch campuses", March 2012, http://www.universityworldnews.com/article.php?story=2012031600441660
- 252. Richard Garrett, Director, OBHE, Indian Business School Becomes Australian!? The latest on international branch campuses of Indian universities, http://www.obhe.ac.uk/what_we_do/news_articles_reports/news_analysis/na_2015/news_analysis_3_22jan15

- 253. India's latest branch campus and higher education investments in the United Arab Emirates and Qatar: meeting both sides' development needs, http://www.obhe.ac.uk/documents/2009/Articles/India_s_latest_branch_campus_and_higher_education_investments_in_the_United_Arab_Emirates_and_Qatar_meeting_both_sides_de_velopment_needs
- 254. Branch Campus Listing (Updated January 27, 2016), http://www.globalhighered.org/?page_id=34
- 255. Brian Maffly, The Korean connection: University of Utah explores branch campus outside Seoul, http://archive.sltrib.com/story.php?ref=/sltrib/news/54490090-78/songdo-university-utah-campus.html.csp
- 256. Laura E. Rumbley, Philip G. Altbach, "International Branch Campus Issues", July 2007, http://archives.democrats.science.house.gov/Media/File/Commdocs/hearings/2007/full/26jul/altbach_appendix_1.pdf
- 257. Howard Gardner, Series Editor, "Manifest Destiny in American Higher Education: Elite Tertiary Institutions and the Branch Campus Phenomenon", Alexis Brooke Redding Harvard Graduate School of Education, June 2012, http://thegoodproject.org/pdf/78-Manifest-Destiny-in-American-Higher-Education.pdf
- 258. Jacqueline Prowse, University of Victoria, Canada, "Cross Cultural Comparison: Piloting an Analytical Framework", http://lthe.zu.ac.ae/index.php/lthehome/article/download/159/117
- 259. Patricia Wotila Croom, "Institutional Strategy in a Global Context: The Land-Grant University Experience", http://studyabroad.isp.msu.edu/research/Croom_Dissertation_2010.pdf
- 260. Min Park, Anne Schiller, "George Mason University Korea Campus Initiative", Feb 2012, http://www.gmu.edu/resources/facstaff/senate/MINUTES_FS_2011-12/GMU_Korea_Campus_Initiative_Final_Draft__2.2.12.pdf
- 261. Ninive Gomez, City University of New York (CUNY), "International Branch Campuses", 2015, http://academicworks.cuny.edu/cgi/viewcontent.cgi?article=1366&context=cc_etds_theses
- 262. "Education as an Export: The Globalization of U.S. Higher Education and the Emergence of the Overseas Branch Campus", J. P. Morgan, https://www.chase.com/content/dam/chasecom/en/commercial-bank/executive-connect/common/document/higher-education-globalization.pdf
- 263. Tammy Joy Silver, University of Nevada, Las Vegas, "The Role of the Integration-Responsiveness Framework in an International Branch Campus: A Case Study", 2015, http://digitalscholarship.unlv.edu/cgi/viewcontent.cgi?article=3430&context=thesesdissertations
- 264. Stephen Wilkins, Graduate School of Management, Plymouth University, UK, "Ethical issues in transnational higher education: the case of international branch campuses", https://pearl.plymouth.ac.uk/bitstream/handle/10026.1/3935/Ethical%20issues%20in%20transnational%20higher%20education%20-%20academia.pdf?sequence=1
- 265. Sepideh Mahani, Higher Colleges of Technology, Abu Dhabi Women's College, United Arab Emirates, Arman Molki, The Petroleum Institute, United Arab Emirates, "Internationalization Of Higher Education: A Reflection On Success And Failures Among Foreign Universities In The United Arab Emirates", http://www.cluteinstitute.com/ojs/index.php/JIER/article/viewFile/4969/5061

- 266. Yi Caoa, University of Minnesota, USA, "Branch Campuses in Asia and the Pacific: Definitions, Challenges and Strategies", Comparative & International Higher Education 3 (2011), http://www.higheredsig.org/cihe/Number03-02.pdf
- 267. Shintaro Hamanaka, "Japan's Education Services Imports: Branch Campus or Subsidiary Campus?", ADB Working Paper Series on Regional Economic Integration, 2012, https://openaccess.adb.org/bitstream/handle/11540/1255/wp103-japan-education-services-imports.pdf?sequence=1
- 268. Reginald H. Laigo, "Recruiting Faculty Abroad: Examining Factors That Induced American Faculty To Work At Branch Campuses In Qatar's Education City", University of Southern California, http://digitallibrary.usc.edu/cdm/ref/collection/p15799coll3/id/335229
- 269. Darbi Roberts, David Stanfield, "The Complexities of Cross-Border Engagement", A blog from the Center for International Higher Education, INSIDE HIGHER ED, https://www.insidehighered.com/blogs/world-view/complexities-cross-border-engagement
- 270. "Towards a risk-based typology for transnational education", Higher Education, 2015, 69(1), pp.1-18, https://www.researchgate.net/profile/Nigel_Healey2/publication/270292940 Towards a risk -based typology for transnational education/links/550be0f20cf265693cefc9b0
- 271. Sustainable integration is key to attracting and retaining international branch campuses, Feb 2015, http://tecomgroup.ae/sustainable-integration-is-key-to-attracting-and-retaining-international-branch-campuses/
- 272. Cai, Li and Hall, Chris (2015), "Motivations, expectations, and experiences of expatriate academic staff on an international branch campus in China", Journal of Studies in International Education, University of Nottingham, http://eprints.nottingham.ac.uk/32038/1/JSIE%20paper,%20revised%20August%202015.pdf
- 273. EngKee Sia, "Student motivation, intercultural competence and transnational higher education: Uzbekistan, a case study", Journal of the Scholarship of Teaching and Learning, Vol. 15, No. 1, February 2015, pp. 57 69, http://files.eric.ed.gov/fulltext/EJ1052563.pdf
- 274. "Branch campus leaders inexperienced and unsupported, study finds", 2015, https://www.timeshighereducation.com/news/branch-campus-leaders-inexperienced-and-unsupported-study-finds
- 275. Stephen Wilkins, "The future of transnational higher education: What role for international branch campuses?", http://www.academia.edu/4484362/The_future_of_transnational_higher_education_What_role_for_international_branch_campuses
- 276. Stephen Wilkins, Graduate School of Management, Plymouth University, Plymouth, UK, "Establishing international branch campuses: A framework for assessing opportunities and risks", Journal of Higher Education Policy and Management, 2016, 38(2), 167-182, http://s3.amazonaws.com/academia.edu.documents/43716400/JHEPM https://exampus.pdm.nicsyrmis.
- 277. Beckie Smith, "China cracks down on Sino-foreign joint programmes", Dec 2014 http://thepienews.com/news/china-cracks-sino-foreign-joint-programmes/

- 278. "Branch campus Yantai", http://www.rug.nl/about-us/internationalization/branch-campus-yantai?lang=en
- 279. Xuyang Jingjing, "Bringing the Ivy League to China", http://www.globaltimes.cn/content/806445.shtml
- 280. U.S. Universities Rush to Set Up Outposts Abroad, http://www.nytimes.com/2008/02/10/education/10global.html?r=0
- 281. Robert Coelen, Stenden University of Applied Sciences Netherlands "International Branch Campuses and Institutional Control", https://ejournals.bc.edu/ojs/index.php/ihe/article/download/5809/5179
- 282. Ian Harrison & Kay Bond, "Transnational education and engineering accreditation", Engineering Education: a Journal of the Higher Education Academy, Vol. 7(2), 2012, pp. 24-28, http://www.tandfonline.com/doi/full/10.11120/ened.2012.07020024
- 283. John Fielden, Erica Gillard, "A guide to offshore staffing strategies for UK universities", UK Higher Education International and Europe Unit Research Series/7, April 2011, http://www.lfhe.ac.uk/filemanager/root/site_assets/research_resources/research/misc/2011%20Fielden%20-%20Offshore%20Staffing%20-%20Final.pdf
- 284. Stephen Wilkins, University of Bath, Melodena Stephens Balakrishnan, University of Wollongong in Dubai, "Student perception of study at international branch campuses: implication for educators and college managers", 2012, http://ro.uow.edu.au/cgi/viewcontent.cgi?article=1256&context=dubaipapers
- 285. Jason E Lanea, Kevin Kinsera, "Reconsidering Privatization in Cross-Border Engagements: The Sometimes Public Nature of Private Activity", Higher Education Policy (2011), http://www.palgrave-journals.com/hep/journal/v24/n2/full/hep20112a.html
- 286. Dr. Neil Kemp Institute of Education, University of London, "Transnational Education: What Does it Mean, Where is it Going and What are the Implications?", https://www.wko.at/Content.Node/service/aussenwirtschaft/bt/Keynote 1 Kemp.pdf
- 287. Victoria Neumark, "Branch campuses: the lay of the land", 2013, http://www.theguardian.com/higher-education-network/2013/jan/16/branch-campuses-hong-kong-asia
- 288. "The value of Transnational Education to the UK", BIS Research Paper Number 194, Prepared by the Careers Research & Advisory Centre (CRAC) Ltd, Nov 2014, https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/387910/bis-14-1202-the-value-of-transnational-education-to-the-uk.pdf
- 289. Nigel Healey, "Managing International Branch Campuses: What Do We Know?", https://www.academia.edu/14381342/Managing_international_branch_campuses_what_do_we know
- 290. Alex Katsomitros, Research Analyst, The OBHE, "Why branch campuses cannot go their own way", Nov 2012, http://blog.into-corporate.com/why-branch-campuses-cannot-go-their-own-way/
- 291. Jason Lane, Kevin Kinser "Have Our Universities Become Multinational Corporations?", 2015, http://www.newsweek.com/have-our-universities-become-multinational-corporations-342346
- 292. Professor Nigel Healey, Pro-Vice-Chancellor (International), "The Future of Transnational Education Overcoming the Challenges, Embracing the Benefits", https://www.academia.edu/7124169/The_future_of_transnational_education_overcoming_the_echallenges_embracing_the_benefits

- 293. Professor Nigel Healey, Pro-Vice-Chancellor (International), "Towards a risk-based typology for transnational education", http://www.academia.edu/7683623/Towards_a_risk-based_typology_for_transnational_education
- 294. Cai, Li and Hall, Chris, "Motivations, expectations, and experiences of expatriate academic staff on an international branch campus in China", Journal of Studies in International Education, University of Nottingham 2015, http://eprints.nottingham.ac.uk/32038/1/JSIE%20paper%2C%20revised%20August%202015.pdf
- 295. "Established and Emerging Hubs for International Education in Africa and the Middle East", 2015, http://wenr.wes.org/2015/06/established-emerging-hubs-international-education-africa-middle-east/
- 296. "2012 Global Forum: A preview: 'New Players and New Directions: The Challenges of International Branch Campus Management", OBHE, http://www.obhe.ac.uk/newsletters/borderless_report_april_2012/2012_global_forum
- 297. William Lawton, The Observatory on Borderless Higher Education (OBHE), "TNE, branch campuses and hubs:Drivers and trends", IAU 14th General Conference "Higher Education and the Global Agenda: Alternative Pathways to the Future", 2012, http://www.slideshare.net/IAU Past Conferences/cs-iii4-w-lawton
- 298. Dr. Paul Greatrix, Registrar University of Nottingham, "Why Branch Universities? The Nottingham Experience", http://www.slideshare.net/resbe/why-branch-campuses-humane-june-2013
- 299. Dr. William Lawton and team, OBHE, "Horizon Scanning: what will higher education look like in 2020? September 2013", http://docplayer.net/storage/27/9975158/1459612825/9Z9e8b_U7fj-zlfhaHRMtA/9975158.pdf
- 300. Kevin Kinser, Jason E. Lane, Cross-Border Education Research Team, ""Managing across geopolitical borders: oversight of international branch campuses", http://www.slideshare.net/OECDEDU/jason-lane-kinser-revised
- 301. Line Verbik, Deputy Director OBHE, "The International Branch Campus: Models and Trends", International Higher Education Internationalization Trends, https://ejournals.bc.edu/ojs/index.php/ihe/article/download/7943/7094
- 302. "Teaching the Globe: An Overview of the International Branch Campus Landscape", A White Paper on Trends, Costs, and Forecasts for American Universities Seeking to Establish International Branch Campuses (IBCs) for Foreign and Domestic Students, March 2015, http://www.slideshare.net/IgorGeyn/trends-in-international-branch-campuses-ibcs
- 303. Alan Dessoff, "Cultivating Branch Campuses", NAFSA, https://nafsa.org/ /File/ /ie novdec11 branch.pdf
- 304. Dr. Neha Vora, "Globalized higher education in the United Arab Emirates unexpected outcomes", https://globalhighered.wordpress.com/category/abu-dhabi/
- 305. "When is a campus not a campus?", http://wonkhe.com/blogs/when-is-a-campus-not-a-campus/
- 306. Enterprise Risk Management, Compliance, and Management Advisory Services: An Integrated Approach SCCE Higher Education Compliance Conference 2011, http://www.slideshare.net/theSCCE/scce-2011-conference
- 307. Benjamin Tak-Yuen Chan, University of Hong Kong, "Pedagogical Issues in Transnational Education: the case of postgraduate pharmacy and education programs", HKU Space,

- http://www.slideshare.net/btychan/pedagogical-issues-in-transnational-education-the-case-of-postgraduate-pharmacy-and-education-programmes
- 308. Sophie Koppe, "Asia, Australia, Transnational Education and Research Networks: Implications for the 'Anglo-Saxon Model'", https://lisa.revues.org/8919
- 309. Indian private universities Go forth and multiply: A crowded home market is encouraging some institutions to expand abroad, Oct 2015, http://www.economist.com/news/business/21672290-crowded-home-market-encouraging-some-institutions-expand-abroad-go-forth-and-multiply
- 310. Bharati Vidyapeeth, Ras Al Khaimah, http://www.bharatividyapeeth.edu/Experience+Campus+Life/Dubai/index.aspx
- 311. "India must embrace the internationalisation of higher education", THE World University Ranking, 5 June 2013, http://www.timeshighereducation.co.uk/world-university-rankings/news/india-embrace
- 312. William Lawton, Saskia Jensen, "An early-warning system for TNE: Understanding the future global network connectivity and service needs of UK higher education", OBHE, Jan 2015, https://community.jisc.ac.uk/system/files/17659/JR0030_PS-TNE-DOC-092%20V3.0%20080115 Summary-External FINAL 0.pdf
- 313. "Higher education in India: Moving towards global relevance and competitiveness", FICCI Higher Education Summit 2014, E&Y and FICCI, http://www.ey.com/Publication/vwLUAssets/EY Higher education in India/\$FILE/EY-higher-education-in-india.pdf

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