

TABLE OF CONTENTS

Topic	PAGE
Thesis Completion Certificate	ii
Declaration	iii
Table of Contents	iv
Preface and Acknowledgements	viii
Executive Summary	ix
List of Tables	xii
List of figures	xiii
List of abbreviations	xiv
Chapter 1 – Introduction and need for Research	1
Introduction	
1. What is Vocational Education	2
2. Current status of VE in Country and Projections of next 10 Years.	3
3. Major problem being faced in the existing system	4
4. Status of Vocational Education in four economic sectors of country-	5
1. Service Sector	
2. Manufacturing Sector	
3. Agriculture Sector	
4. Power Sector	
5. Magnitude of Task	
	9
Need for Research	
1. Challenges that emerge from the existing VE System	9
2. Challenges of Power Sector in India	10
3. Evaluation Survey of World Bank FICCI regarding quality of Vocational Education in India – 70% say it is poor	11
4. Comparison of Vocational Education– India Vs Other Important Countries	12
Chapter 2 – Literature Review	14
1. Historic prospective of Vocational Education in India	14
2. Bureaucratic developments in framing of policy during last 50 years	15
3. Challenges of Vocational Education arising out of literature review	18
4. Challenges of Skill Building India Vs China	21
5. Skill Development Performance of Govt. Ministries at National Level	24
6. Requirement of Skill Capacity by 2015 as assessed through literature review	24
	27
7. Challenges before power sector in country as assessed from literature review	31
	34

8. Based on literature review comparison of international practices of VE	36
9. Modi Govt. initiate to Revamp National Skill Development Policy	36
10. Gaps in Vocational Education derived from Literature Review	
Chapter 3 - Research Design	38
1. Research Problem	38
1. Business Problems	
2. Research Gaps	
3. Research Objectives	
4. Research Questions	
2. Research Methodology	38
Objective 1	39
Descriptive Research	
1. Data Collection through Primary and Secondary Research	
2. Data Analysis, Document Analysis	
3. Structured Interview Analysis	
4. Case Studies	
Objective 2	40
Development of NVQF based on all the inputs / research work of Data collection and analysis covered in the report, for Power and other business segments	
Objective 2a	40
1. Through Case Study of Power Distribution Companies	
2. Data Collection, Field Study, Interviews for Assessment of Skills	
Objective 2b	
1. Primary Data Collected through Study tours of 5 foreign countries	41
2. Deliberation with respective consulates in India	
3. Secondary Data Published Reports, Papers quoted under ref.	
3. Research Sampling Plan and size	41
Chapter 4A- Data Collection and Analysis	42
1. Vocational Education in India	
1. Case study – Productivity and cost India Vs Developed Countries.	42
2. VE in selected foreign Countries – China, Japan, Germany, UK	43
3. Existing practices/policies of VE and identify deficiencies in the system	44
4. Stake holders analysis closely connected with VE practices in the country with the help of structured questionnaire	50 53
5. Performance Data of major Government dept./NSDC	

6. VE in Power Sector – Case study assessment of Skills in Industry	61
1. Analysis of Power Distribution system in Northern India	
2. Assessment of skill requirement in power distribution system	62
3. Case study of Power Distribution Sector identifying skills and operating practices	71
7. Capacity Roadmap of VE by the year 2015	
Chapter 4B -Design of Semi Structure questionnaire for stake holders survey	73
1. Questionnaire for Power Sector	73
2. Questionnaire for Industry	73
3. Questionnaire for Vocational Institute	75
4. Questionnaire for National Skill Development Council (NSDC)	75
5. Questionnaire for Ruler Scheme	76
Chapter 5 – Research Findings – Objectives and development of NVQF	77
1. Findings - Issues and challenges of VE in India (Objective 1)	78
1. Planning and operational bottle necks	78
2. Capacity bottle necks	79
3. Research Gap from stake holder’s point of view	79
4. Delivery Short fall data of last 3 years performance at National level	80 81
2. Findings –Assessment of VE in power distribution sector (Objective 2a)	81 81
1. Case Study Power Distribution Companies – Performance Review	82
2. Summary of Skill requirements in BSES Rajdhani Ltd.	82
3. Important Skill Development initiatives by BSES Rajdhani Ltd.	
3. Findings – Comparative study of VE in five advanced foreign countries (Objective 2b)	82
Relative evaluation in 5 Parameters	
1. National Philosophy and Work Culture	
2. Percentage of VE in education, Policy Planning	
3. Implementation Philosophy	
4. No. of trades Career Growths	
5. Relative Ranking from Indian Context	83
4. Findings – Development of National Vocational Qualification Framework –NVQF (Objective 2) – 12 Step Strategy	83
1. Foremost need to delink from bureaucratic control implementation through professional bodies and change of	

philosophy in positioning VE comparable to academics	
2. Skill pyramid	83
3. Proposed NVQF structure four broad headings as under	85
Conceptual Framework-dealing with Policy and Planning aspects	
Operational Mechanism-dealing with implementation aspects	
Monitoring Mechanism- Establishing effective NVQF	
NVQF at a Glance – Tabular Presentation	88
4. Proposed VE structure-VE University, Boards, Councils	89
Skill Development initiative by Modi Government	91
5. Participation of Industrial houses and foreign countries	91
6. Participation of Private education, Universities, Social Groups	92
7. Proposed functional structure of VE	93
8. Plugging the biggest gap – Training for unorganized sector	94
9. Faculty Training and development for VE	94
10. Labour Market Information System (LMIS)	95
11. Funding and Financial viability of VE	96
Tabular presentation of NVQF	97
12. (a) Role of NSDC in creating PPP Model for Vocational Training	98
(b) Overall submission of VE activities in country	
Chapter 6 –Conclusions, Recommendations, Limitations and Future work	102
	102
1. Conclusions	106
2. Recommendations	108
3. Limitations	108
4. Future work	
Bibliography	110
References	114
Brief Background of Researcher	119
Brief Background of External Guide	120