



Success Stories on TVET Initiatives and Good Practices in India

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Abstract: The document outlines the different best practices that the Indian TVET sector is implementing to promote, manage and implement TVET in their country. The article discusses the qualification framework, TVET strategies, as well as the initiatives such as promoting TVET in the rural areas and encouraging women participation.

Keywords: India, TVET, Success Stories, Best Practices

INTRODUCTION

The Ministry of Skill Development and Entrepreneurship is the apex body in regulating and implementing the TVET in India and was set up in November 2014 to drive the 'Skill India' agenda in a 'Mission Mode' in order to converge existing skill training initiatives and combine scale and quality of skilling efforts, with speed. The National Skill Development Mission (NMSD - known henceforth as, the Mission), was then launched by the ministry to provide the overall institutional framework to rapidly implement and scale up skill development efforts across India.



Figure 1: Structure of Authorities in TVET Structure
Source, MSDE, India

The vision, objectives and design of the Mission is to train a minimum of 300 million skilled people by the year 2022.

The key institutional mechanisms for achieving these objectives of the mission have been divided into three tiers: (1) The Governing Council at apex

level, (2) a Steering Committee and (3) a Mission Directorate (along with an Executive Committee) as the executive arm of the Mission. Mission Directorate as shown in figure 1 below, is being supported by three other institutions: National Skill Development Agency (NSDA), National Skill Development Corporation (NSDC), and Directorate General of Training (DGT). A similar structure was also adopted at a state level. (MSDE, n.d.)

Considering the above facts, the Government of India has emphasized aligning vocational education containing employability skills matching the emerging needs of the markets. Therefore, education through skill development leading to employability and employment would impart definitive impetus to achieve this alignment. This can be called a 3Es approach: Education - Employability – Employment and can be achieved by public-private-partnership (PPP) to reduce dropouts and make youth employable. (Shah, 2020)

Therefore, NVEQF framework has been created to organize qualifications according to a series of levels (in terms of learning outcomes i.e., the competencies) of knowledge along with skills through formal, non-formal or informal education and training. Qualifications are made up of occupational standards for specific areas of learning units. It is, therefore, a nationally integrated education and competency based skill framework that will provide for multiple pathways both within vocational education and between general and vocational education to link one level of learning to another higher level and enable learners to progress to higher levels from any starting point in the education and/or skill system. The key elements of the NVEQF are to provide (a) national principles for providing Vocational Education (VE) leading to international equivalency, (b) multiple entry and exit between VE, general education and job markets, (c) progression within VE, (d) transfer between VE and general education, and (e) partnership with industry/employers. (MHRD, 2012)

In the era of globalization and digital technology, competition among industries has become stiff and look up to TVET institutions/TVET Institution to solve their problems. Thus, the Technical and Vocational Education System in India is as shown in following figure no. 2.

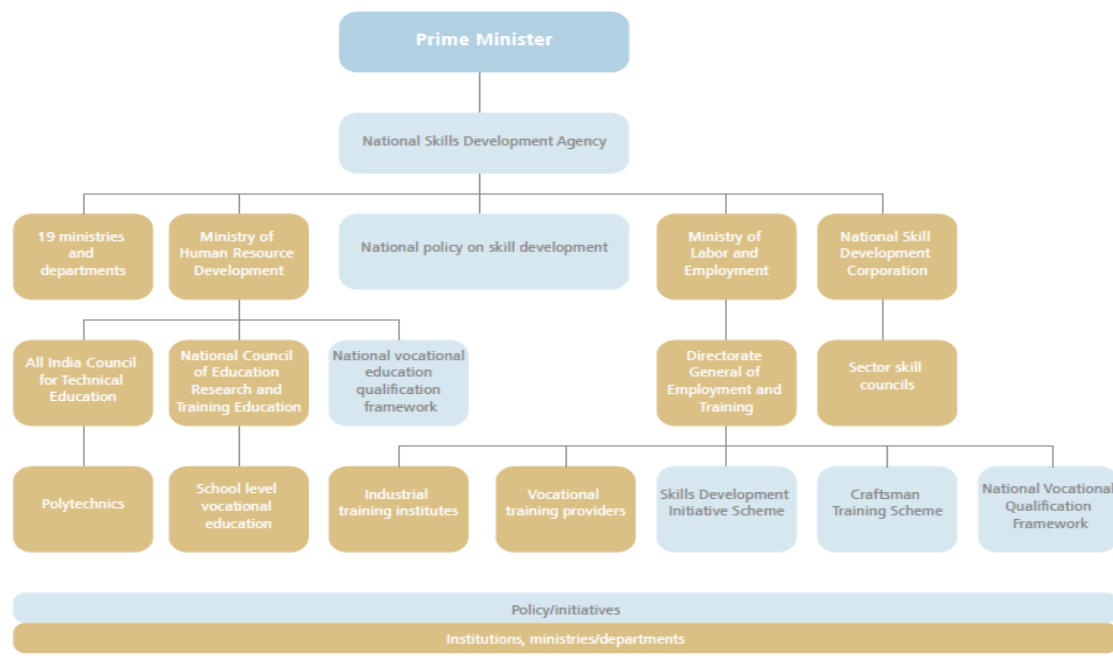


Figure 2: Organization Chart of the Technical and Vocational Education System in India. Source: Mehrotra, et al (2014).

There is an urgent need to prepare TVET students for jobs in multinational companies, by exposing them to newer technologies and engineering methodologies, in order to respond the needs of industry and labor markets. The trained workforce being a backbone of the regional economy, is indispensable for enhancing the productivity, enterprise competitiveness and sustainability.

Therefore, here an attempt has been made to study the following things that has great bearing on the VET system in India and thereby on the curriculum to visualize the success of TVET in India.

- An implemented policy that encourages, demonstrates, rewards or acknowledges good governance or management of TVET.
- A unique initiative that had a profound and long-lasting impact in changing the mindset or practice of a particular community on TVET.
- A project or activity that had a significant impact in the improvement in the TVET implementation.

With this background in mind, this article emphasis to study the success or impact of the legal policy framework, NVEQF, curriculum design, industry institute interaction and other functions that are necessary to bring a desirable change in TVET sector in India.

TVET STRATEGY AND KEY POLICY DOCUMENTS

TVET in India aims to provide lifelong learning opportunities, develop a healthy attitude among students towards work and life, enhance student employability, and reduce the mismatch between the demand and supply of skilled labor. The following key documents help guide the development of VET in India. The National Policy on Skill Development and Entrepreneurship 2015 aims on skilling the labor force, focusing on speed, quality, and sustainability. It seeks to align all skilling activities to common standards and to link them with demand. (UNESCO-UNEVOC, 2018)

Governance:

The Ministry of Human Resource Development and Ministry of Skill Development and Entrepreneurship are responsible for the development of VET policies. The VET system is governed in a decentralized manner through various institutions and departments as listed below. (UNESCO-UNEVOC, 2018)

The National Skill Development Agency (NSDA) is an autonomous body that coordinates and harmonizes skills development activities. It is responsible for, amongst other things, the coordination and implementation of the National Skill Qualifications Framework (NSQF) under the Ministry of Skill Development and Entrepreneurship.

The National Skill Development Corporation India (NSDC) is a public-private partnership non-profit company set up by the Ministry of Finance. The NSDC

incentivizes skill development programs by providing financing, either as loans or equity, to selected private sector initiatives including for-profit private, non-profit industry associations, or non-profit NGOs. The NSDC's finances come from the National Skill Development Fund. The NSDC supports the development of curriculum, faculty training standards, quality assurance, technology platforms, student placement, and setting up standards and accreditation systems in partnership with industry associations.

The All India Council for Technical Education (AICTE) is responsible for the planning, formulation and maintenance of norms and standards. It upholds quality assurance through accreditation, funding in priority areas, monitoring and evaluation, maintaining parity of certification and awards and ensuring coordinated and integrated development and management of technical education in India.

QUALIFICATION SYSTEM AND QUALITY ASSURANCE:

National Qualifications Framework (NQF)

The NQF in India has ten levels and is coordinated and monitored by the National Skill Development Agency under the Ministry of Skill Development and Entrepreneurship. (UNESCO-UNEVOC, 2018)

Table 1: NQF Levels and Corresponding Qualifications

NQF Level	Academic Qualification	TVET Qualification
10	Ph.D.	
9	Post Graduate	
8	Post Graduate Diploma/Degree	
7	Degree	
6	Diploma	Advance Diploma
5	Diploma	Diploma
4	Class 12	Certificate
3	Class 11	
2	Class 10	Certificate
1	Class 9	

Source: UNESCO-UNEVOC, 2018

The All India Council for Technical Education is a national-level apex advisory body that has the statutory authority for planning, formulation, and maintenance of norms and standards in technical education. It is responsible for quality assurance through accreditation, and maintains parity of certification and awards.

The National Skill Development Agency (NSDA) and the Directorate General of Training (DGT) under the Ministry of Skill Development and Entrepreneurship are the apex organizations for quality assurance of programs relating to formal vocational education and training.

Vocational training programs (at the ISCED 3 level) are offered through a network of 13,350 government and private-owned Industrial Training Institutes. The National

Council for Vocational Training (NCVT) is responsible for establishing guidelines for the formation / creation / setup of new institutes and trades. In the meantime, Industrial Training Institutes are under the administrative and financial control of state governments or union territory administrations.

Curriculum

The PSS Central Institute of Vocational Education under the Ministry of Human Resource Development is responsible for the development, updating and quality of the outcome-based VET curriculum, textbooks, and teacher handbooks in schools. Industry validation of the course materials is done through the involvement of the National Skill Development Corporation and the Sector Skill Councils.

In addition, the National Occupation Standards (NOS) are used to develop curriculum and assessment instruments and tools for the assessment and certification of learners. They specify the standard of performance an individual must achieve when carrying out a function in the workplace, combined with the knowledge and understanding required to meet that standard consistently. Each NOS, defined by Industry and the Sector Skill Councils, identifies one key function in a job role. Each NOS must be a concise and readable document, usually consisting of a few pages.

NVEQF AND ITS SALIENT COMPONENTS

The National Vocational Education Qualification Framework (NVEQF) integrate various qualifications, directly from secondary level to Ph.D. level, interweaving academic education, vocational education, technical education and skill training for vertical mobility and career growth. The salient features include competency based, modular, flexible courses with a provision for the recognition of prior learning, flexibility in delivery mode, training design and diversity in a range of courses and training options, covering both the organized and un-organized sector. Each module will lead to certificate of attainment. NVEQF has the following components.

1. *National Occupation Standards (NOS)*: The NOS for each job role within the identified skill sectors will be laid down by the Sector Skill Councils (SSCs) duly constituted by the National Skill Development Corporation (NSDC) with representatives from the industry and employers.
2. *Multiple pathways*: NVEQF is organized as a series of levels of competency/skills, arranged in ascending order from Recognition of Prior Learning (RPL) 1 and RPL 2 leading into level 1 to 10 as shown in following table 2. (MHRD, 2012). Each level on the NVEQF is described by a statement of learning known as a level descriptor as illustrated in following table number 1 and 2. The NVEQ level descriptor provides a broad indication of 'learning outcomes' specified in the National Occupation Standards (NOS) that are appropriate to a specific qualification at that NVEQ level. (MHRD,2012)

Table 2: Structure of Authorities in TVET structure

		Case I	Case II	
Level	Certificate	Equivalence	Equivalence	Certifying Body
10	NCC 8	Degree	Doctorate	University and SSC [^]
9	NCC 7	PG Diploma	Masters Degree	University and SSC [^]
8	NCC 6			University and SSC [^]
7	NCC 5	Advanced Diploma *	Bachelors Degree**	*Board of Technical Education and SSC [^]
6	NCC 4			**University and SSC [^]
5	NCC 3	Diploma*	Grade XII**	*Board of Technical Education, and SSC [^] **School Board and SSC [^]
4	NCC 2			Grade XI**
3	NCC 1			
2	NCWP 2	Grade X	Grade X	School Board and SSC [^]
1	NCWP 1	Grade IX	Grade IX	School Board and SSC [^]
RPL	RPL 2	Grade VIII	Grade VIII	NIOS /State Open Schools and SSC [^]
	RPL 1	Grade V	Grade V	NIOS /State Open Schools and SSC [^]

RPL: Recognition of Prior Learning

NCWP: National Certificate for Work Preparation

NCC: National Competency Certificate

Source: Ministry of Human Resource Development, 2012

3. *Recognition of Prior Learning (RPL)*: Objectives of RPL will be two pronged: (i) recognition of prior learning or qualifications acquired outside the learning path, and (ii) recognition of credits obtained through formal learning. Institutions such as the National Institute of Open Schooling (NIOS) with requisite experience has been authorized to conduct assessment through RPL, at the lower rung and community colleges/polytechnics at the higher level.
4. *Industry Engagement*: VE courses would be designed, developed, delivered, assessed and certified in consultation with industry and employers. In addition to this the industry will also provide support in terms of providing Skill Knowledge Providers (SKPs) including through Boards of Apprenticeship Training (BOATs).
5. *Competency-based curriculum*: The competency-based curriculum package would consist of syllabus, student manual, trainers guide, training manual, teacher qualifications and multimedia packages and e-material. These could be developed

for various NVEQ levels by agencies such as National Institute of Technical Teachers Training and Research (NITTTRs), Pandit Sunderlal Sharma Central Institute of Vocational Education (PSSCIVE), Central Board for Secondary Education (CBSE), State School Boards, State Technical Boards, All India Council for Technical Education (AICTE) and University Grants Commission (UGC) together with the industry through SSCs and employers. NVEQF curricula would be modular, allowing for step ups in skill accumulation and facilitating exit and entry. Curricula design would also be aligned to a credit framework so that skill accumulation corresponds to credits earned and competencies achieved.

Table 3: Level Descriptors for RPL

RPL Level	Descriptor				
	Process Required	Professional Knowledge	Professional Skill	Core Skill	Responsibility
Level 1	Prepares a (adult) person to validate the skills acquired informally through a laid down assessment framework	Acquainted with common tools, equipment and process. The person is familiar with local specific terminologies specific to the profession and basic numeracy with literacy skills	Identification & handling of appropriate tools, & equipment. Takes adequate steps on safety & security	Can demonstrate routine, basic operating tasks	Can take independent decisions on the trade related activities.
Level 2	Prepares a (adult) person to validate the skills acquired informally through a laid down assessment framework & help in his/her career progression	Acquainted with common tools, equipment and process. Understands the context of work and trade at basic level. Familiar with local specific profession and basic numeracy with literacy skills.	Handling of appropriate tools, & equipment. Takes adequate steps on safety & security. Possess soft skills required to deal with profession efficiently.	Can demonstrate routine, basic operating tasks independently.	Can take independent decisions on the trade related activities and demonstrate the same in work situation

Source: Ministry of Human Resource Development, 2012

Table 4: Level Descriptors for NVEQF

NVQF Level	Descriptor				
	Process Required	Professional Knowledge	Professional Skill	Core Skill	Responsibility
1	Prepares person to carry out process that are repetitive and require no previous practice	Familiar with common trade related terminologies, words meaning & understanding	Routine and repetitive, takes safety and security measures.	Reading and writing, addition subtraction personal financing,	No responsibility, always works under continuous

NVQF Level	Descriptor				
	Process Required	Professional Knowledge	Professional Skill	Core Skill	Responsibility
				familiarity with social and religious diversity, hygiene and environment	instruction and close supervision
2	Prepares person to/carry out process that are repetitive on regular basis with little application of understanding, more of practice	Material tools and application in a limited context, understands context of work and quality	Limited service skill used in limited context, select and apply tools, assist in professional works with no variables differentiates good and bad quality	Receive and transmit written and oral messages, basic arithmetic personal financing understanding of social political and religious diversity, hygiene and environment	No responsibility, works under instruction and close supervision
3 Semi-skilled worker	Person may carry out a job which may require limited range of activities routine and predictable	Basic facts, process and principle applied in trade of employment	Recall and demonstrate practical skill, routine and repetitive in narrow range of application	Communication written and oral, with minimum required clarity, skill of basic arithmetic and algebraic principles, personal banking, basic understanding of social and natural environment	Under close supervision. Some responsibility for own work within defined limit.
4 Skilled worker	Work in familiar, predictable, routine, situation of clear choice	Factual knowledge of field of knowledge or study	Recall and demonstrate practical skill, routine and repetitive in narrow range of application, using appropriate rule and tool, using quality concepts	Language to communicate written or oral, with required clarity, skill to basic arithmetic and algebraic principles, basic understanding of social political and natural environment	Responsibility for own work and learning
5 Supervisor	Job that require well developed skill, with clear choice of procedures in familiar context	Knowledge of facts, principles, processes and general concepts, in a field of work or study.	A range of cognitive and practical skills required to accomplish tasks and solve problems by selecting and applying basic methods, tools, materials and information	Desired mathematical skill, understanding of social, political and some skill of collecting and organizing information, communication	Responsibility for own work and learning and some responsibility for other 's works and learning
6 Master technic	Demands wide range of specialized technical skill, clarity of	Factual and theoretical knowledge in broad	A range of cognitive and practical skills	Reasonably good in mathematical calculation,	Responsibility for own work and learning

NVQF Level	Descriptor				
	Process Required	Professional Knowledge	Professional Skill	Core Skill	Responsibility
-ian / trainer	knowledge and practice in broad range of activity involving standard nonstandard practices	contexts within a field of work or study	required to generate solutions to specific problems in a field of work or study	understanding of social, political and, reasonably good in data collecting organizing information, and logical communication	and full responsibility for other 's works and learning
7 Graduates	Requires a command of wide ranging specialized theoretical and practical skill, involving variable routine and non-routine context.	Wide ranging, factual and theoretical knowledge in broad contexts within a field of work or study	Wide range of cognitive and practical skills required to generate solutions to specific problems in a field of work or study	Good logical and mathematical skill, understanding of social political and natural environment good in collecting and organizing information, communication skill	Full responsibility for output of group and development
8 Honors	Comprehensive, cognitive, theoretical knowledge and practical skills to develop creative solutions, to abstract problem. Undertakes self-study, demonstrates intellectual independence, analytical rigor and good communication.			Exercise management and supervision in the context of work/study having unpredictable changes, responsible for development of self and others.	
9 Master	Advanced Knowledge and skill. Critical understanding of the subject, demonstrating mastery and innovation, completion of substantial research and dissertation.			Responsible for decision making in complex technical activities, involving unpredictable study/work situations.	
10 Doctorate	Highly specialized knowledge and problem solving skill to provide original contribution to knowledge through research and scholarship.			Responsible for strategic decisions in unpredictable complex situations of work/study.	

Source: Ministry of Human Resource Development, 2012

6. **Credit framework:** For each job role and each level of learning a credit framework is developed by the certification awarding bodies in consultation with SSC's to meet the dual objective of achieving skill competencies of that level and the general education learning requirements of equivalent level. This will further facilitate multiple entry and exit at each level (or within a level).
7. **Credit Accumulation and Transfer:** Competency based modular curricula would enable multi entry and exit, encouraging performance-based learning – with definable competencies. This multi-level entry and exit system shall allow the candidate to seek employment after any level and rejoin education as and when feasible to upgrade qualifications / skill competency.

SUCCESSFUL TVET INITIATIVES IN INDIA

Under the umbrella of MHRD and MSDE, various initiatives have proved as milestones in the TVET journey and are thus considered as the success stories of these

initiatives/policy implementation. Some of these initiatives have been discussed here in the following paragraphs.

Initiative for Indian Students:

The Indian Government has permitted a group of Indian students of two important vocational sectors: gems and jewelry; and beauty and wellness, to participate in the UK's largest annual skills and careers advice show held at National Exhibition Centre in Birmingham in 2015. The event was the result of collaborative partnership between The British Council India and the National Skills Development Corporation (NSDC) that promotes skills and improves employment prospects for young people in India.

These students were sponsored and supported by the British Council to attend the Skills Show in the UK. The purpose of this visit was to provide the opportunity to Indian students to showcase their skills and compete against some of the most talented young people in the UK and also to meet employers and industry experts for competing against one another. Further, these students were benefited from exposure to contemporary techniques and skills so that they can benchmark themselves against the best from the UK. Thus, they in turn, will cascade their learning to their peer group and work environment. (British Council, 2020).

Ammachi labs - Eempowering rural women through ICT in TVET

A project Donor- based (funded in part by United Nations Democracy Fund (UNDEF) and in parts by Ammachi labs of Amrita Vishwa Vidyapeetham, an innovative initiative was carried since 2012 to date, for following purposes.

- Enhancing women's and girls' access to TVET programmes and providing equal opportunities in the world of work
- Improving skills education through use of technology and preparing learners for a digital world

Though skill development is a recognized medium of empowerment, the access to technical vocational education and training (TVET) remains a challenge to a majority of women living in rural India therefore often have little say in family and community decision-making. Thus, for empowerment of such women, AMMACHI Labs offers program that uses innovative approaches and modern technology to overcome the obstacles rural women face in terms of access to TVET. In addition to developing technical skills that are in demand in the labor market (such as plumbing and fabric painting), a life skills courses called Life Enrichment Education (LEE) are integrated into the training, which provides awareness on personal, family and community issues and also stimulates critical thinking and problem solving. AMMACHI Labs also deploys a Mobile Vocational Education (MoVe) van, which is equipped with ICT tools for education.

As of 2017, the program is active in 27 villages in 21 states. It has provided thousands of women with practical skills that have enhanced their earning potential and increased their capacity to participate in decision-making at the individual, family and community levels. (UNESCO-UNEVOC, 2017).

IL&Fs Skills: Skilling for Impact

IL&FS (Infrastructure Leasing and Financial Services) Skills Development Corporation is a leading vocational and employability training company and imparts multifarious skills in diverse domains across India and abroad. It began its journey in 2007 as a joint initiative with National Skill Development Corporation of India (NSDC), with a mandate to train four million aspirants by 2022. It has an annual training capacity of 0.15 million people through more than 200 skill development institutes across 24 states. The company implements many good practices (as defined by GOI-UNDP, 2009 cited by Shah, 2020). Their good qualities include innovativeness, ability to lead to an actual change, having an impact on policy environment, replicability and sustainability) in TVET sector.

The company has introduced a blended skills development model that optimizes existing capital capacities with technical and vocational skills and thus extended its reach to almost all states of India including conflict prone zones like Kashmir, North East and Left Wing Extremism (LWE) affected areas in the central and north central India covering all types of learner categories with the 'skills for job' motto. The company offers programs that link every successful trainee to employment in the organized sector, through its 61 multi skills institutes, popular as IL&FS Institute of Skills (IIS) and more than 400 skills schools. Thus the 'right candidate' is skilled for the 'right job. This sustainable model has great bearing on economy of India and the various factors contributing to its success, has been discussed here in following paragraph. (Shah, 2020)

- *Scalability*: The Company is one of the largest private training ventures in India as it provides training over 1,584,840 youth a year.
- *'Hub-and-Spoke' model*: There are 18 hub schools and 355 spoke centers. The hubs are providing the larger number of courses in multiple areas including specialized courses like life skills, personality development, career counselling etc. and help with administration, centralized job placement, specialized training capsules to trainees and training of trainers. Whereas spoke centers that offer programs tailored to particular regions / areas.
- *Reaches the 'Bottom of the Pyramid'*: Focus on youth from very remote and difficult areas from poor rural households in areas like Jammu & Kashmir, Odisha, Assam, and Bihar, etc.
- *Holistic development and 360° learning*: Utilize technology for virtual class rooms with community computers, flash cards, audio visual training aids,

physical visits to the job sites, guest lectures by industry experts are some of the core items to ensure purpose-oriented placement linked training through bi-lingual content.

- *Rigorous Training and Evaluation:* The Company rigorously evaluates its efforts to ensure that its students are ready for work. Industry-recognized bodies and government accredited third-party institutions certify the quality of training. All training is mapped to National Occupational Standards (NOS) that follow a stringent National Skills Qualification Framework (NSQF).
- *Working closely with employers:* IL&FS has developed a unique strategy to network its industry partners to partake their requirements and dovetail the same in its curriculum so that the graduates are work-ready from day zero on placement.

Thus, IL&FS Skills aim to train four million persons by 2022 under their flagship skills initiative - Skills Programs for Inclusive Growth (SPRING) - designed to offer industry endorsed, technology driven, standardized and employment-oriented programs delivered through the following practices:

- Skills for Jobs: Market led placement linked vocational skills programs for the youth for entry-level jobs. (Persons trained - 600,000).
- Skills Upgrade: Up-skilling of the workforce in government and private sector. (Persons trained - 120,000).
- Skills for Good Governance: Addressing the need to bring government servants up to date with technology and trends in good governance. (Government officials trained so far - over 800,000).
- Skills for Schools and Colleges: Short term vocational skills programs in schools and colleges under NSQF. (Trained so far - 20,000).
- Skills for Trainers: Mastery program for training of trainers on domain, pedagogy and life skills. (Trainers/mentors trained - over 5,000).
- Skills for Entrepreneurship: Holistic training solution for setting up small businesses. (Persons trained - 500,000).

Thus, IL&FS Skills follows a robust standardized skills value chain and conform to the key issues of relevance, utilization of human and physical capital. Each of these practices focused on two key areas: moderating the price point of skill services so that learners-especially from Bottom of Pyramid groups can afford training and improving the quality to make learner experience valuable. (Reddy, 2014 as cited by Shah, 2020)

Bosch Vocational Centre (BVC)

The training activity at Bosch Ltd dates back to 1953. Since the product lines of Bosch i.e. Spark plugs and fuel injection equipment are high-precision items, the need for skilled manpower was felt from the start of Bosch's operations. Prompted by the requirement for skilled manpower, the Tool Room Apprenticeship scheme was started in 1953, and the Bosch Vocational Centre (BVC) was established in 1960. The BVC was conceived and set up as a fully-fledged training center to develop the base of

skilled personnel required to produce high-quality products on sophisticated machines. Since then, the BVC has been the center to cater to all training needs of the company. It is notable that the BVC was established before the enactment of the Apprentices Act. In fact, the committee responsible for the formulation of the Act visited Bosch Ltd and found that the BVC was a working model for them to study. Bosch's insights on the draft memorandum of the Act were sought. Presently, there is a group of 24 dedicated faculty members guiding the trainees to achieve excellence. The training schemes include trade apprenticeship training, which takes 60 students at Secondary School Level Certificate (SSLC) level in two batches each year, and graduate apprenticeship training, which takes 30 engineering graduates in Mechanical, Electrical, Electronics, Mechatronics, Automobile, Industrial Engineering & Management and Industrial Production & Engineering streams each year. In addition to this, the project trainee scheme at Bosch Ltd was started in 1995 as a social obligation to strengthen the industry-institute relationship. In its scope, final-year engineering students from various colleges are allowed to carry out their project activities to fulfil their academic requirements while gaining experience in an industrial working environment. (Mehrotra Santosh et-al, 2014)

Infosys Technologies Ltd., Bangalore

The practice of Infosys Technologies Ltd. Bangalore, can be both a strategy and an act of social responsibility as it cares for existing and potential employees – from training schools to corporate cabins. In the context of training, it ensures a steady supply of skilled professionals.

In terms of social responsibility, it boosts morale in the company while projecting a favorable public image. In this context, no other foundation program in the world is as vast and well-integrated as that of the Infosys Global Education Centre (GEC). The residential training program for entry level engineering graduates at the GEC in Mysore has been imparting generic and stream specific training in various technology domains to new recruits every year. GEC also offers training in soft skills and leadership programs that are taught by talented trainers. About half of the teachers are trainers with technical and non-technical expertise.

The training program starts with basics and includes comprehensive modules. The 23-week course begins with an internship followed by regular training in selected technologies to suit the particular requirements of organizations. Over 100,000 entry-level engineers have been trained here so far. The facility can house 15,000 trainees at any one time. This is the brainchild of Infosys, one of the leading IT companies in India which currently employs 103,000 people in more than 50 offices across the globe.

Infosysians, as they are called, are responsible for designing and delivering IT-enabled business solutions to the clients around the world. These solutions focus on providing

strategic differentiation and operational superiority to clients. Campus Connect Knowing well that the IT industry as a whole need to “scale up industry-ready high-quality students to meet the growing demands of the industry”, Infosys launched Campus Connect in 2004, a first-of-its-kind industry-academia interaction program. Campus Connect aims to be a partnership forum where the best practices at Infosys are shared with institutions. At this time, 60 engineering colleges all over India have taken part in the program. More than 275,589 students and 9814 faculty members have benefited from this process of aligning engineering talents with industry requirements. Campus Connect also conducts Faculty Enablement Programs to train the partner college faculty on Foundation Program course delivery and industry-oriented courses. Both the GEC and Campus Connect are testimonies to Infosys’ commitment to building the competency of their own employees and corporate social responsibility to the larger society. Given the fact that Infosys is one of the global giants, it only attracts young professionals thus obviating the free rider problem. The company is also insulated from attrition, a common concern among other companies.

Tata Motors

Tata Motors established its Pune unit in 1966 to manufacture commercial vehicles, and passenger cars as well. The plant has about 6000 employees, 90% of whom are blue collar workers. It has a fully equipped industrial training center on its premises and most of the workers are the product of this training center. It has a long tradition of investing in vocational training and capacity building in the country. As on 2017, it has adopted about 137 ITI across India. They are adopted under Public Private Partnership (PPP) models in which Tata Motors provides modern infrastructure for those adopted ITIs and helps in designing curricula according to the needs of the industry and in training their trainees. It also facilitates new vocational courses. For instance, some of the courses it has introduced include Motor Mechanic Vehicle, Diesel Mechanic Trade, Fitter and Automotive Electrician. These courses were introduced to ensure uninterrupted flow of skilled workforce to its large-scale network-based dealers placed across India.

The training center is designed on the model of an ITI with 23 qualified trainers coming from various disciplines and has fully equipped instruments and other infrastructure. Trainees are given a stipend of Rs 4,500 per month. Boarding and lodging facilities are available on the company premises. The trainees take theoretical classes in their respective trades and experiment with those concepts in the practical sessions in the workshop. At times, they are taken to shop floors in the factory for on-the-job training. (UNESCO, 2017 as cited by Mehrotra Santosh et-al, 2014)

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