Further Education and Training, Retraining: Skilful India – A Dream or Reality

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> *"The illiterate of 21st century will not be those who can't read and write*
> *But who cannot learn, unlearn and relearn." (Dskmag 2009)*

1   Training – An Overview

Training is a planned and systematic attempt to improve aptitude, attitude, skills and knowledge of a person to perform a task effectively and efficiently. All types of organisations, of late, have understood that their success lies not in physical assets but in the quality of human resource (HR) they possess. It is the employees who make or break an organisation. Identifying, attracting, developing, compensating and above all retaining the talented workforce, called 'Talent management', is the biggest challenge faced today by all the HR managers of the world. Talented employees provide competitive advantage to an institution. So, every employer is keen to hire the best talent available in the job market. Candidates with right attitude, good aptitude, sound in domain and general knowledge with hard and soft skills are preferred by the employers, which is a rare commodity in the employment market and hence the employer assumes the responsibility of equipping the workforce through training.

The first part of this article throws light on the existing skill gap in India to help the reader to understand the background of job seekers in India, efforts made to bridge the skill gap by imparting vocational education and training to the students at schools and colleges and through Corporate Social Responsibility (CSR) efforts so as to build the basic skills apart from highlighting the recent efforts made by Indian government to skill the Indians through its new national skill development policy. The second part deals with method of training need assessment (TNA) and current training practices followed in leading IT companies, few manufacturing and service sector units in India. The third part deals with importance of E-Learning, methods followed in evaluation of training effectiveness and suggestions and recommendations for improving the skill and competency of Indian workforce to meet future challenges.

For this purpose the training practices of five globally known IT companies viz. TCS, Wipro, Infosys, IBM and Accenture have been studied, and to know the training practices in Indian manufacturing sector four leading business groups/companies viz. Aditya Birla group, ESSAR group L&T and TITAN have been discussed. Training practices of two major public sector undertakings, which are part of Indian 'Navratna' companies (the nine most successful public sector undertakings of India), viz. Neyveli Lignite Corporation (NLC), Hindustan Petroleum Corporation Limited (HPCL) have also been analysed. In the service sector, the training practices of banking and insurance sector has been considered. The required information and data were collected both from various primary and secondary sources.

2   Skill Gap – The Great Indian Talent Conundrum

India with 1.2 billion population as of today is expected to reach 1.3 billion by the year 2020, will become the most populated country in the world over taking China. At the same time, a good news for India is that, it is "one of the youngest country in the world" which is blessed with "demographic dividend". The term "demographic dividend" refers to

> "*At an early stage of [demographic] transition, fertility rates fall, leading to fewer young mouths to feed. During this period, the labour force temporarily grows more rapidly than the population dependent on it, freeing up resources for investment in economic development and family welfare."(Mason and Lee 2006)*

Despite having this so called demographic dividend, labour and skill shortage or skill gap continues to haunt the Indian industries in a big way. Here the term 'skill shortage' or 'skill gap' refers to a difference between demand and supply of skilled labour in the Indian employment market. In simple terms, it is nothing but the difference between the skills required for the job and those held by the futures employee. Census 2011 report of Government of India says 113 million unemployed are seeking jobs. According to Nimesh Chandra (2013) 39 million persons have registered with the 969 government employment exchanges spread across the country as of the year 2010. These employment exchanges, in an average in a year, can provide job opportunities for 7.2% of its registered candidates only. The Indian unemployment rate stood at 13.3% during the year 2013 as per the survey of Ministry of Labour, Government of India. The same survey says one third of Indian graduates are unemployed.

As per 2007-08 Indian economic survey, 64.8% of India's population in future will be in the age group of 15-59 years in the year 2026 which was 62.9%

in the year 2006. National Skill Development Corporation (NSDC) Policy report (2009), citing a study conducted by Confederation of Indian Industries (CII) and Boston Consulting Group (BCG) (2014) says "If the current trend continues 109 million persons will reach the working age during the period of 2007-12 in India 2014." The overall addition to work force is expected to reach 89 million of which around 13 million are expected to be under graduates/post graduates and about 57 million may belong to the group of school drop outs or illiterates. According to International Labour Organisation (ILO) report 2011, only 10% of the workforce in India has received some form of skill training. In that, 2% of total workforce has undergone formal skills training and other 8% have received informal training (see chapter 12). Further it says, 80% of candidates who join the Indian work force don't have opportunity for skill training. It is also important to note that 90% of Indian work force is employed in informal/unorganised sector. ILO as has defined the 'unorganised workforce' as

> *"(…) those workers who are not been able to come together to achieve their common objectives due to certain constraints like the casual nature of their employment, ignorance, illiteracy etc." (Sundaram 2000)*

The unorganised sector is not backed by any proper skill development and training method of learning and improving skills. The National Policy on Skill Development (2009) once again citing the BCG study says that

> *"(…) by 2020 the world will have shortage of 47 million working people but India will have surplus of 56 million people." (Mukerji and Tripathi 2010)*

So to encash the benefit of demographic dividend and to export skilled labour to other parts of the world, India needs to focus both on skilling its people entering the job market and its current work force to improve its existing productivity, standard of living of people and there by contribute for overall economic development.

3   Bridging of Skill Gap

Realising all the above said challenges the country has started making efforts towards bridging the skill gap in India through various means and agencies. The efforts made in the country include providing more and more skill based vocational education, CSR efforts by corporate houses and introduction of National

skill policy by Government of India apart from efforts by various Non-Govern-mental Organisations (NGOs) and few international agencies (see chapter 10).

3.1   *Vocational and Skill Education through Schools and Colleges*

In India around 12 million people join the workforce every year comprising a 'very small number of highly skilled persons' and the remaining belongs to the group of skilled, semi-skilled and unskilled workforce. As per All India Council Technical Education (AICTE 2012) 2012-13 handbook there are 3,716 polytechnic colleges, 10,344 Industrial Training Institutes, 5,672 engineering institutes in India offering technical and vocational education apart from government agencies/departments, NGOs and corporate initiatives (see chapter 4, 5 and 10). Pillai (2014), in his re-port, illustrated that existing vocational education institutions have the capacity to produce only 4.3 million people only as against 12 million joining every year as the work force in India. Vocational education is currently offered at higher sec-ondary level in India that too in a small scale by offering few subjects, which are not scientifically designed in its actual sense. In future, skilling and technical ed-ucation capacity needs to be enhanced to 15 million. A study conducted by NAS-COM and McKinsey study in 2005 says only 25% of Indian engineering graduates are employable in IT industry without training. The vocational education in India has not attracted the Indian students, because the students and parents think that education and training through ITIs, polytechnic and other craft institutes are in-ferior and prepare for lower end jobs with meagre salary, when compared to uni-versity and college education which gives better social status. It is evident that according to a World Bank report 2006, less than 3% of the students attending grades 11-12 in India have enrolled in vocational education, when compared to other countries like Russia (60%), China (55%), Chile (40%), Indonesia (33%), Korea (31%), Mexico (12%) and Malaysia (11%) (Bharadwaj et al. 2011). A con-cept note on Need for Vocationalisation of Education in India by Symbiosis (2010) states that there are about 6,800 schools which enrolled 0.4 million students in vocational education scheme in the higher secondary education of India, using only 40% of the available student capacity in these schools. Also there is a short-age of qualified and experienced faculty to teach students on vocational skills. The inputs given at schools, ITI, polytechnic and even in engineering colleges are not in line with industrial needs. The practical classes, project work and internships included as part of the study in schools and colleges do not give enough exposure and are not offering the desired inputs, for obvious reasons. The industry-institute interaction is reasonably good in India's premier engineering and management in-

stitutes like IITs and IIMs and in few private institutes only and not with the majority. Because of this, the academia fails to understand the industry expectations to mould its students properly (see chapter 3,4,5,6 and 10).

3.2   Role of Corporate Social Responsibility in Skill Development

The CSR aims at fulfilling the 'societal obligations' of corporate houses apart from meeting the expectations and serving its major stake holders like shareholders/promoters and its employees. Many Indian corporate and MNCs are voluntarily offering several skill development programmes under their CSR programme for a long time. A recent notification in Indian companies Act 2013 made it mandatory to spend 2% of net profit after tax of the Indian companies to benefit the society. The provisions of law are applicable to companies with at least Rs. 50 million net profits or Rs. 10 billion turnover or Rs. 5 billion net worth. These companies should spend 2% of their three-year average annual net profit on CSR activities in each financial year, starting from financial year 2015. A study by Ernst & Young predicts that a sum of Rs. 12.5 to 15 billion is likely to be spent by more than 2,500 companies in India for the CSR programmes every year in future. A survey of 50 companies by the same agency has found that the companies spend the major portion of their CSR budget for 'education and lively hood development' which covers skill development programmes also.

3.3   Introduction of National Skill Policy

In the year 2013 realising 'the great Indian talent conundrum' the government of India has framed national skill policy in 2009, which fixed a target of imparting skills training 500 million by 2022. The Prime Minister's National Council on Skill Development is a highest administrative body to frame policies, directions and will do progress review. In the year 2013 the NSDC, a Private Public Partnership (PPP) model (50% funding from government and 50% from corporate houses) with an initial funding support of Rs. 10 billion from the Government of India, started preparing skill gap analysis report for 21 sectors in 14 states of India. N also conducts training to impart various skills along with its 62 alliance partners across India (see chapter 7).

The challenge in skilling the Indian workforce is its diversity and work location. The diversity in terms of literate and illiterate, male and female, rural and urban, fresh and experienced, skilled vs. unskilled, organised vs. unorganised and

agriculture and non-agriculture etc. The following table classifies the distribution of Indian workforce in different sectors.

Sector	Number of workers (in millions) during 2009 – 2010
Agriculture	244.85
Mining	2.95
Manufacturing	50.74
Construction	44.04
Electricity, gas and water supply	1.25
Services	116.34

Table 1: Composition of employment - Sector wise. Source: Planning Commission (2009-2010)

From table 1 it is observed that 50% of overall Indian workforce is engaged in agricultural sector and remaining 50% distributed in non-agricultural sector namely construction, mining, manufacturing energy and services sector. The services sector provides second highest employment opportunity next to agriculture. The existing skill gap is likely to extend in future. A forecast data (ICRA Management Consulting 2010) from National Skill Development Corporation report (2009) about the skill gap short fall in 2022 is given in table 2.

S.No	Sector/Industry	Incremental requirement for Human Resources by 2022 (in millions)
1	Building and Construction Industry	33
2	Real Estate Services	14
3	Leather and Leather Goods	4.6
4	Gem and Jewellery	4.6
5	Organised Retail	17.3
6	Textile and Clothing	26.3
7	Electronic and IT hardware	3.3
8	Auto and Auto Components	35
9	IT and ITES	5.3
10	Banking, Finance services and Insurance	4.2
11	Furniture and Furnishing	3.4
12	Infrastructure Structure	103
13	Tourism and Hospitality Services	3.6
14	Construction Material and Building Hardware	1.4
15	Chemicals and Pharmaceuticals	1.9
16	Food Processing	9.3
17	Health Care	12.7
18	Transportation and Logistics	17.7
19	Media and Entertainment	3
20	Education and Skill Development Services	5.8
21	Select Informal Employment sectors (domestic help, beautician, facility management, security guard)	37.6
	Total Incremental Requirement for skilled personnel	347

Table 2: Skill gap expected in India in 2022. Source: ICRA Management Consulting (2010)

From the above table, it is observed that there is going to be a huge skill gap in the infrastructure, auto and auto components, textile and clothing, informal, organised retail, transportation and logistics fields.

In addition to above, increased manufacturing competitiveness among the nations will lead to requirement of more and more skilled labourers. The 2013 global competitiveness Index manufacturing report of Deloitte has listed the top ten nations' manufacturing competitiveness which is given below in table 3.

Rank	Country	Index Score (yr. 2013) 10=High 1=Low	Rank	Country	Index Score (yr. 2018) 10=High 1=Low
1	China	10.00	1	China	10.00
2	Germany	7.98	2	India	8.49
3	U.S.A.	7.84	3	Brazil	7.89
4	India	7.65	4	Germany	7.82
5	South Korea	7.59	5	U.S.A.	7.69
6	Taiwan	7.57	6	South Korea	7.63
7	Canada	7.24	7	Taiwan	7.18
8	Brazil	7.13	8	Canada	6.99
9	Singapore	6.64	9	Singapore	6.64
10	Japan	6.60	10	Vietnam	6.50

Table 3: Current and future global manufacturing competitiveness. Source: Deloitte (2013)

From the above table, it is clear that the developed economies are ranked in the top 10 list during the year 2013. The Deloitte and U.S Council on Competitiveness joint Global Manufacturing Competitiveness Index (GMCI) report of 2013 says in the next 5 year period developing economy nations like China, India, Brazil are likely to occupy the first three positions. Brazil's giant leap from 8th position to 3rd position is notable. India's manufacturing competitiveness is increasing and the study says that in the next five years India is going to climb up the ladder and will occupy 2nd position from the present 4th position in the top 10 list. Though the developed economic nations like Germany and USA are found in the future index, it is said that few of them are expected to slip from their present position. The three major disadvantageous factors cited by European business leaders participated in the study are labour policies, immigration policies and policies resulting in government intervention and ownership in companies.

From the above arguments it is very clear that there is a definite need for producing skilled manpower to meet the future manpower requirements of India. Since the percentage of youths joining the workforce with necessary skills, knowledge and aptitude is very less, the Indian employers are forced to pay their full attention on training and development of the Indian workforce in addition to current and future efforts by Government and NGOs who are also augmenting the best possible at their end.

4   Training Need Assessment

Success of any training programme to a very great extent depends on assessing the training needs of the participants and training design and delivery. It was found that, many companies surveyed for this study are following common and conventional methods like task analysis, individual analysis, requirement analysis and performance reporting methods etc. Tools used by them for assessing training needs include work sampling, checklist, critical incident, suggestion from supervisors and managers, personal interviews and self-reporting questionnaires. Training needs were also analysed and understood by observing lower productivity, poor quality of output, industrial accidents, poor interpersonal relations, lack of individual initiative and increase in absenteeism, market trends and reports on skill and manpower needs and labour turnover.

5   Training Programme in Indian Companies

Training and development in Indian companies is provided at all levels i.e. workers, supervisors, junior and senior managers, and top level executives. Majority of the institutions of the study follow popular job training methods like on off the job training, job instruction training, project assignment, under study method, apprenticeship training, and committee assignment (see chapter 8). They also follow off the job methods like case study, role play, simulation games, syndicates, seminars, panel discussion, brain storming, computer and web based learning, satellite broadcasting etc. The methods of training and development programmes followed by Indian companies for different levels of employees and executives have been presented in table 4 (see chapter 9).

Level	Method of Training
Workers	Operational Training
Supervisors	Functional Training
Junior and Senior Managers	Functional and Behavioural Training
Top level executives	Leadership Skills, Strategic Management, OBL

Table 4: Training offered in Indian Companies - Level wise. Source: Own illustration

In the last 10 to 20 years, Indian industrial and business organisations have made a significant progress in terms of their training efforts. This is because of the impact of globalisation on Indian economy and entry of multinationals and competition arising thereof etc. According to PallaviJha, Managing Director of Dale Carnegie Training,

> *"In a country where the knowledge economy is booming, training budgets are estimated to be low and restricted to certain 'progressive' companies. Traditionally, Indian companies spend anywhere between 0.5 and 2% of their turnover on training their employees. IT and ITES companies, which are essentially involved in people-oriented businesses, spend about 3-5% of their revenues on upgrading employee skills."(Prayag2006)*

5.1   Training and Development Practices in Indian IT Companies

Information Technology (IT) companies are the greatest hope for today's Indian Engineering Graduates and today they are the biggest recruiters in private sector in India. For example, the top 6 IT companies called SWITCH – Satyam (now Tech Mahindra), Wipro, Infosys, TCS, Cognizant and HCL alone recruit around 0.2 million fresh engineering graduates every year from all disciplines of engineering like mechanical, civil, biotechnology, chemical, automobile, etc., across India through their 'on campus' and 'off campus' hiring process. The annual salary in IT services company ranges from Rs. 0.3 million to Rs. 0.6 million. In the case of IT product companies the MNCs like Microsoft, Yahoo, Google etc., are paying Rs. 0.6 million to Rs. 2.5 million per annum for fresh engineering graduates in India. Hence training practices of some of the leading IT companies are discussed in detail in the following paragraphs.

5.1.1   Training and Development in TATA Consultancy Services (TCS)

TCS an Indian multinational company which is one of the top 10 IT companies of the world having 150 offices spread across 46 countries employing around 0.3 million employees in IT and Information Technology Enabled Services (ITES). It has training centres located at Chennai, Ahmadabad, Hyderabad, Guwahati, and Kolkata and in overseas countries like China, United States and South Africa. For new employees, in the Initial Learning Programme (ILP) the modules like basic technology training, project delivery, management and business life cycle and soft skills are covered. Trainees are expected to maintain a log of their daily learning which is periodically reviewed by the trainers. All TCS employees undergo a mandatory 14 days retraining every year under their continuous learning programme.

TCS offers various online courses and sends emails and SMS to its employees about the launch of the new courses and their duration. These are closely tracked by the training department which ensures successful completion by sending automated reminders for those who fail to complete the training within the training. TCS does 'talent spotting' with the help of their line managers to offer

leadership training under succession planning system. High performers from different geographies of TCS are identified and are given technical and managerial training to occupy higher positions in future. The CEO of TCS is personally involved in selecting and forming leadership teams of different geography. TCS follows job rotation by sending them to different projects, verticals and geographies to make them versatile.

The average attrition rate in Indian IT industry is between 10 to 20% during December 2013 according to Cxotoday.com. The software professionals in the IT industry after acquiring basic knowledge and skills in an IT company do job hopping to get better salary and position. Hence, of late, as a HR strategy, the software companies are started recruiting non-engineering graduates such as Bachelor of Science (B. Sc.) and Bachelor of Computer Application (BCA) and other related under graduate science courses in the place of engineering graduates. These non-engineers are paid 20 to 30% lesser salary than the engineering graduates and they do accept this salary and stay happily for a longer duration. To stop attrition of these non-engineering employees IT companies sponsor them for higher studies which are beneficial to both individual and organisation with a service agreement.

- *IGNITE*: It is an intense learning programme for non-engineering science graduates. TCS is the largest recruiter of fresh science graduates. Selected candidates are given six months training and are exposed to various real world projects. These candidates are encouraged to pursue Master of Computer Application (MCA) programme through distance learning with their partner Universities like SASTRA University, Thanjavur, India.
- *TCS ambassador Corp*: It is a leadership development programme for experienced employees to take up global sales role. TCS also offers many other innovative training programmes like 'Knowmax' an enterprise wise knowledge management system. They also offer E-Master of Business Administration (MBA) programme through AMRITA University, Coimbatore, Tamil Nadu and Master of Science (M. Sc.) in Management and IT services through University of Buffalo, New York, USA. Similarly IIT Madras, India is offering specialised programmes like M. Tech., in Mechanical Engineering Design and Applied Mechanics in Computational Engineering.

5.1.2   Training and Development in IBM

IBM globally ranked number 1 software company was founded in the year 1911 and its Indian operations started in 1951.The company has 55,000 employees in India and having its presence in 170 countries across the globe. Their major verticals include banking, insurance, finance, media, entertainment, energy, pharmaceuticals, retail, travel, transport, aero, defence, automobiles, electronics, government, education and health care. Its Indian training division has around 2,000 part time internal trainers who have rich practical experience in project management, technical management, soft skills and software developments. Its Indian training centres can train 1,500 people at a time through its five training centres in Chennai, Bangalore, Kolkata, Pune and Mumbai. It offers training programme for a minimum period of three days to a maximum of two months depending on the training module. The topics of training includes ORACLE, SAP, soft skills, leadership development, diversity management, global culture, executive leadership programme, corporate services, etc. The target group ranges from software developers, programmers and executive leadership. The company also sponsors its executives and employees to pursue higher education with reputed E-Schools and B-Schools in India and abroad. Currently the retraining programme focuses on 'fastest emerging technologies' namely Social media, Mobile technology, Analytics (big data), Cloud computing (SMAC) for a week, to all its practitioners.

5.1.3   Training and Development in WIPRO

Wipro limited (Western India Products limited) was founded in the year 1945 and head quartered in Bangalore, India. It is ranked as the seventh largest IT services company at the global level with a market capitalization of approximately $20.8 billion. It has around 0.146 million employees with its presence in 67 countries. It focuses on both IT and non IT businesses. The non IT businesses cover consumer care, health care, lighting and infrastructure engineering. At the beginning, the new entrants are given a three day orientation programme. The first day is dedicated to explaining the value system in Wipro, and then they are given group exercises. After completing orientation programme, eight to ten weeks of training is offered in topics like computer operating system, networking, website programming and digital exercises. Later they are exposed to quality parameters where they spend three days to understand business, finance, sales, marketing and HR concepts and practices. In addition to behavioural training, they are introduced to 24 competencies to be measured in their future career. The trainees are tested periodically for their understanding of inputs with a minimum score of 70% to retain

their jobs in the company. Later they are given project readiness programme where they will spend two to three months of training based on their area of interest like software programming or project engineering. Trainees are assigned technical topics to prepare and present before their senior officials. Each vertical gives domain specific training to the new employees. Candidates joining Wipro Business Process Out sourcing (BPO) division get special training on western culture, countries history, spoken English with neutral accent, business etiquettes and manners etc. After six months of rigorous training, Mr. Azim Premji, the Chairman of Wipro Technologies addresses the employees, in batches, about the organisation's vision, mission and value system.

Wipro has introduced Wipro Academy of Software (WASE), the first of its kind in India, for the B. Sc. graduates. Under this programme, the employees with B. Sc. qualification are sponsored to pursue M. Sc. programme through distance learning mode with BITS Pilani, Rajasthan, India, which is one of the top most private engineering institutes in India.

Wipro InfoTech Master of Science (WIMS) programme is offered to B. Sc. and B.C.A. graduates on IT infrastructure management services. It also offers another four years M. Sc. programme on software technology through its partner Universities like VIT Vellore. During the four year programme, the candidates are given theoretical and hands on practical experience in live projects with a decent stipend, as a part of 'earn while you learn' programme. For the WASE candidates, ten weeks training is given covering the following four modules in the Wipro ILP.

Fundamental Readiness Programme (FRP) covering four modules over a period of ten days. Corporate Readiness Programme (CRP) spread over six days covering an introduction about the organisation, behavioural skills, spirit of Wipro and personal and premises security. The Technical Readiness Programme (TRP) imparts ten different technologies with a set of designed assignments and case study spread over 25 days. The Real Life Lab (RLL) gives opportunity to assimilate the understanding of TRP by analysing real life case study for a period of four weeks before they are deputed to project works.

5.1.4   Training and Development in Accenture

Accenture is a multinational, management consulting, technology services and outsourcing company founded in the year 1989 and is headquartered at Dublin, Ireland. It is a Fortune Global 500 company and the world's largest company in terms of revenue with a total workforce of 0.293 million (2014). Its revenue in the year 2013 was $28.6 billion. It operates in 56 countries. Accenture offers technical, communication skill, team skills, leadership skill for the fresher apart from 12

weeks on the job training under the guidance of experienced employees. 'Leaders Teaching Leaders' is a unique programme in which Accenture leaders share their past experience with present employees for the betterment of working styles. Senior employees act as mentors for new and young employees. All Accenture employees are expected to undergo a minimum of 80 hours of training in a year. It offers 0.1 million online as well as class room courses. Peer learning also happens through a programme called 'communities of practice' by sharing their knowledge and best practices. Employees with more than five years of experience are given training and certification programme at MIT, USA. The company also sponsors its managerial executives to pursue MBA and M.Sc. through reputed institutions of India.

5.1.5   Training and Development in Infosys

Infosys is an Indian multinational corporation that provides business consulting, IT, software and outsourcing services. Infosys is ranked as third largest India based IT Services Company by 2014 revenues. It was founded in the year 1981 and has 0.16 million employees across the globe. It is ranked as the 15th largest IT Company by HFS research in its 2013 ranking in the world. The market capitalisation was 885 billion. Infosys has the global education centre at Mysore, India. It was established in 2002 with 1.4 million sq. ft. floor space, 500 instructors and 200 classrooms, and is the world 15 largest corporate university which had trained around 100,000 engineering graduates till 2012. It can train 12,000 employees in three batches of 4,000 employees of four months each. Infosys has been recognised as 'the gold company' which offers 850 distinct workshops, programmes and courses to develop managerial, process, industry, technical and leadership skills. 'Path Finder Next' is an internal internship programme offered to infoscions to select work opportunities across various domains, which gives vertical lateral exposure, hands on learning and job enrichment. Infosys encourages its employees to pursue higher education with their partner Universities. It also offers various part time and value added internal assignments. Through a mentoring programme called 'friendly ear' constructive feedbacks are given about individual performance. The Infosys Leadership Institute (ILI) which has 96 rooms and trains 400 infoscions every year on leadership aims at developing excellent future corporate leaders. The institute identifies potential candidates and supports their developments in taking on key leadership positions.

5.2 Training in Manufacturing Sector

India's manufacturing sector plays a significant role in the economic development of the country. They undertake as variety of employee development initiatives to train and retrain their employees. Training initiatives of a few leading business houses of India are given below, as a sample.

5.2.1 Training and Development in Aditya Birla Group

Aditya Birla Group belongs to the league of fortune 500 companies, having 0.12 million employees belonging to 42 different nationalities. The Aditya Birla Group (2015) has been ranked as top four companies in global ranking conducted by Aon Hewitt and Fortune Magazine and ranked as No. 1 in Asia Pacific in the year 2011. In its group revenue, 15% flows from overseas operation. The group was founded in the year 1857 and they concentrate in the field of metals, cements, staple fibre, branded apparel, chemical, fertilizers, telecom, IT, wind power and financial services. The group operates in 36 countries. The leading manufacturing giant in India offers training and retraining program to their employees in different ways. Some of them are given below.

Gyanodaya Virtual Campus (GVC) is the Group's Learning Management System (LMS) serving 30,000+ active e-learners at various levels across the globe. E-Learning, multi-tier programme and leadership training is offered to general managers.

- *Gyandhara* is the Group's knowledge *e-magazine* portal that reaches out to 50,000 readers.
- *Individual Learning Plans* are developed for every employee based on individual training needs.
- *Continuing Education Policy* facilitates learning through a wide range of sponsorships and other enabling mechanisms.
- On the job, cross culture, leadership development, cross functional projects, overseas assignments, personal development and Knowledge Integration Programme (KIP) are some of the innovative employee development programmes offered by the group.
- *Functional programmes* like sales, marketing and supply chain management are offered to marketing executives. Role specific programme is offered to marketing, finance, HR and branch unit heads to improve their

managerial competency in their field. Business focused programme is offered to middle and top level executives which covers current business practices, challenges and business competition.

5.2.2   Training and Development in ESSAR Group

ESSAR group was founded in the year 1969 and it has subsidiaries namely ESSAR steel, ESSAR oil, ESSAR shipping, the mobile store and hyper mart. The company employs more than 73,000 people operating in more than 25 countries and has revenue of $39 billion. Some of the novel training and development initiatives of ESSAR group companies are given below:

- *Coaching and Mentoring*: As a part of their performance management process, every employee is entitled to receive coaching and mentoring from the immediate supervisor.
- *ESSAR book of coaching and mentoring*, which helps share success stories of the coaches and mentees.
- *Coaching and mentoring summits*, where ESSAR coaches and mentors come together to laud and learn from successes across businesses and locations
- *Performance coaching*, where all ESSAR managers undergo performance coaching workshops.
- *ESSAR certified coach*: ESSAR managers undergo a six to nine months programme. Select coaches are awarded the prestigious ESSAR Starfish Award.
- *DET programme:* A two year full time residential programme for Diploma engineer trainees which acts as a bridge course to impart technical capabilities to the fresher.
- *ESSAR Corporate University (ECU):* The ECU is a virtual learning organisation. ECU offers 18 month MBA programme under a MoU with premier B-Schools of India, for selected executives who meet their eligibility criteria. It also provides training on team skills, networking, risk taking, bonding, developing trust etc.
- *ESSAR Learning Centre (ELC):* ELC at Hazira offers various training programmes to meet the training requirements of ESSAR's human capital. It conducts 400 formal training programmes per year on various subjects like production management, principles of management, and Logistics and supply chain management.

- *'Learning for all'* is a LMS which has e-modules on Industrial and business management and technical topics.
- *Individual learning plans*: Eemployees are made responsible for their own learning. The learning and Organisation Development (OD) department offers various kinds of inputs and required tools to help employees, such as individual/personal learning plans and learning passports for all.
- *'Learning tree'* provides support for learning through a chain of its owns libraries.
- *Learning hour*: Thought provoking lectures, interesting presentations, or discussions by experts on topics ranging from leadership to current business affairs.
- *Tell me why with chai? (Tea)*: Presentations or lectures on scientific topics that employees may be very keen about but was never given the opportunity to learn.
- *Executive Development Review (EDR)* is a mid-year appraisal where the line manager works with the employee to understand personal aspirations, identify training requirements, and frame career planning. This helps to identify promising future leaders and prepare succession plan to fill the important positions in the organisation, in future.

ESSAR group has won award from Indian Society for Training and Development (ISTD) in 2009 for innovative training practices.

5.2.3   Training and Development in Titan

Titan Company Ltd is a designer and manufacturer of multi-product lines such as watches, jewels, precision engineering components and other accessories like sunglasses, wallets, bags and belts. It is a joint venture between Tata group and Tamil Nadu Industrial Development Corporation. The Titan is the largest wrist watch manufacturer and it exports watches to more than 32 countries. Its revenue is $ 1.7 billion in the year 2013.

- Titan has 7,000 employees in India; its business is operated in 42 countries and has training centres in Hosur, Roorkee, Panthnagar and Uttaranchal of India.
- It provides attitude and technical training to its workers for a period of three to seven days through its training centre.
- For supervisors, it offers 12 days training on communication, interpersonal, behavioural, supervision and technical skills.

- ▪ Executive Development Programme (EDP) is offered to middle level executives for seven days.
- ▪ The other major areas of training include six sigma, ISO 9,000, health and safety measures, energy management and environment.
- ▪ They also use on line and mobile technology for various training programmes.

5.2.4   Training and Development in L&T Constructions

Larsen and Toubro also known as L&T, is an Indian multinational conglomerate founded by two Danish engineers in the year 1938 with its headquarters in Mumbai. The company's business interest includes engineering, construction, manufacturing, IT and financial services, heavy equipment, electrical, power, ship building etc. Its employee strength is 84,000 (2014). The fresh engineering graduates are given one year training covering the topics like soft skills, technical skills, basic business etiquettes and manners in addition to training in respective domains like Civil, Mechanical, Electrical and Electronics Engineering, Electronics and Communication Engineering. A brief orientation about organisation culture, vision and mission is given at the beginning of the training. Finally, at the end of training they are given mock projects to test their planning skills. Under 'Daksha' programme, the trainees are given two weeks intensive training on construction skills which covers quality, safety, cost and other aspects of construction. For all the existing employees four days training per annum is made compulsory. They adopt in-house and out bound training methods. For employees further education they have signed MoU with prestigious B-Schools of India Namely IIM Ahmadabad, XLRI, SP Jain management institute Mumbai. For M. Tech. Studies, they have a tie up with leading engineering institutions like IIT Mumbai, IIT Delhi, NIT Trichy and NIT Suratkal. The company also sponsors two-year tuition fees and hostel fees for M. Tech students and pays a pocket allowance of Rs. 8,000 every month.

Training offered at different levels in L&T constructions:

- ▪ *Supervisory Development Programme*: To the site based project engineers one week and a ten day Management Development Programme are planned to offer an exposure to operational management and behavioural skills.
- ▪ *Executive Development* is happening through intensive two-week long programmes providing exposure to overall understanding of the business,

Strategic Planning, Customer Relationship Management, increasing Shareholder Value, Financial Management.

- For middle level managers there is an exclusive nine day programme, crafted carefully in association with Administrative Staff College of India, Hyderabad.
- For top level executives, there is an agreement with Management Development Institute, Gurgaon to provide development programmes at Company's Management Development Center, Lonavla.

5.3   Training and Development in Neyveli Lignite Corporation

NLC is a Navratna Industry, founded in the year 1956. It generates power from coal. The main activity of NLC is lignite extraction and power generation using lignite excavator. It also sells raw lignite to small scale industries to use it as a fuel in production activities. It is head quartered at Neyveli, Tamil Nadu, South India. It has around 17,500 employees which include 4,200 executives 8,100 non-executives and 5,200 labourers. Quality circle activities are very popular in NLC and it offers various in-house training programs through its Employee Development Centre. It also deputes its employees for training to various private and government institutes. NLC in-house training program covers wide range of topics like individual development programme, functional development programme, material management programme, industrial psychology, environmental psychology and computer related programme etc. Selected workers, executives and supervisors are sent to foreign countries to acquire skill on design erection and maintenance operation on equipment and machinery. The graduate engineers and executive trainees are also given one year training. The company offers workers education scheme through its two week training program followed by one week industrial tour. Special programmes in the form of workshops, seminars and symposiums are also conducted for its suppliers to share information about best business practices. Employees are encouraged to learn Hindi language through its one month/ 60 hours training programme. The company's inter organisation training programme helps employees of nearby organisations to come and learn from NLC employees.

5.3.1   Training and Development in Hindustan Petroleum Corporation Ltd

HPCL founded in the year 1974 is an Indian state owned oil and natural gas company having head quarter at Mumbai, Maharashtra. It is one of the Navratna industries of India. HPCL has been ranked 260th in the Fortune 500 ranking of world's biggest corporation in the year 2013 and 4th among Indian companies in

the year 2012. As of 2012 it had more than 11,000 employees. 'Samevesh' is an induction or orientation programme offered to new employees to offer a sense of belongingness. Supervisors are equipped with function specific inputs and job related technical skills. Similarly, through project 'Akshay', the leadership development programme is offered. HPCL nominates officers for external seminar and conferences in connection with their function required. Advanced management courses are offered for their executives with the help of reputed B-Schools. Selected employees are sent on study tour to enrich their knowledge and skill by sending them within and outside the country. It offers E-Learning programmes on various topics including project management and supply chain management. It has established learning centre in all zones and in its corporate head quarter office providing internet, books and CDs. Under Education Refund Plan (ERP) sponsorship for higher studies is made by the company. The company also provides study leaves to encourage employees to pursue higher studies.

5.4   Training in Indian Service Sector

The training and development efforts are very much required in the Indian service sector as it provides employment to large number of people and is growing faster. Here the training practice is offered in two major industries viz., banking and insurance are highlighted in the following paragraphs.

5.4.1   Training in Insurance Sector in India

The Indian and foreign direct investment is increasing in India in the past few years in various sectors including insurance sector. Job opportunities are increasing day by day. India's life insurance sector with 360 million policies, consists of 52 insurance companies, out of which 24 are in life insurance business and 28 are in non-life domain. The life insurance industry in India is expected to grow at a rate of 12 to 15% in the next five years. The industry plans to reach the peak level by 2020, and has the potential to achieve the US $1 trillion mark in the next seven years. This optimistic outlook is helped to a large extent by the Government of India's supports and efforts to strengthen the sector. The Union Cabinet in July 2014 approved a proposal to relax Foreign Direct Investment (FDI) limit in the domestic insurance sector to 49% from 26%, expressing very clearly the government's intent to attract capital and investment into the sector. Insurance sector in India, both the Life Insurance Corporation of India (LIC) and General Insurance Corporation of India (GIC), is organizing skill training to the various levels of

employees on wide range of topics. Managers are offered training in various concepts like understanding customer needs, developing products, marketing and sales promotion, supervisory skills, channel management skills and finally with leadership and management skills. Training offered for advisor/agents are on understanding insurance concept and product, financial concepts such as Internal Rate of Return (IRR), Price Value (PV) ratio, financial planning of customers, sourcing the customers, communication skills and personality development.

The topics of training offered to Asset and Portfolio managers are on portfolio management skills, risk management skills, ability to determine asset mix and financial management concepts. Training offered for claims manager are on documentation skill, legal norms, coordination skills, problem solving skills, computing and management skills.

5.4.2   Training in Banking Sector

Banking sector in India is playing a pivotal role in India's economic development and has a total workforce of 1.17 million (2013) as per Wikipedia. The Indian banking sector is likely to hire 1 million new candidates in the next five years for its business expansion and hence it is essential to know the skill requirement for different positions in the sector.

In a research study conducted by Chackochan J. Njavallil (2007) the training areas preferred by the employees in public sector banks and new gen banks has found that in the case of public sector banks the order of preference from most important to least important is. 1. Skill in using various computer packages, 2. Product knowledge, 3. Inter-personal and communication skill, 4. Public speaking skill, 5. Leadership and team working skills, 6. Managerial skills and 7. People/customer relation skills. In the case of new generation banks, the order or preference is: 1. Managerial skills, 2. Product knowledge, 3. Public speaking skills, 4. Leadership and Team working skills, 5. Skills in using various Computer packages, 6. Inter-personal skills, 7. People and Customer relation skills. Various agencies also offer training programmes. Some of the major training agencies involved in training of banking personnel in India are:

- National Institute of Bank Management, Pune
- Administrative Staff College of India, Hyderabad
- College of Agricultural Banking, Pune
- Bankers Institute of Rural Development, Lucknow
- Institute for Development and Research in Banking Technology, Hyderabad

- ▪ Indian Institute of Banking and Finance (IIBF) Mumbai
- ▪ Institute of Finance, Banking and Insurance (IFBI)

6   Training Budget of IT Companies

A press release in 2007 said the top five software and IT companies namely TCS, Wipro, Infosys, HCL and Cognizant alone spent around $ 438 million during the financial year 2007–08 for training around 0.1 million fresh engineers hired by them. Mr Kiran Karnik, the president of NASSCOM (National Association of Software and Service Companies), has said that

> *"Indian education system is not market responsive and drastic reforms are required in education system in schools and colleges to understand the industrial needs. Lack of skills and technical knowledge tax the IT firms." (Chaudary 2007)*

The well-known consulting companies like Deloitte and PwC say that currently, Indian IT and ITES companies are spending anywhere between 3 to 3.5% of their payroll costs in training talent, which has to be increased to 5 to 6%. Ms. Padmaja Alaganandan, Executive Director, consulting, PwC consulting, says that "the learning and development cost in India is around 3.5% of the payroll". She pointed out at a recent AIMA (All India Management Association) conference that the "corporate India needs to focus more on this than companies in mature markets and should allocate at least 5-6% of payroll costs on training" Prayag (2012). According to the American Society for Training and Development, companies in USAs spend around 3 to 4%. The initial budget allocation for skill development by Government of India towards NSDC was Rs. 10 billion and later it was doubled in 2013 union government budget.

7   E-Learning – A Strategic Training Tool

E-Learning has assumed much importance in the recent past, especially in IT industry. E-Learning is the convergence of information and communication technology.

E-Learning is said to be one of the fastest, simplest and low cost method of delivering education and training. E-Learning overcomes various barriers like physical distance, time, personal and official convenience of both trainer and trainee, learning psychology and budget allocation and investment on physical infrastructure. Though the initial investment is more, the return on investment in the long run is more.

Various research and marketing studies have been conducted on the benefits of E-learning and some of them are highlighted below. The E-Learning

- increases 26% revenue generation per employee (The Business Impact of Next-Generation eLearning 2011).
- provides 35% improvement in time management, 32% improvement in introducing new products and services and 32% faster role out of IT systems (Towards Maturity Report 2012).
- helps companies to boost 50% of its existing productivity, 26% in overall cost saving, it saves 40% to 60% of time is saved when compared to traditional classroom training (Brandon Hall study).
- increases employee retention rate from 25 to 60% (E-Learning – A Strategy for Maximizing Human Capital in the Knowledge Economy**,** Research Institute of America).
- providing a competitive advantage in their particular market to 72% of the organisations surveyed (Certifyme.net).
- can help companies boost productivity by 50%. Every $1 spent in E-Learning results in $30 of productivity (The Value of Training - IBM Report).
- boosts 18% employee engagement (http://mollyfletcher.com/blog/3-reasons-to-implement-e-learning-in-your-organisation/).
- consumes an average of 90% less energy and produces 85% fewer CO_2 emissions per student than conventional face to face courses while producing and providing E-Learning courses, according to Britain's Open University study (Knowledge Direct Web).

Hence Indian companies are also using E-Learning as a major tool to scale up their training efforts. The future in E-Learning will concentrate on micro learning, gamification (using games to train and teach), personalised learning, automatic learning, experiential learning etc.

8   Mentoring – A Tool for Training

Concept of mentoring is not new to India as it was practiced earlier in the name of Guru-Sishya Parampara (teacher-student tradition). In the famous Indian epic Mahabharat, Lord Krishna acted as mentor of PanchaPandavas and Chanakya, acted as an intelligent minister who was also a mentor to King Chandragupta Maurya. Time has changed but contexts have not. Under mentoring, a person of high experience with learning ability shares some of the most important and best experience,

values, skills and knowledge to a less experienced employee based on his real life experience on learning. Concept of mentoring includes coaching, facilitating, counselling and networking. A research study conducted by DebashmitaTripati at SatguruPratap Singh Apollo hospitals found that employee attrition rate was reduced by 15% in 2011 as compared to 2010 attrition and the administrative errors were reduced by more than 15.3% due to mentoring efforts. Mentoring is emerging as a powerful tool in HRD in imbibing organisational values, for clarifying vision and mission of organisation and familiarising organisation culture, career development and growth. Indian companies of all types and sizes invariably adopt mentoring system.

9 Training Evaluation in Indian Corporate Houses

There is an old axiom 'nothing will improve until it is measured'. It is very true that the training programmes have to be evaluated to know the desired outcomes. In other words, the training evaluation helps to understand the impact of training on individual, group and organisation as a whole. Even-though several methods are available to assess the impact of training programmes in organisations, unfortunately there is no one universally acceptable evaluation method like that of no best way of training employees. The study units evaluate the effectiveness of their training programmes conducted by them by way of direct observation, feedback from immediate supervisor, self-evaluation by the trainees, performance reports, employees' survey, training audits etc. Indian companies are also using some of the well-known training evaluation techniques such as Kaufman's Five levels of evaluation, Philip's five level ROI framework, CIRO's four level of evaluation of training impact and Kirkpatrick's four level of evaluation of training impact.

10 Major Issues faced in Training and Retraining of Employees in India

The Indian companies do face various challenges in offering training programme which includes low budget allocation, lack of faith in training outcomes by top level managers, lack of adequate infrastructure inside the organisation, fear of loss of production and productivity and profit, lack of interest of trainees etc.

11   Suggestions, Recommendations and Conclusion

India will pass through the golden period in the next 10-20 years. By a systematic planning, committed and dedicated efforts of all the stakeholders' viz. government at national level - both at centre and state level, private employers and employees, India can reap the democratic dividend to its advantage. The dream of India to become a world super power can be realized in the next 10 to 20 years by skilling the Indian workforce in a most effective manner through scientific planning and execution. Some of the suggestions for enhancing the employability of the youth entering in to Indian job market and equipping the existing workforce to improve their productivity are given below:

- Vocational education should be made compulsory right from 8th standard at the school level. Interests and abilities of the individual should be identified through proper diagnostic test to offer basic, specific and suitable courses on a particular trade during the remaining five years of their schooling.
- As a continuation of skill learning, at college level, each and every programme must have specific courses which can strengthen the innate abilities and skills of the students in a particular trade, based on his career goals. Internships, summer and winter projects at university and college level should be made compulsory and it must be practiced in its true sense and evaluation should be done by nearby industry and business representatives as external examiners which may help them in campus placements also.
- Under CSR initiative, all the Indian corporate may be requested to adopt at least 'one school', 'one college/university' and 'one village' to impart technical training to produce more skilled workforce.
- The government budget allocation at national and state level for vocational and technical education should be enhanced considerably.
- Manpower planning and skill gap analysis should be made continuously and the industry requirements and expectations should be communicated to the academia every now and then through a well-designed system to plan and offer suitable curriculum at school, college and university level.
- Presently, the employment exchanges in India are not able to help considerably the registered unemployed in securing jobs through them. Hence they may be converted in to skill development and career counselling centres.
- By amending The Companies Act, corporate houses should be made to spend at least 3 to 5% of their total earning for training and development

    to improve their production and productivity. Expenses on training should be considered by Indian employers as an investment for long-term success of the organisation.

- Considering the huge penetration of internet, computer and also the increasing use of mobile phones by Indian population, E-Learning, mobile learning and other modern forms of learning should be used by all the sectors and agencies to scale up the training outputs.

- Mahatma Gandhi, the Father of India once said "India lives in villages". Even today majority of the Indian population lives in rural areas, without proper basic education and skill training. Skill development centres should be established at every village Panchayat or block level across India to train the unemployed rural youth and existing work force as a part of increasing the overall skill building capacity of India. Skill development should be considered as No. 1 in the agenda of central and state governments to increase employability which in turn will help us to achieve the overall economic and social development.

- In all types of organisations further learning or employee skill development should be made mandatory. A minimum of seven days in a year must be spent to learn new skills, knowledge on recent development in their respective field of work by the employees. Job promotion and annual hike in salary should be connected with the new learning made by the employees in the particular year and work performance. Corporate must be advised to support or sponsor fully or partially at least 1% of its total workforce for higher education every year. This provision should be extended to government departments and public sector undertakings also.

- In the recent times, IT companies like TCS, Accenture, Wipro, Infosys and IBM are advancing a portion of fresher's training, to the college and university campuses itself where they do campus hiring. This model is said to be very successful and helps them in reducing training cost and time, and provides 'ready to deploy manpower' with their clients. This can be followed by other companies which will fix more responsibility on the part of academia to produce better inputs from their campuses to the world of employment.

- Industrial heads, business leaders and successful entrepreneurs should be included in curriculum planning at all levels of education. The curriculum of all the school, college and university education should be revised in such a way that 50% of time spent on learning is allotted for learning one or more skills of their interest to achieve their career goals.

- 'Skill registry' should be created and maintained at regional, district, state and national level in which skills needed for different occupations should

be clearly stated and number of skilled people available in the region should be maintained. For this a separate new ministry in the name of 'Ministry of Skill Development and Employment' should be established to pay full attention on this most pressing agenda of India. (It is very happy to note that while drafting the final copy of this article, Government of India has formed a separate ministry and appointed a minister exclusively for skill development and entrepreneurship development in India, which is suggested here.)

▪ The present system of framing a common syllabus for all affiliated colleges and universities by State universities should be changed in such a way that the individual colleges are given freedom to offer skill based programmes and courses based on local and regional employment needs.

To conclude, the unemployable young Indians, who are considered as liabilities today, should be converted into valuable assets of tomorrow by skilling them through a concerted and coordinated effort by all the stake holders of the society, which will help us to realise the today's dream in to tomorrow's reality.

"High achievement always takes place in the framework of high expectation." (Charles Kettering n.d)

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