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Ministry of labour & Employment

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SKILL DEVELOPMENT DURING 2008-09 – *General Information*

Years 2007-08 & 08-09 have been very significant in the history of skill development in the country. Lots of initiatives taken by the Govt. for skill upliftment which commenced in 2007-08 continued their thrust in 2008-09, the result of which will have far-reaching consequences. A new Scheme for upgradation of 100 domestically funded ITIs into Centres of Excellence was started in 2005-06 and in the last financial year we utilized Rs.260 million for the upgradation of these 100 ITIs. The best outcome of this Scheme has been that most of the trainees who completed the first courses of two years in different trades with the upgraded facilities have been suitably placed in the industry.

2. Another Scheme for upgradation of 400 ITIs into Centres of Excellence was started with the assistance of the World Bank. In the last two years i.e. in 2007-08 & 2008-09, 400 ITIs were taken up for upgradation and an amount of Rs.2210 Million & Rs. 2050 Million respectively were released to the State Governments for upgrading the infrastructure. In addition, we also upgraded the infrastructural facilities in 14 Centrally Funded institutions and released substantial funds to upgrade these institutions to world standards. These institutions will be primarily responsible for imparting specialized training services to instructors of the upgraded ITIs. Another Scheme for upgradation of remaining 1396 Govt. ITIs in the next five years through Public Private Partnership was announced by the Finance Minister in his Budget Speech, 2007-08. Consequently, 600 ITIs have so far been taken up for upgradation @ 300 ITIs per annum. Each

of these 600 ITIs is being upgraded under the leadership of an industry partner. During the year, 265 additional industry partners (312 identified during 2007-08) were identified. In each of these ITIs, Institute Management Committee (IMC) headed by an industry partner and consisting of four other industry members, five Govt. representatives with Principal as the Member Secretary have been constituted. In order to give administrative and financial autonomy to the IMC, it has been registered as IMC society with its own articles and memorandum of association. A tripartite agreement between the Central Govt., the State Govt. and the industry partner has been entered into and an amount of Rs.25 Million has been made available to each of these ITIs. The IMC societies have been requested to now undertake the process of upgradation of infrastructure in these ITIs and train persons in the upgraded infrastructure according to the requirement of the industry. A total of Rs.15000 Million has been released to the IMC societies of these 600 ITIs during 2007-08 and 2008-09. Another set of 300 ITIs will be taken up at the cost of Rs.7500 Million in the current financial year.

3. Another path-breaking Scheme titled 'Skill Development Initiative' was started in 2007-08. Under this Scheme, it has been planned to train one million persons in next five years in Modular Employable Skills (MES) and thereafter one million every year. Under the Scheme, 419 modules under different trades have been developed so far. These Modular Employable Skills enable the trainees to acquire skills in a short time, get placed and come back for training in another module according to preference and aptitude of the candidate. In the last one year, an amount

of Rs. 445.0 Million was utilized and 1.15 lakh persons were trained against a target of 0.50 lakh

4. Another Scheme of setting up of 22 new and 3 additional ITIs & upgrading 35 existing ITIs in north-east and Sikkim was completed at a cost of Rs.1065.0 Million. As some of the residual infrastructure are pending completion in the three additional ITIs, extension of the project duration is being sought for one more year, which on completion will increase the existing seating capacity of ITIs from 7,244 to 16,144 in north-eastern states. Similarly another component for upgradation of 37 existing ITIs in the State of Jammu & Kashmir and setting up of one new women ITI at Jammu are nearing completion for which, an amount of 24.24 crore has so far been released to J&K. On completion, the seating capacity in ITIs in J&K will increase from 4364 to 6200. In addition to above, an effort is being made to upgrade the infrastructure in the existing Central vocational training institutes. An amount of Rs. 382.6 Million was utilized in the last financial year. In addition, Rs. 35.2 Million have been utilized for the training of Scheduled Castes/Scheduled Tribes and physically challenged persons.

5. Another effort is being made to set up a large number of ITIs and ITCs and affiliate them to the National Council for Vocational Training (NCVT). While in 2005 and 2006, 124 and 137 ITIs/ITCs were affiliated to NCVT, increasing the seating capacity in different trades by 30,000 and 25,000, respectively, a total of 816 ITIs/ITCs were affiliated in 2008-09, increasing

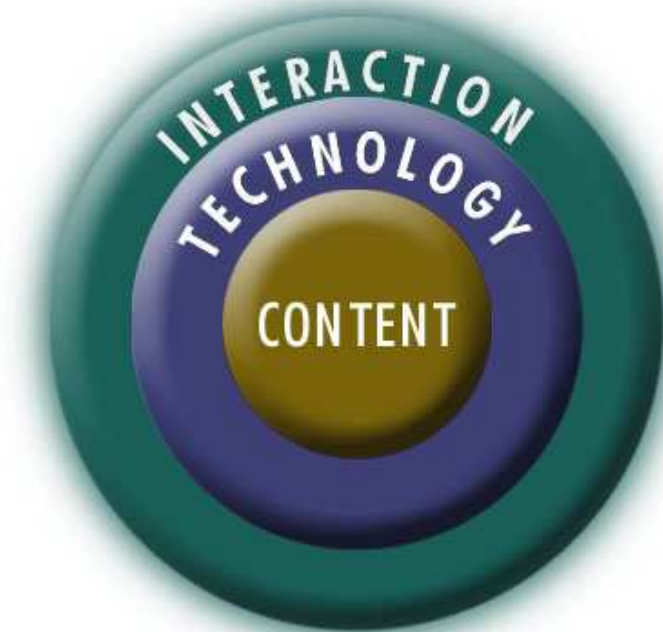
the seating capacity by 1.25 lakh. This has been a record performance by NCVT in a financial year.

6. Requirement of skilled persons in newer and newer trades is being felt by the industry. Keeping in view the latest requirement of the industry, three new trades in Craftsmen Training Scheme, 34 new trades in Apprenticeship Training Scheme, 16 new trades in multi-skilling courses and 124 Modular Employable Skills courses were developed during 2008-09, taking to a total of 112 trades in Craftsmen Training Scheme, 188 trades in Apprenticeship Training Scheme, 230 modules under the multi-skilling courses and 419 modules under the Modular Employable Skills.

7. National policy on Skill Development was formulated and the same was approved by the Union Cabinet on February 23, 2009. This policy is to be a key force in linking education and skill training to 'employability' and increase 'functional literacy' in the country. The policy will also enable different Ministries/Departments of Govt. of India and State Governments work in a cohesive and coordinated manner to train 500 million persons by 2022 in order to meet skill needs of various sectors of economy.

8. Govt. of India utilized Rs.1,0943.3 Million in 2007-08 and Rs. 10830.8 million in 2008-09 against Rs.1014.5 million in 2006-07, which is an increase of about 11 times over the last year.

Training and Skilling with EDUSAT



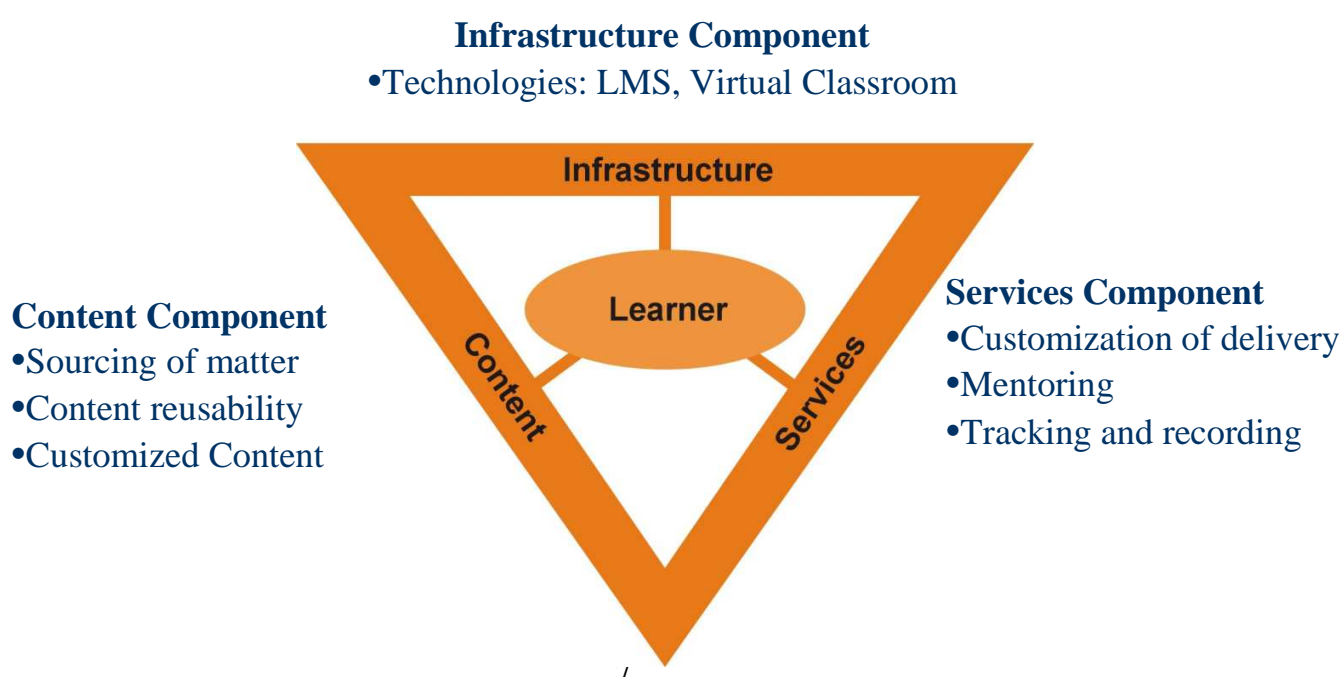
Introduction – EDUSAT

Over the past few years, 'Distance Skilling' has become a significant technological input in the field of 'Training' in India. The 'Edusat' project has demonstrated the concept of multicasting interactive multimedia for the skill building sector and there by augment training capabilities in the country.

There is one national beam and five regional beams provided by ISRO through EDUSAT to cater to the educational/training requirements of the nation as a whole and also of the regions separately. The EDUSAT works on KU band which has got cheaper and latest technology than previously used extended C band. The life span of EDUSAT satellite is at least ten years.

DGE&T has become the largest network of Industry Training Institutes in India by connecting over 6000 Institutions and several Industry under EDUSAT Training network which would benefit over 10,00,000 trainees.

Managing Knowledge with Training/Skilling/Learning Objects



The present EDUSAT project allows key elements of interactivity, access, cost-effectiveness and consistency of information to students. One subject expert can simultaneously teach hundreds of students in multiple locations across a vast geographical area. The students of the remote and 'un-reached' Institutes can get the live lecture/demonstration sessions of the best trainer. This initiative, therefore, addresses the major issue of paucity of faculty members in Common education training.

With the full-fledged EDUSAT network and DGE&T's web-based e-Learning facility, the students in India are poised for getting a level ground of technical and vocational training and education.

Key Benefits of EDUSAT Network and e-learning

- Sharing of training and learning resources across Institutes
- Providing a level playing ground for trainees
- Improving quality of Training-learning processes
- Providing online examination
- Facilitating e-management and e-library
- Virtual classroom
- Video on demand
- Database access
- On-line admission
- On-line examination
- Radio networking

Institutes:

- Bridges gaps in availability of quality training resources

- Improves the quality of training content and resources delivered to trainees
- Encourages faculty to play a proactive role in content creation, student mentoring, assessment creation and delivery
- Regulate opportunities by serving the industry and other institutions

Faculty Members

- A powerful tool to build question banks, quizzes and assessments
- Empower trainees to direct the training-learning process in the Institutions
- Enables peer group interaction and collaboration with external agencies – enhanced learning opportunities for trainers.

Trainers /learners

- Provides self-directed, self-paced, anytime, anywhere learning
- Possibility of self assessment and benchmarking
- Become part of a larger “learning community”

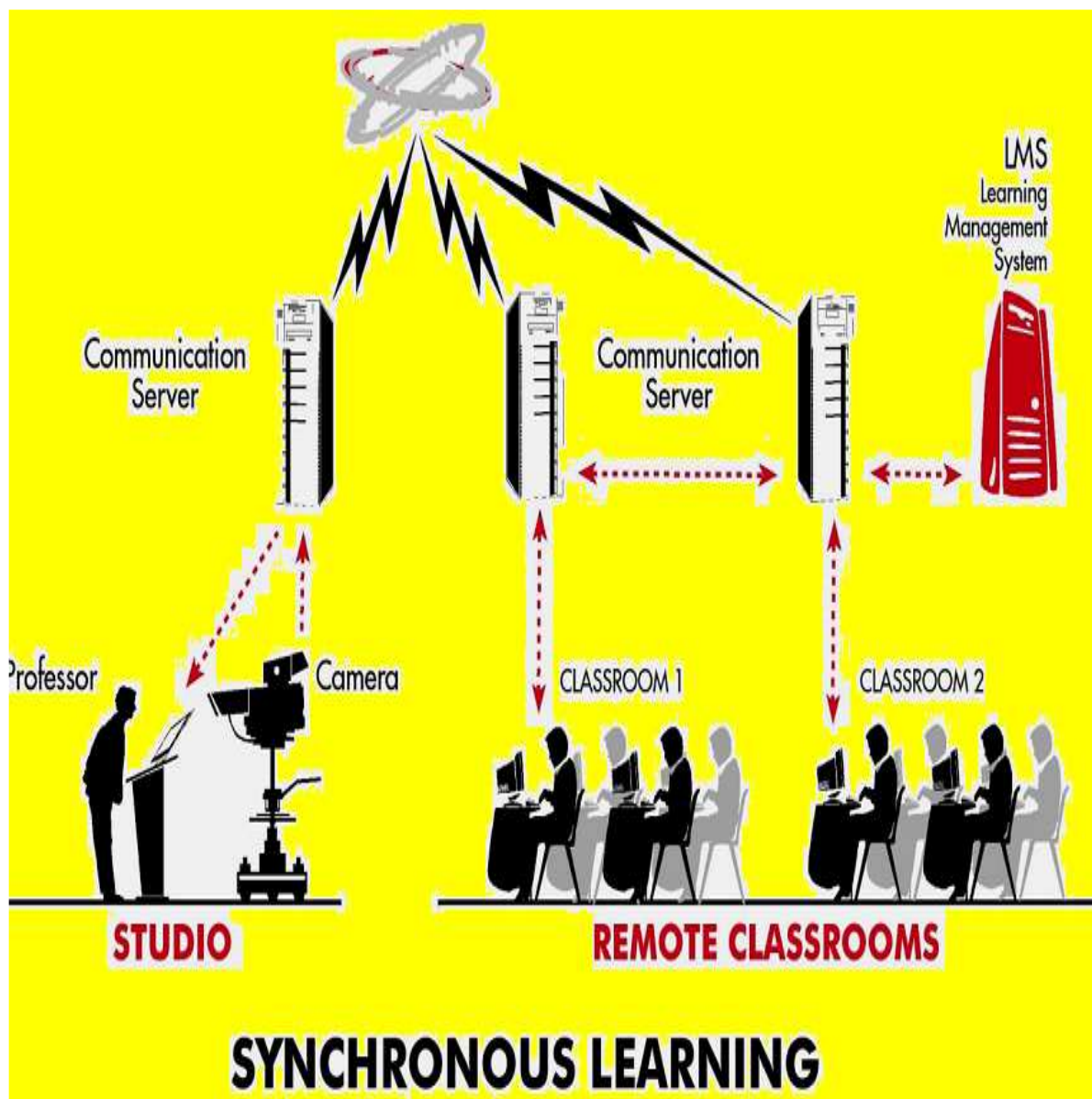
Industry

- Availability of skilled manpower, resource materials and preparing test materials for selection.
- Opportunity of partnering with DGE&T in the training process
- Contribution to training activities as per their requirements
- Identifying the manpower at the source of employment.

EDUSAT Infrastructure

There are four Main Components of Network:

- Central Station (Main Hub)
- All traffic is routed through the main Hub
- Number of Sub-Hubs / Teaching Ends
- Number of Remote Interactive Terminals

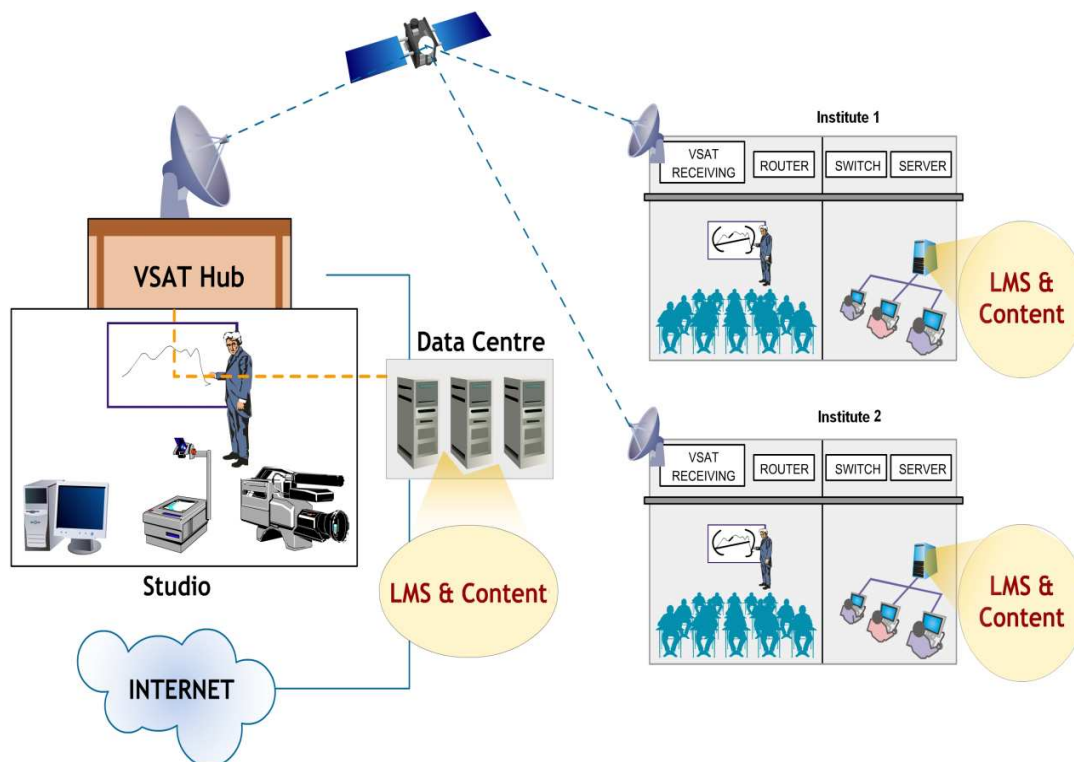


Multiple Strategic approach

- Traditional Classroom
- Self-paced E-learning/E-Training
- Learning-on-the-Job with Mentoring & Coaching
- Blended Learning
- Synchronous Learning
- Continuous and ongoing learning

Edusat Project Experience

In India, some of the programmes are already being done by Indra Gandhi National Open University[IGNOU] and some of the States for schools and engineering colleges for greater interactivity, cost effectiveness and consistency of information to students. For the engineering students, they have the facility to interact with subject experts at the studio either through a voice-link-via-satellite or phone/fax/SMS.



The transmission of live sessions has now become a regular feature and become an integral part of the academic calendar of the schools &

engineering colleges. Through this mode, one subject expert can simultaneously teach hundreds of students in multiple locations across a vast geographical area.

DGE&Ts e-Learning Framework

Under the VTIP with World Bnk assistance through APEX HITECH INSTITUTE- DGE&T-EDUSAT Project, the network infrastructure is being used for delivery of "live" video-based lecture sessions. The subject experts use presentation content, which is derived from the deployed e-Learning content. Such video sessions would be captured, digitized and linked to become part of the overall e-Learning content.

e-Learning framework, consists of the following components:

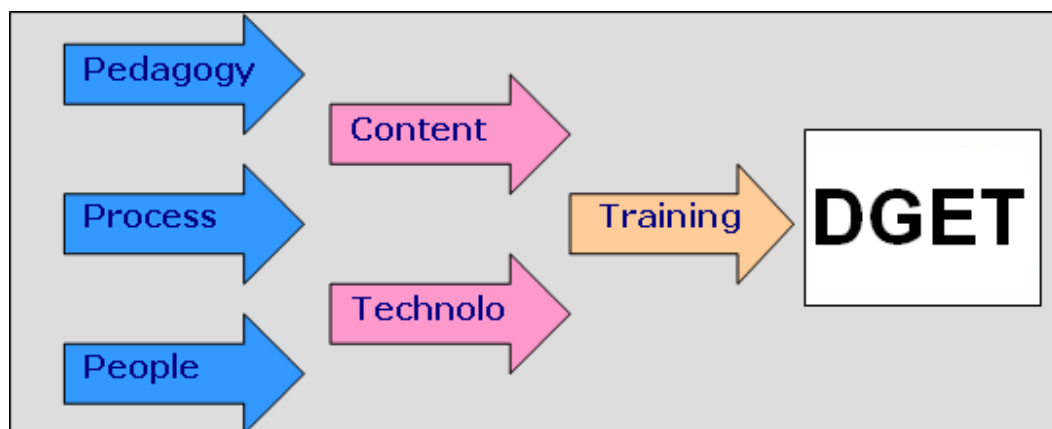


Figure-2: e-Learning Framework

A dedicated website will be created and digital content will be deployed. This site will give information on everything about the project and the programme, be it schedule of the session, background of subject experts or availability of lecture material.

DGET has initiated web-based distance training; to make video-based lecture and e-Learning courseware available on the web for any trainer/trainee. In the first phase 52 GITIs in Karnataka State will be brought into the EDUSAT Training net which will be used for training of Trainers/Instructors/Staff and also the GITI students in a few selected subjects. The experience will be taken and the activity will go into the second phase of networking GITIs & ITCs in various states. The third phase will be throughout the country on a continues and sustainable basis.

Some of the anticipated benefits are:

- Teaching faculty can use the courseware to develop new curricula and specific courses.
- Individual learners could draw upon the materials for self-study or supplementary use
- Over time DGE&T e-Learning website would serve as a common repository of vast educational resources and could facilitate widespread exchange of ideas about innovative ways to use those resources in teaching and learning
- The website is also aimed at providing tools for interaction between the experts/faculty and the learners, assessment of progress made by the learners and for certification.

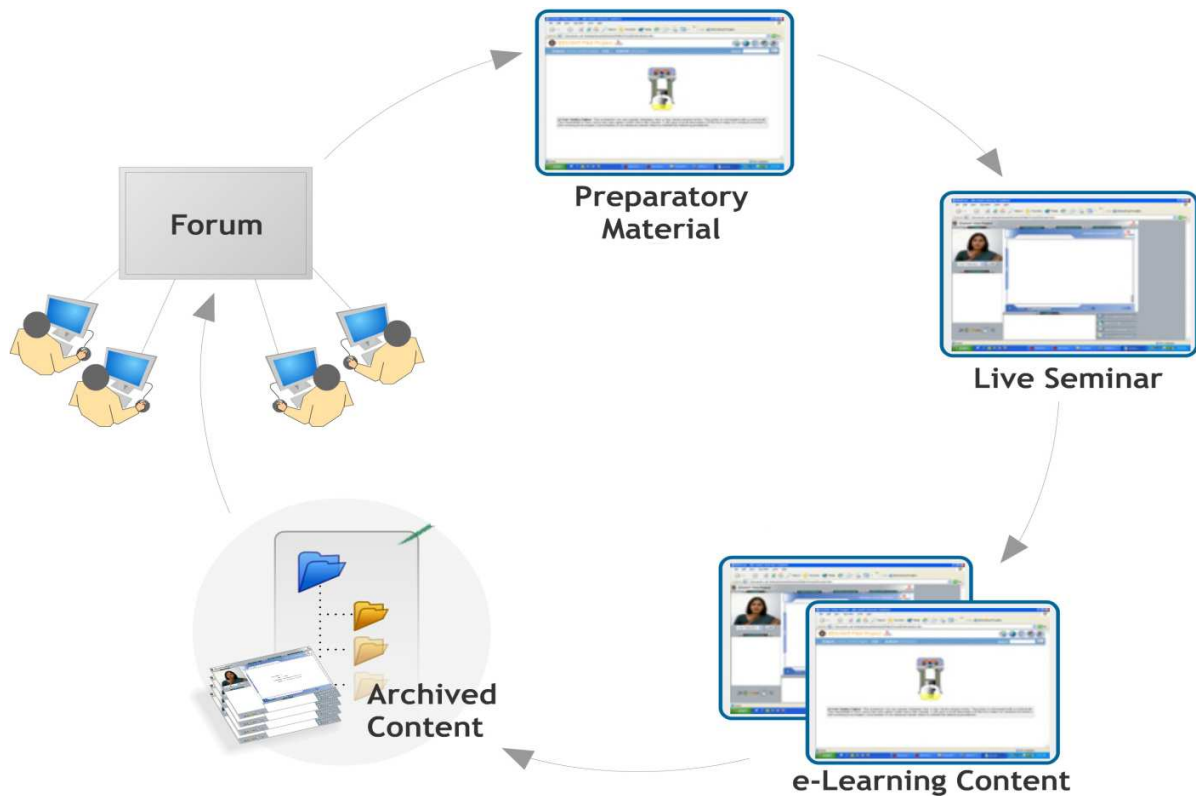


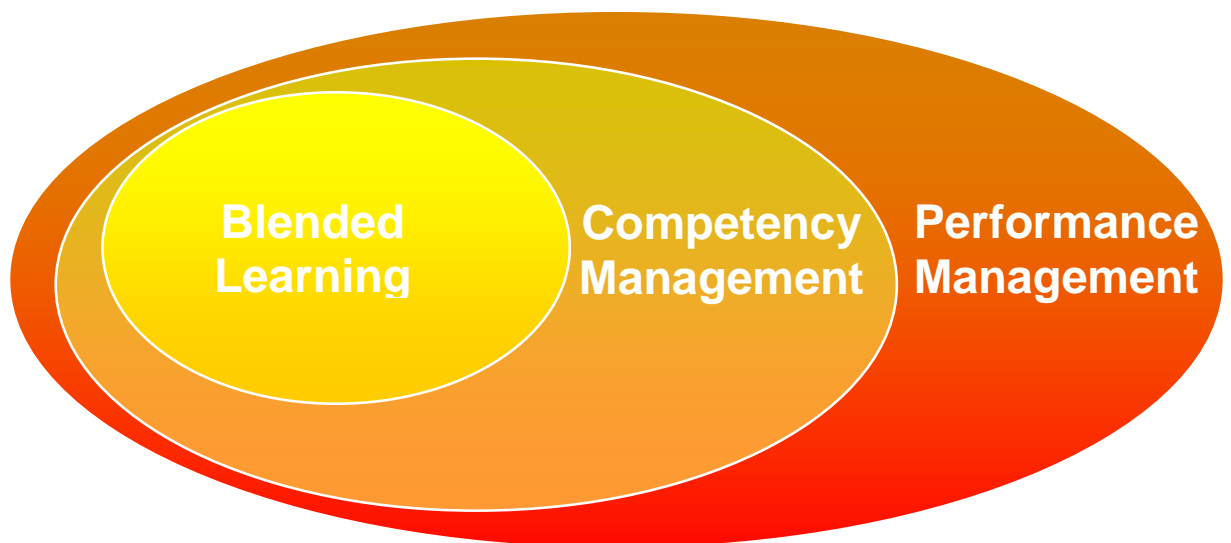
Figure-3: Student-centric Approach

The major advantages of this distance education mode are-

- Simultaneous delivery of lecture sessions/ video lessons to a large number of geographically dispersed trainees in the shortest possible time
- Uniformity and quality of the lesson/ content
- Access to best teachers/subject experts/trainers
- Repeatability of delivery of video/lecture sessions
- Capability to share the same network by different user groups
- Cost effectiveness and economies in travel, logistics and replication of training/teaching infrastructure
- Minimal transmission loss.
- Collect, fine tune and disseminate content developed by experts drawn from both academia and industry

- Sharing of teaching-learning training-learning processes across geographical locations
- Facilitating e-management and providing e-library services
- Provide interaction/guidance/feedback tools to learners/trainees and act as facilitator between experts and students/trainees.
- Supplement the conventional system of training and education and bring uniformity in technical education
- Provide an on-line examination platform
- Revenue opportunities by servicing the industry and other academic institutions.
- Providing e-learning materials, C.D's, Videos of programmed lessons for application and practice

Beyond Online Content



It is proposed to take the following steps in the preparation of software:

- A group of subject experts will be identified in each curricular area and they will be trained to make presentations in the distance education mode.
- These experts will take up delivering lectures through the 'Edusat' immediately from the start of the next academic year.

- The subject experts will use presentation content, derived from the e-learning content. These video lessons would be captured, digitised and linked to become part of the overall e-learning content of the web based digital library services.
- Simultaneously another core group of classroom teachers and content experts will be selected for each of the identified curricular areas to prepare e-learning materials.
- These groups will identify hard spots in each subject.
- Content and scripts will be developed by the script writers and will be scrutinized by subject experts.
- This content will be converted in to video scripts by professional script writers.
- The production of films in each subject will be outsourced.
- A teachers' handbook will be developed and distributed to all the receiving stations and will be put on the web. This will help the regular classroom teachers in the polytechnics/ITIs to synchronize the classroom lesson with the broadcast of the video lesson.

Development of Hardware

- The infrastructure will include sound proof, air conditioned, and fully equipped audio and video studio recording facilities, control and editing rooms along with adequate power backup.
- These studios will be equipped with the state-of-the-art cameras along with high quality equipment which can be used for recording as well as direct broadcast of the programmes emanating from the studio.
- These studios will be used both for production of TV films and for direct broadcasts of lessons as well as teacher/trainer training for the Edusat project.
- ROTs will be established in all the polytechnics/ITIs of the state of which ... will be interactive and ... will be non interactive terminals.
- A audio/video link will be established between the Institute and the DSERT uplink facility, till the Institute gets its own uplink facility.

Costing : The estimated cost will be around Rs. 50 million

Conclusion

Using this EDUSAT network, we have already planned to train students on such skills as problem solving, leadership qualities, communication skills, experimental skills, teamwork, time and crisis management, techno-entrepreneurship development, design orientation, creativity and career planning. We are also planning to conduct programmes on social and environmental awareness, professional ethics and behavioural habits.

With the full-fledged EDUSAT network and DGETs web-based e-Learning facility, the students in India are poised for getting a level ground of technical training

WORKPLACE LEARNING

AN OVERVIEW OF APPRENTICESHIP TRAINING SCHEME

BACKGROUND

- Development of human resource is crucial for the industrial development of any nation. Upgradation of skills is an important component of Human Resource Development. Training imparted in Institutions alone is not sufficient for acquisition of skills and needs to be supplemented by training in the actual work place.

OBJECTIVES

Apprentices Act, 1961 was enacted with the following objectives :-

- To regulate the programme of training of apprentices in the industry so as to conform to the syllabi, period of training etc. as laid down by the Central Apprenticeship Council; and
- To utilise fully the facilities available in industry for imparting practical training with a view to meeting the requirements of skilled manpower for industry.

EVOLUTION OF APPRENTICESHIP TRAINING SCHEME

- National Apprenticeship Scheme started in 1959 on Voluntary Basis.
- Apprentices Act was enacted in 1961 and implemented w.e.f. 1.3.1962.
- Initially the Act envisaged training of Trade Apprentices.
- The Act was amended in 1973 to include training of Graduate and Diploma Engineers as "Graduate" & "Technician" Apprentices.

- The Act was further amended in 1986 to bring within its purview the training of the 10+2 vocational stream as "Technician (Vocational)" Apprentices.
- **It was further amended in 1997 to amend various sections of the Act as regards definition of “establishment” and “worker”, termination of apprenticeship contract, number of apprentices for a designated trade, practical and basic training of apprentices, obligation of employers, penalty for contravening the provisions of the Act and cognizance of offences.**
- **The Act was again amended in 2008 to amend various sections of the Act as regards reservation for candidates belonging to Other Backward Classes (OBCs), expenditure on related instruction shall be imparted at the cost of employer and the employer shall, when so required, afford all facilities for imparting such instructions and to provide flexibility in respect of ratios prescribed for apprenticeship seats.**

MONITORING OF THE IMPLEMENTATION OF THE ACT

- DGE&T is also responsible for implementation of the Act in respect of Trade Apprentices in the Central Govt. Undertakings & Departments. This is done through **six Regional Directorates of Apprenticeship Training** located at Kolkata, Mumbai, Chennai, Hyderabad, Kanpur & Faridabad.
- State Apprenticeship Advisers are responsible for implementation of the Act in respect of Trade Apprentices in State Government Undertakings/ Departments and Private Establishments.
- Department of Education in the Ministry of HRD is responsible for implementation of the Act in respect of Graduate, Technician & Technician (Vocational) Apprentices. This is done through **four Boards of Apprenticeship Training** located at Kanpur, Kolkata, Mumbai & Chennai.

CENTRAL APPRENTICESHIP COUNCIL

- It is an apex statutory body. It advises the Government on laying down policies and prescribing norms & standards in respect of Apprenticeship Training Scheme(ATS).
- It is tripartite by constitution with members from Govt. both Central and State/UTs, Employers & Trade Unions.

COVERAGE

- It is obligatory on the part of employers both in Public and Private Sector establishments having requisite training infrastructure as laid down in the Act, to engage apprentices.
- **254 groups of industries** covered under the Act.
- 24815 establishments engage trade apprentices.

STIPEND

- Trade apprentices are paid stipend at following rates : Rs. 1090 p.m for 1st year, Rs. 1240 p.m. for 2nd year, Rs. 1440 p.m. for 3rd year and 1620 p.m for 4th year.(with effect from 21st March 2007)
- The expenditure on stipend for trade apprentices is borne by the employers.
- The rates of stipend for Graduate, Technician & Technician (Vocational) apprentices are Rs. 2600 p.m, Rs. 1850 p.m. and Rs. 1440 p.m. respectively. (with effect from 8th January 2008)
- Expenditure on Stipend for the categories of Graduate, Technician & Technician (Vocational) apprentices is shared equally between the employer and the Central Government.
- Rates of stipend are revised every two years based on Consumer Price Index.

TRAINING OF TRADE APPRENTICES

- 188 trades in 35 trade groups have been designated [**list annexed**].
- Qualifications vary from Class VIII pass to XII class pass (10+2) system.
- Minimum age is 14 years.
- Period of training varies from 6 months to 4 years.
- Training comprises Basic Training, Practical Training and Related Instructions as per prescribed syllabus for each trade.
- Basic Training & Related Instructions are conducted in Basic Training Centres (BTCs) or Related Instruction Centres (RICs) set up within the establishments or in a BTC or RIC set up by the Government.
- Seats for trade apprentices are located by the Apprenticeship Adviser on the basis of prescribed ratio of Apprentices to Workers and availability of training facilities.
- Every apprentice and employer has to enter into a contract of apprenticeship training, which is registered by the Apprenticeship Advisers.
- Employers and apprentices have to fulfill their obligations under the Act.

TESTING AND CERTIFICATION OF TRADE APPRENTICES

- All India Trade Tests (AITT) for trade apprentices are conducted by National Council of Vocational Training (NCVT) twice a year (October/ November and April/May).
- National Apprenticeship Certificates (NAC) are awarded to those who pass the AITT.

- NAC is recognized for employment under Govt./Semi-Government departments/ organizations.

SKILL COMPETITION OF TRADE APPRENTICES

- With a view to fostering healthy competition among apprentices as well as establishments, skill competition is organized at local, regional & All India levels.
- Skill competition is held for 15 trades namely; Fitter, Machinist, Turner, Welder (Gas & Electric), Electrician, Mechanic (Motor Vehicle), Tool & Die Maker (Die & Moulds), Tool and Die Maker(Press Tool, Jigs & Fixture), Instrument Mechanic, Draughtsman (Mechanical), Mechanic Machine Tool Maintenance, Wireman, Mechanic(Diesel), Refrigeration & Air-Conditioning Mechanic and Electronics Mechanic.

TRAINING OF GRADUATE, TECHNICIAN AND TECHNICIAN (VOCATIONAL APPRENTICES)

- **114 subject fields** have been designated for the category of Graduate & Technician apprentices.
- **102 subjects fields** have been designated for the category of Technician (Vocational) apprentices.
- Period of post qualification training for these categories is one year.
- Seats are located based on managerial/supervisory posts and training facilities.
- Training programme is prepared in joint consultation between Apprenticeship Adviser Establishment concerned.
- Certificates are awarded on completion of training by the Deptt. of Education, Ministry of Human Resource Development.

List of designated trades under the Apprentices Act, 1961

Trades having entry qualification Class VIIIth Pass

Name of Trades				Period of Training
1	Lineman	2	Wireman	3 years
3	Furniture & Cabinet Maker	4	Plumber	
5	Mechanic (Marine Diesel)	6	Tractor Mechanic	
7	Pattern Maker	8	Painter General	
9	Driver-cum-Fitter			
10	Mason (Building Constructor)	11	Sports Good Maker (Wood)	2 years
12	Auto Mechanic (Two Wheeler/ Three Wheeler)	13	Book Binder	
14	Tailor (General)	15	Leather Goods Maker	
16	Footwear Maker	17	Finished Leather Maker	
18	Upholsterer	19	Rigger	
20	Gas Cutter	21	Ceramic Moulder	
22	Ceramic Caster	23	Ceramic Kiln Operator	
24	Ceramic Press Operator	25	Ceramic Decorator	
26	Moulder (Refractory)	27	Painter Marine	
28	Tailor (Men)	29	Tailor (Women)	
30	Jewellery and Precious Metal Worker	31	Glass Former and Processor	1 year
32.	Gardener			
33	Weaver	34	Doffer-cum-Piecer	6 months
35	Tenter (Drawing Speed/ Fly Frames)	36	Winder (Textile)	
37	Printing Textile	38	Barber/Hair Cutter/Dresser	
39	Tyre Repairer	40	Pruner Tea Gardens	
Trades having entry qualification Class Xth Pass				
41	Electrician Aircraft	42.	Tool & Die Maker (Die & Mould)	4 years
43	Tool & Die Maker (Press Tools, Jigs & Fixture)	44.	Mechanic (Earth Moving Machinery)	
45	Mechanic (Instrument Aircraft)	46	Power Electrician	
47	Plastic Mould Maker	48	Mechanic Radio and Radar Aircraft	
49	Operator Cum Mechanic (Power Plant)			

Trades having entry qualification Class Xth Pass			
50	Fitter	51	Turner
52	Machinist	53	Machinist (Grinder)
54	Foundryman	55	Forger & Heat Treater
56	Sheet Metal Worker	57	Electrician
58	Mechanic Machine Tool Maintenance	59	Mechanic Maintenance (Textile Machinery)
60	Shipwright (Steel)	61	Mechanic (Dairy Maintenance)
62	Mechanic Maintenance (Chemical Plant)	63	Material Handling Equipment-Cum-Operator
64	Instrument Mechanic	65	Mechanic Watch and Clock
66	Mechanic Diesel	67	Mechanic (Motor Vehicle)
68	Refrigeration and Air Conditioning Mechanic	69	Construction Machinery Mechanic-Cum-Operator
70.	Draughtsman (Civil)	71.	Draughtsman(Mechanical)
72.	Surveyor	73.	Fitter Structural
74	Boiler Attendant	75	Mechanic Mining Machinery
76.	Switch Board Attendant	77	Line Operator
78	Mono Keyboard Operator	79	Process Cameraman
80	Retoucher Lithographic	81	Engraver
82	Offset Machine Minder	83	Optical Worker
84	Sirdar (Colliery)	85	Mate (Mines)
86	*Attendant Operator (Chemical Plant)	87	*Instrument Mechanic (Chemical Plant)
88	*Laboratory Assistant (Chemical Plant)	89	Mechanic (Agriculture Machinery)
90	Maintenance Mechanic for Leather Machinery	91	Insulator Maker/ Machine Operator (Ceramic)
92	Pipe Fitter	93	Shipwright (Wood)
94	Electronics Mechanic	95	Brick Layer (Refractory)
96	Apprentices Food Production (General)	97	Steam Turbine Cum Auxiliary Plant Operator
98	Winder (Armature)	99	Cable Jointer
100.	Electrician (Mines)	101	Electroplater
102.	Carpenter	103	Mechanic Television (Video)
104	Attendant Operator (Dairy)	105	Information Technology & Electronic System Maintenance
106	Mechanic –cum-Operator Electronics Communication System		

3 years

* Persons possessing B.Sc. qualification can undergo Apprenticeship Training with duration of 1½ year in these trades.

Trades having entry qualification Class Xth Pass			
107	Welder (Gas & Electric)	108	Motor Vehicle Body Builder
109	Auto Electrician	110	Mono Castor Operator
111	Plate Maker (Lithographic)	112	Shortfirer/Blaster (Mines)
113	Steward	114	Baker and Confectionery
115	Hotel Clerk/Receptionist/ Front Office Assistant	116	Apprentice Food Production (Vegetarian)
117	Fibre Reinforced Plastic Processor	118	Plastic Process Operator
119	Designer and Master Cutter	120	Dress Maker
121	Embroidery and Needle Worker	122	Horticulture Assistant
123	Stockman (Dairy)	124	Pump Operator Cum Mechanic
125	Sports Goods Maker (Leather)	126	Photographer
127	Beautician	128	Steel Melting Hand
129	Crane Operator (Overhead Steel Industry)	130	Furnace Operator (Steel Industry)
131	Hair Dresser	132	Health and Slimming Assistant
133	Hair and Skin Carer	134	Enamel Glazer
135	Fruit And Vegetable Processor	136	Operator (Steel Plant)
2 years			
137	Mechanic Automobile (Advance Petrol Engine)	138	Mechanic Automobile (Advance Diesel Engine)
139	Mechanic Auto Electronics	140	Mechanic (Denting, Painting and Welding)
141	TIG/MIG Welder	142	Structural Welder
143	Welder (Pipe and Pressure Vessels)	144	Chemical Laboratory Assistant
145	Advance Mechanic (Instruments)	146	CAD-CAM Operator-cum-Programmer
147	Advance Welder	148	Jigs and Fixtures Maker
149	Quality Assurance Assistant	150	CNC Programmer cum Operator
151	Operator PLC System	152	Mechanic (Electrical Domestic Appliances)
153	Mechanic (HT, LT Equipments and Cable Jointing)	154	Mechanic (Electrical Power Drives)
155	Mechanic (Embedded Systems and PLC)	156	Mechanic Power Electronics (Inverters, UPS & Maintenance of Drives)
157	Mechanic (DTH and other Communication System)	158	Mechanic (Domestic, Commercial Refrigeration and Air Conditioning Machines)
159	Mechanic (Central Air conditioning Plant, Industrial cooling and Package Air conditioning)	160	Mechanic (Cold storage, Ice plant and Ice candy plant)
161	Computer Aided Pattern Maker	162	Fashion Designing Assistant
163	Shirts and Trousers Maker		
2 years			

164	House Keeper - cum Accommodation Assistant	165.	Knitter (Hosiery)	1 ½ years
166	Mechanic Sewing Machine	167	Senior Sales Person (Retail)	1 year
168	Battery Repairer	169	Lacquering and Powder Coating Operator	
170	Wood Handicrafts Worker			
171	Creel Boy-Cum-Warper	172	Screen Printing	6 months
173	Beautician Assistant	174	Cable Television Operator	
175	** Call Centre Assistant	176	Sales Person (Retail)	
Trades having entry qualification Class XIIth Pass				
177	Operator Advanced Machine Tool Maintenance	178	Mechanic Advanced Machine Tool Maintenance	3 years
179	Mechanic Industrial Electronics			
180	Data Preparation and Computer Software	181	Desk Top Publishing Operator	2 years
182	Operator Cum Mechanic Pollution Control Equipment	183	Mechanic Medical Equipment for Hospitals and Occupational Health Centre	
184.	Medical Laboratory Technician (Pathology)	185.	Medical Laboratory Technician (Radiology)	6 months
186.	Medical Laboratory Technician (Cardiology and Physiology)			
Trades having entry qualification B.Sc. Pass				
187.	Advanced Attendant Operator (Process)			1 ½ years
Trades having entry qualification National Trade Certificate in "Computer Operator And Programming Assistant" issued by National Council for Vocational Training				
188.	Programming And Systems Administration Assistant			1 year

** Persons possessing National Trade Certificate issued by NCVT in the trades of Electronics Mechanic, Electrician, Mechanic cum Operator Electronics Communication system, Computer Operator and Programming Assistant, Information Technology and Electronics System Maintenance, Radio and Television, Instrument Mechanic can undergo Apprenticeship Training.