10.1 NEW MODEL CHRISTENED AS “SKILL BASED TRAINING MODEL”

IMC is a unique organization, which could bring tremendous changes in the industrial training system in India. With proper involvement of IMC we could bring a new practical model in training system. In order to meet the new challenges facing the Indian workforce, it is recommended setting up of a Skill based continuing training system covering all sectors of the economy. The training system will have a well-defined certification system for the competencies acquired during the program. It will help in providing learning, training, retraining, assessment and accreditation opportunities, with desired academic flexibility to those who wish to achieve higher skill standards and performance at the work place. This means that the trainees are free to leave the training and join work as and when they feel that they have received adequate amount of training. After some time, they can again join in for training if the situation demands or they feel a need to upgrade or shift laterally.

The purpose of Skill Based Training Model (SBTM) is to develop a competent workforce which will consist of individuals who can consistently perform work activities to the standards required in employment over a range of contexts or conditions.

New model of SBTM differs from the traditional training on the basis of which the training cycle is operated. In SBTM, the basis of training design is explicit; standards of performance are measurable and reflect the actual expectations of performance in a work role.

The key features of this approach are:

- Skills to be demonstrated are derived from the job function/ roles of different categories of employees.

- The methodology for assessing the performance is based upon achieving specified skills and is made public in advance.
• The rate of progress through the training programme is determined by demonstration of skill rather than time required for completion.

• The learning programme is individualized as far as possible, through the use of instructional modules for each competency, which offer different instructional alternatives.

• Some of the skills like leadership; team work will be developed in group situations during the contact sessions.

10.2 SKILL BASED TRAINING MODEL

A model for Skill Based Training Model for developing required skills is given as Figure.

It consists of 4 core areas:

a) Identification of Skills Requirements

b) Preparation of Modules for Instruction

c) Programme Implementation and Evaluation

10.2.1 Key requirements participative Skill Based Training Models in India

Employer participation models need to have the following characteristics in order to have widespread usage.

**Scalable:** The skill issue faced in India is very large in terms of number of people whose skills need to be upgraded. One of the key requirements for success of this model is that it should be quickly scalable so that a large number of people can benefit from them.

**Non exclusive:** The skill development initiative is broad based so that a large number of potential employees benefit from the same. Each initiative should be aimed at providing skills that cover at least 2 -3 industries.

**Self-funding:** The skill development initiative not depend on periodic infusion of funds by the stakeholders for day to day operations. Delays in periodic infusion of funds that may be required may become a detriment to the success of the model. It should be self-sustaining so that large scale periodic infusion of funds is avoided.
Flexible: The model is flexible so that it can be adapted across the varied educational system and socio economic conditions prevalent in the country.

Chart 10.1: New model for skill-based training (SBT)

10.3 FORMATION OF HRD COUNCIL FOR CREATING FUNDS FOR ITI UNDER THE AEGIS OF IMC

In this new model, it is proposed that the Government of India, with the help of Government & Industrial associations, could initiate innovative techniques to create a Human Resource Development Fund (HRDF) after forming an HRD council for each state. The HRDF may be generated from payroll levy, with a contribution of 1% of employee wages. Promoted investments obtained from these contributions will be 100% to 200% exempted from income tax. These investments are a flexible & demand-driven training scheme. Reinvestment programs offer grants of up to 40% of the capital investment for production capacity. Depending on their training needs, firms can choose flexibly from among several programs:

1. Approved training courses provided by registered external institutions;
2. Ad hoc in-plant or external training courses on an as-needed basis;
3. Annual training programmes.

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Prior approval of training courses under the second and third programs is required from the HRD Council. However, the Council’s overhead costs be kept low, to reduce the filing burden on firms, by automatic approval of courses under the first programme, by using IMCs of the ITI of the surrounding area & other training institutions as collection agents of the council, and by giving firms with well developed training plans the option of filing under the annual programme. In addition, the HRDF could also provide firms with grants for developing training plans; organise regional courses on training need assessments, and administers a variety of subsidised programme targeting small enterprises. A preliminary analysis indicates that the scheme could increase the incidence of training modestly.

10.4 HOW TO MAKE ITI’S MORE SELF-RELIANT

If state governments cannot provide more financial resources to the ITIs, then they should offer operational freedom and incentives enabling staff to improve utilization of existing assets and generate revenues. Devolution of powers would result in both, an increased workload for ITI staff as well as incentives. The regime of autonomy, which brings no obvious incentives to the staff, has a great chance of being rejected or underutilized.

IMCs suggest that conversion of training institutions into flexible and autonomous operators requires considerable reform of management, financing and staffing rules and regulations. The states that attempt to improve autonomy and flexibility of their ITIs would need project-based assistance to implement systematic reform rather than doing “patchwork”.

The suggested autonomy of ITIs would include:

- Freedom to decide on a realistic mix of training programmes to offer as well as on enrolments;

- Freedom for the ITI management or IMCs to hire and fire teaching and non-teaching staff. It may be suggested that at the beginning of the reform, the existing vacancies should no longer be filled through government appointments but rather through contract-based employment. One possibility
is that staffing of ITIs be made as a mix of permanent staff and contractual staff (let’s say, a 50/50 per cent rule);

- Recruitment rules for the contractual staff should be firmly established and salary scales should be fixed and decent. Contract staff will have an incentive to become permanent provided that there are vacancies;

- Disassociation from government departments in all operational issues related to the payment of expenditures such as electricity, water, building maintenance, etc. it is should be able to finance these costs themselves from revenues received from the Government, as well as student fees, etc.;

- Freedom to generate revenue by all legal means and spend it according to certain rules that are approved by the State Treasury. This would firstly require that ITIs open bank accounts. They should also have the right to conclude service agreements with customers and receive fees. The policy regarding ITI revenues should make it clear that they are exempt from taxation;

ITI management should be strengthened through introduction or reconstitution of their Management (Governing) Boards. Boards are to be given rights to employ and fire staff including the ITI principal, to budget and disburse important funding and make strategic development decisions.

The tripartite management boards should be appointed by the state governments. Such boards would have the right to enter into service contracts with the state government or other financing agencies that determine the type and amount of services the training institute would deliver in exchange for specified funding. Given the complexity of autonomous operations, ITI management and accounting staff should be retrained. They should acquire management, technical, operational and other skills in order to maintain the mix of their programmes in high gear with the demand for them, to market their courses, and to manage their accounts. The DGE&T should draft standard operational rules for the management boards.
Chart 10.2: Standard operational rules for the management board:

Chart 10.3: Model for three phase industry-institute integration:

Industry

3-phase industry-institute integration

Better early stage innovation

Better technology transfer

Knowledge partnership

Start-ups in collaboration

Forming consortium of organizations

Funding

Regulations

Government
Chart 10.4: New Model for IMC

Institute Management Committee

Placement/Industrial Trg. Committee

Specialized training

Data Bank

Placements seminar

Interview Preparation

In-House Trg. Trng.

Apprenticesh

Conferences/TGs

Local Industry

Demand from Industry

Instructors

ITI Principal

Students

Income Generation

Donors/Local Industry

Technical Experts

Curriculum Development Committee

Review Committee

On Job Trg.

Industrial Survey for Current Trends

Industry Needs
Chart 10.5: Finance Flows: Traditional Fragmented Training Market

Chart 10.6: Finance Flows: Training Markets with Strong State Intervention
10.5 SETTING UP OF OVERSEAS MANPOWER EXPORT SC UNDER THE AEGIES OF STEERING COMMITTEE OF IM STATE LEVEL

Under this new concept it is purposed to have Overseas Manpower Society (OMES) be under registered under the Companies Act, 1956. The objective of this society is to assist ITI passed out job seekers in securing placement abroad. The State Governments could contribute at least 50 lakh time seed money.

The Society would deploy maximum candidates on employment abroad. The beneficiaries will be mostly skilled, semi-skilled and technicians. Further it could also expand to cover Diploma holder, Engineers, IT Professionals, Doctors and Medical personnel.

Its other important activities, be as under:

1) To provides passport services for the candidates as well as the general that are residing within the jurisdiction of the Regional Passport Office, Chandigarh.
2) To provide Visa stamping service for the candidates who are recruited through OMES by the employers abroad and who secure employment abroad on their own efforts.

3) The proposed Overseas Manpower Export Society would have a full-fledged Travel Division to sell air-tickets. It would be accredited by IATA (International Air Transport Association), having stock of air tickets and Computerized Reservation Facility of its own for booking International Air tickets.

4) The society would implement a Social Security Scheme for candidates to provide for Accident and Hospitalization covers and their families for a period of five years against one time payment of affordable premium.

5) This society could also rope in Nurses professionals by launching CGFNS (Commission on Graduates of Foreign Nursing School) and IELTS (International English Language Testing System) training courses to qualify Indian Nurses for employment in USA and Western Countries in collaboration with any University in Punjab of repute.

6) To interact with the Ministry of External affairs on the demand & opportunities abroad.

7) To give training on spoken & writing English to the candidates going abroad for jobs.

10.6 PLACEMENT ADVISORY BUREAU (PAB)

Placement Advisory Bureau could be established in each ITIs with the help of Nearest District Employment Office, PAB could provide help for job placement, Internet surfing, Job searching, Campus Interview, Library, News Papers for Employment. The purpose of this Placement Advisory Bureau is to deliver employment related service to the ITI students. Separate room with proper infrastructure should be provided to PAB. Following checklist should be maintained to observe the progress of PAB.
Table 10.1: Placement Advisory Bureau provide help for job placement

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Particulars</th>
<th>Up to Last Months</th>
<th>In Current Month</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>No. of Candidate Passed ITI</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>No. of Reg. candidate in Employment office</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>No. CoE Trainees Passed</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>No. of Candidate given Membership</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>No. Employment Seminar done</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Present candi. for Self Employment Seminar</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>No. of Employment Fair</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>No. of Candidate present in Employment Fair</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>No. of Candid. Selected in Employment Fair</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>No. of Campus interview in ITI Campus</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Present Candidate in Campus Interview</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>No of Selected Candidate in Campus Interview</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>No. of Experts called for Trade/Subject Guidelines</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>No. of Candid. present in Trade/Subject Guidelines</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>No. of Available Computer/Printers</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>No. of Candidate uses advantage of Library</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>No. of candidate uses Internet</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>No. of Ready Bio-data</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The computerization of PABs could prove more beneficial on a sustained basis by way of change of work practices.

A pilot scheme for modernization and computerisation of these some of selected PABs, which are located in industrial hubs of the respective states, could be initiated e.g.

<table>
<thead>
<tr>
<th>State</th>
<th>Placement Bureau Agency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Punjab</td>
<td>ITI Ludhiana</td>
</tr>
<tr>
<td>Himachal Pardesh</td>
<td>ITI Solan or ITI Baddi</td>
</tr>
<tr>
<td>Haryana</td>
<td>ITI Gurgaon</td>
</tr>
</tbody>
</table>

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For larger transparency of the placement functions, the emphasis should be to collect:

(i) Changes in employment & apprenticeship situation in local establishments through an ‘online’ computer system

(ii) Public display of registered persons nominated for public funded jobs. Therefore the PABs on computer linked network could provide efficient exchange of information on placement & apprenticeship services.

The infrastructure of Placement Advisory Bureaus could be utilized for holding Rozgar Mela; in the Mela, PAB could organise meetings of the employer (mostly from the private sector) with suitable candidates on the live register. The candidates should also be reimbursed travel expenses within the State for attending the interviews.

The IMC with the help of PAB could also take up an innovative scheme of “Self-Employment Rozgar Yojana” to generate self-employment among people living in backward areas. This is done through imparting training for skill formation.

The infrastructure at PAB could also be utilized to collect regular and frequent information on changes in Placement & Apprenticeship conditions. As there is a tremendous lack of objective information in this respect from other sources like the Annual Survey of Industries on different returns of Apprenticeship & Placement Schemes required at DGE& T level. There is need to reshape and strengthen PAB information system programme and IMC could play a pivotal role in expanding its coverage to each industrial units under respective PAB.

IMC also recommends that PAB consider campus placements in following modes:

10.6.1 Placement Directly Through Company

PAB should have details of Company Profile viz:

- Head office
- Branch offices in country
- Registration certificate
- Present strength
- Type of work they are doing
- Names of clients for whom they are doing projects
• Turnover (last year)
• How old the company is

Other recruitments done:
• Name and address of college
• Number of candidates selected

Training
• Stipend during training
• Training period
• If training is chargeable take extra care.

Salary: Salary and other perks

Bond Money: It should not be paid in cash. Bank Security arrangement can be used.

10.6.2 Recruitment through consultant

IMC authorized PAB for the services of placement consultant & must obtain the following details of the consultant in addition to the details of the company explained above:

• Consultant registration No. (Unregistered consultants should not be entertained).
• Head office/Branch office/Contact No. & address.
• List of institutes where the same consultant brought companies and verification from the concern institutes placement officer for this placement.
• Names of the companies where earlier selected students are working, verification from companies.
• Consultant’s fee (should be paid by the institutes, not by students)
• After selection, offer letters should be obtained signed by company’s representative, not by consultant.
• Salary during training & after training should be clearly mentioned in offer letters & pre placement talks (PPT)

10.6.3 PABs are required to keep all placement records

10.6.4 PABs are suggested to do tracer study of all the passouts for at least three years
10.7 UTILIZATION OF ITI INFRASTRUCTURE THROUGH COMMUNITY SERVICES CENTRE

Community services centers could be another concept which could bring revolutionary changes in ITIs, enabling them to earn revenue by obtaining orders from the communities for plumbing, painting, masonry, welding, wood-work, etc. This scheme or new model could be effectively implemented the involvement of IMC by Ex ITI passouts with equipment available in ITIs. This could result in a more efficient utilization of the premises and equipment and strengthened the abilities of ITI passed out in starting up their future businesses. The following work groups could be established in this community service centre: cutting and tailoring, electrician, carpenter, radio, TV and electronics, refrigeration and A/C, painting, motor mechanic, a construction multi-skilled group involving mason, plumber, welders, etc. In addition, short-term training courses could also be organized by community service centers. These courses enabled ITI Ex-pass outs to become more employable and to start their small businesses.

The purpose of the above schemes is mainly to utilize ITI infrastructure including premises and equipment more efficiently and to promote self-employment of Passed out candidates. The autonomy of ITIs could be increased through:

- IMCs where people from industry participate;
- Opening ITI bank accounts which accumulate development funds;
- Authorizing ITIs to generate and manage their revenues enabling the recruitment of instructors and other staff for short-term courses that are revenue-financed.

In spite of the considerable advantages of improving efficiency that are documented above, the above management practices in ITIs have some weaknesses that need to be overcome. These weaknesses involve:

- Continued low flexibility in launching new regular (long-term) courses as ITI core staff are civil servants and cannot be replaced with new instructors rapidly;
- Utilization of revenues accumulated in ITI development accounts is subject to the approval of the state authorities which may not be able to realistically handle this process on a case-by-case basis as there is a very large number of ITIs;
- IMCs remain weak as they do not really have management functions; as a result, they have not been deeply involved in the efficiency improvement process although they participate in decisions on revenue utilization;
• ITI budgets remain part of the government budget with the bills for water, electricity, building repair, etc. paid for by the state government. Therefore only part of ITI operations have been covered by the efficiency improvement concerns, while the modern trend is to establish public training institutions as autonomous, flexible and market-oriented institutions that would require them to be more independent from government.

10.8 IMC INITIATING INDUSTRY INTERACTION FOR ‘WORK AND STUDY’ SCHEME

IMC Chairman being the link between industry and ITI is the most important liaison to get this scheme going, “Hands-on” training in the industry or ‘on-the-job’ training while production is the only self-sustainable approach to vocational ‘training’. The following case study describes a case study of an ITI and IMC chairman based on actual experience.

A Government ITI was taken up for development by the IMC headed by a Managing Director of a large engineering enterprise during 2005. Meetings were held every month. Following aspects were taken up for implementation:

• The ITI was established 42 years ago. The purpose was to offer technical education to the children of BHEL employees and employees of other industries who were not able to go in for higher education. The other purpose was to provide skilled manpower.

• The ITI mainly focused on trades like Welder, Fitter, Sheet Metal Worker, and Moulder.

• The strength at the ITI gradually has gone up to 1200 students comprising 1100 males and 100 female students.

The IMC after inspection found that the students were lacking in practical training, soft skills and on-the-job training. Further it was found out that there was no toilet facility for the female students. The IMC gave priority for construction of a ladies toilet block and also extended necessary financial assistance. This initiative was greatly appreciated by the entire student community.

About 120 students were offered practical training at 5 days a week in batches for almost one year at 2 units of the firm. The students were paid daily wages. The theory classes were arranged on Saturdays and Sundays at the ITI itself utilising the same staff. The staffs were compensated for their work on Saturdays and Sundays. The arrangement worked as “EARN WHILE YOU LEARN” Scheme.
The Engineering firm headed by IMC chairman was recognized by the Government as the approved Training and examination Centre (Practical) for trade and advanced welding course students. It has deputed its staff as examinees during examinations on regular basis and also few of the Managers have visited as Faculty for Safety, Welding and Soft Skills. With effect from 2006 batch, the first batch of 36 welders has passed out in 2007 and the second batch is about to complete the Training and exam. The in-plant training imparted to students has not only helped improve their Skill and knowledge but also could improve their personal productivity and employability.

**10.9 HOW TO IMPROVE EFFICIENCY OF PRIVATE ITCs?**

Private Industrial training Centers (ITCs) are now more commercialized serving to community. For this stringent actions are to be taken to streamline & make these institutes more accountable & efficient.

For this it is suggested that five-level grading of private institutions should be introduced by each state separately:

- Grades should be assigned annually to each Private ITC. This grading is published in the newspapers.

The Private ITCs that are unable to improve their low grading, risk to be disaffiliated from the State Training Directorate, losing thereby the right to deliver intermediate-level skills.

![Figure 10.1: Share of Govt. and Private Institutes](image)

As the cost of supervising Private ITCs remains very high and great, and financial resources are needed, it is advisable that an annual maintain
should be levied on ITCs to enable the generation of resources for their train quality control services.

10.10 PROPOSED III-PHASE MODEL FOR INDUSTRY–INSTITUTION INTERACTION (ENGINEERING COLLEGES AND RESEARCH INSTITUTES)

Industry institute interaction is a planned activity for the prosperity of society and progress of a country. The ultimate aim of such a interaction is always to improve the status of the society by cultivating right values, setting potentials and having perception about the growth and the future.

Chart 10.8: III-Phase Integrated Model

The III-phase integrated model is a result of the combination of three phases of interaction between industry and academia.

Phase-I represents an integration of environmental challenges to a competitive system. Thereafter, the activity has to overcome hurdles and constraints while developing the interaction being the task for Phase-II.
The Phase-III is taken as a result of mutual cooperation and collabora
tive activities. This requires an act of balancing the interest of different segments. Level of collaboration depends upon integrated efforts at every stage. The indu
must contribute to the institute in terms of resources, funds and quality perso
whereas the institute should contribute by way of combined efforts of diffe

tories, segments and interested elements.

At present the industries and the institute both are working in hi
compitive environment. The global competitive environment in India demands useful indigenous and original industrial research within the country. Such rese:
tivities boosting industrial innovations and developing competitive strength industries cannot take place without appropriate interactions with industries.

**Chart 10.9: Proposed III-Phase Model for Industry**