

**REPORT OF THE
TASK FORCE ON
SKILL DEVELOPMENT**



**PLANNING COMMISSION
GOVERNMENT OF INDIA
NEW DELHI**

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Summary of Recommendations

a) Vocational Education and Training (VET) has been *supply driven* in this country, largely on account of Government's focus on the *welfare* of its citizens and a cultural mindset among our people which does not place a premium on blue collar jobs and the development of professional skills. The proposed **Mission** on Skill Development can address this issue through a major campaign. The central paradox is that while the country faces a shortage of skilled personnel on the one hand there is widespread unemployment of the 'educated' on the other. **At the very outset, therefore the Task Force would like to emphasise that the present state of affairs is not acceptable for a country which seeks to become a knowledge power, a global service and manpower provider and a leading industrial nation. There has to be a paradigm shift in the national policy on skill development with the private sector playing a lead role instead of the government, as they are the job providers. The government's role would have to change from being a vocational training provider to a partner and facilitator, and it is this philosophy which underpins the Task Force Report.** What is being suggested is not new: in the July 2001 Report of the Task Force on Employment Opportunities set up by the Planning Commission, it was observed that: "6.39....*The Central Government should withdraw completely from delivery of vocational training services, and foster autonomous professional bodies that give recognition to training institutes.....Government's role should be one of monitoring....evaluating and assigning rating to the private training establishments....*" This approach is also reflected in the latest budget speech of the Finance Minister and **the Task Force's emphasis is on a shift from a supply to a demand driven policy, a shift which does not seek radical structural changes in the government, but one which signals a change in the way we address the subject. The new approach would help release the latent entrepreneurial energies that our countrymen have and provide school dropouts with a more viable alternative to formal education. The other recommendations flow from this basic premise.**

b) A distinction needs to be drawn between Vocational Education (VE) and Vocation Training (VT), which would help eliminate the prevailing policy overlap and absence of a clearly demarcated responsibility in both these areas, given the fact that most Ministries are involved in the process. VE would relate to all matters which pertain to an *academic curriculum*, including supplementary work attachments whereas VT would provide training for employment in clearly specified skills. At the same time, there needs to be a linkage between academics and skill development, and one single formula may not be applicable for the whole country. Within a broad framework the State Governments can work out their priorities.

c) For VE, the nodal agency would be the Ministry of Human Resource Development but an interface between VE and VT would be provided at different levels.

d) Vocational Education can be provided in schools either by 'weaving' the subjects into the curriculum or by providing separate 'optionals' at the School and College level. The software aspect can be looked at by the National Council of Education Research & Training (NCERT) and the *extent* to which these subjects can be covered should be largely left to the Secondary School Boards and Universities.

e) Flexibility should be provided in the school curriculum to give weightage to vocational subjects during the examinations and for the grant of credits.

f) VT and VE programmes can be made available to students after Class VIII at any time and after Class V for those over 15 years of age in order to cater to dropouts from the formal education system. As regards ‘streaming’ of students into VT, this could begin after class X, given the Government of India’s intention to universalize elementary education and expand opportunities for secondary education.

g) The Pandit Sunder Lal Sharma Central Institute of Vocational Education (PSSCIVE) should become the coordinating agency for VE and promote the interface between education and industry. It can be designated as the National Institute for Vocational Education Planning and Development.

h) *Distance Education* for VET should be supported in a big way and the existing infrastructure of the Indira Gandhi National Open University (IGNOU) and the National Institute of Open School (NIOS) for VET suitably strengthened with appropriate practical training, broadband access and the latest equipment

i) Polytechnics should only be opened in those areas where there is a public demand and a likelihood of employment. These can be opened in the public and private domain, or even through PPPs. A pilot project can be launched to set up 5 *Community Colleges* on the US pattern by either extending the existing infrastructure of community polytechnics or by setting up new institutions.

j) *Certification* for VE examinations would be done by the concerned Board of Secondary Education/ University. For fixing *standards* in these programmes, MHRD could depute the PSSCIVE to interact with industry and service providers and prescribe model curricula.

k) The proposal for ‘de-linking’ jobs in the Government from degrees, which was recommended by the *Kothari Committee* forty years ago, should be revisited.

l) Recognizing the importance of skill development in *agriculture* and its vast potential, the Task Force is of the view that agriculture training institutes can be set up all over the country, in the PPP mode wherever possible, to empower persons dependent on agriculture. The parent ministry could take a lead in this regard, and the Mission can review progress on this.

m) The Government had announced the establishment of a **National Mission on Skill Development**. This could be set up as a semi-autonomous wing of the Ministry of Labour and Employment. The Mission could have a dedicated branch for *quality control* and *standards* should be prescribed in consultation with Industry. This determination of standards should be a *voluntary process*, like ISO certification. The nodal agency for VT would be the ‘Mission’ and, till such time as it is formed, the Directorate General of Employment and Training (DGET) under the Ministry of Labour and Employment. The Mission would oversee the progress of VT in different sectors and provide an overarching vision of the country’s manpower development and its relationship with an increasingly dynamic market for skilled workers. To provide an interface with VE, the nodal officer from MHRD would be a member of the Mission. The work of the Mission and the progress made in VT would be reviewed by a high level committee headed by the Minister in charge of Labour and Employment and including employers’ representatives, at least twice a year.

- n) The role of the Institute of Applied Manpower & Research (IAMR) under the Planning Commission is currently being examined by an expert committee. As there is a lot of synergy with the work of the Mission, the Committee could consider various options to provide an interface between the IAMR and the Mission on Skill Development.
- o) The National Council of Vocational Training (NCVT) should be reconstituted and become the *sole* regulatory authority for **VT**. This would involve the recognition of training providers, which would be a voluntary process, based on their norms, and a list of 'approved' institutions can be brought out from time to time. The *certification process* in respect of training programmes undergone would have to involve Industry (including service providers) and certificates can be issued *jointly* by the concerned institutes and representatives of Industry / professional bodies.
- p) The industrial training institutes (ITIs) should provide more shifts to fully utilize existing capacity and use guest faculty wherever possible. The staff should be the bare minimum and these bodies should be given more autonomy, be allowed to retain their earnings and use guest faculty.
- q) For the ITIs which are not being covered under the Centres for Excellence programme the Finance Minister had announced the sanction of Rs.2.5 crore per ITI as an interest free loan for those run on a *Public Private Partnership* basis. The *concessionaires* would use the existing infrastructure and staff and sign an MOU with the State Government / DGET. They should be allowed to retain their earnings and leverage the infrastructure to cross subsidize the fees of the students nominated for the regular programmes by the Government.
- r) New institutions or *Skill Development Centres* (SDCs) can be opened on demand by the State Government in collaboration with industry on a **PPP** basis. Industry can also set up SDCs and apply for tax concessions/incentives which should be incumbent on their 'ploughing' back their profits for further infrastructure development. The Government of India could facilitate the sanction of an interest free loan not exceeding Rs 2.5 crores for the PPPs and the State Governments would have to provide land for the institutes that they establish. Arrangements may be made for institutional financial support for training providers as well as trainees, if possible through a dedicated institution.
- s) The PPP method to be adopted could be to let the Government make the initial investment and let the *concessionaire* meet the recurring costs by leveraging the infrastructure to cross subsidize vocational training in Government-sponsored programmes.
- t) Full freedom should be given to the *concessionaires* to provide training in a cost effective manner. For the *Skill Development Centres* there need not be any permanent faculty and, in the case of the existing ITIs being taken over and strengthened the service conditions of the employees would stand fully protected although a VRS can be made available. The vacant posts can be filled by contract employees or abolished. For utilising the Rs 2.5 crore in the 'taken over' ITIs, the acceptance of the staff for the changed management should be a *condition precedent* for the sanction of a loan to the *concessionaire*.
- u) The pattern adopted by the Government of Gujarat and some other States is to let **vocational training** be demand-driven and run in close coordination with industry. Other states may be encouraged to follow this example.

- v) Income tax concessions to the reconstituted ITIs and the *Skill Development Centres* for a period of ten years, on a *tapering basis*, can be considered by the government.
- w) The Development Commissioner for Small Scale Industries' (DCSSI) Scheme for expansion for VT should be fully supported, albeit in the **PPP** mode wherever possible.
- x) The Task Force is not in favour of promulgating a separate law for VET at present. The Mission, as the name suggests, has been set up to provide an impetus to vocational training / skill development, and should not be a permanent body. Its proposed functions of laying down standards in consultation with industry, rating VT providers and capacity building can, by the end of the current plan period, be given to an autonomous *National Skills Development Board*, which can be set up jointly by industry and the government. At the end of the present 5 year Plan MoLE can review the role of the Mission and transfer its regulatory and development functions to the Board; its administrative functions would be restored to the DGET, which will be revived.
- y) The Employment Exchange (Compulsory Notification of Vacancies) Act 1959 should be reviewed and the Employment Exchanges' main focus ought to be facilitation and support for the unemployed, particularly those who have undergone VET.
- z) The issue of unemployment in the *unorganized* sector, (where it was suggested that training centres be set up in clusters of villages, linked with rural business hubs and the development programmes of the local bodies, PPPs and industry) could be looked at by the Mission, which would decide its own priorities.

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Report of the Task Force on Skill Development

Economic growth in India has, in the last few years, picked up considerable momentum with services and, recently, the manufacturing sector showing a great deal of buoyancy. While the jury is out on whether the country can sustain a GDP growth of 9% per annum, it is generally agreed that much greater attention would have to be paid to the area of *skill development*. There has been a lot of talk, not all of it well informed, about India's becoming a Knowledge Power but, given our comparatively young population, we have a long way to go before we realize our full potential. *Vocational Education and Training* (VET) has increasingly become a matter of national importance and the High Level Committee on Manufacturing (HLCM) presided over by the Prime Minister has accorded top priority for skill building.

2. For quite some time now concern has been expressed about the mismatch between the job market's requirements on the one hand and the inputs provided by our education system in general and VET in particular, on the other. Most recently, this problem was highlighted by the Prime Minister in his Independence Day speech in 2006 when he made the following announcement.

“As our economy booms, and as our industry grows, I hear the pressing complaint about an imminent shortage of skilled employees. As a country endowed with huge human resources, we can't let this be a constraint. We are planning to launch a Mission on Vocational Education so that the skill deficit in our economy is addressed”.

3. *Vocational Education & Training* (VET) has been handled by a number of departments in the Government of India, in addition to the Directorate General of Employment and Training (DGET) in the Ministry of Labour & Employment. A note submitted by the latter at *Annexure- I* indicates the position, and the list itself would not be comprehensive. (This information should be placed in the website of the DGET). It was against this background that the Planning Commission was asked to set up a Task

Force (TF) “to make recommendations on how to meet the requirements of skilled manpower for India’s growing economy in the India’s Eleventh Five Year Plan period and beyond”. The thrust would be on *training* while the *education* aspect would be reflected in the curricula. A copy of the order setting up the Task Force can be seen at *Annexure-II*, which also spells out its Terms of Reference (TOR). (The order lists the members and subsequently a number of experts were invited to join the deliberations, which are reflected in the minutes at *Annexure IX*). It was felt that the TOR would need to be revisited as it would not be possible for the TF to collect the huge volume of material, given the limited time frame prescribed for it. Some of the documents have already been supplied by the DGET’s office; those which are bulky and not germane to the core issues have not been appended to this report.

4. Another important responsibility of the Task Force is to recommend to the government the nature of the ***Mission on Skill Development*** to be set up on the direction of the Prime Minister. The Task Force has already met four times and discussions have been held by some members with experts and stakeholders. The approval of the Deputy Chairman of the Planning Commission has been sought and obtained to submit the report by the 31st March, 2007. The draft report was prepared and circulated to the Members and other experts the next day.

5 The concept of India’s becoming a knowledge power arose largely on account of the success of Indians in the Information and Communication Technology (ICT) sector, a phenomenon attributable to a number of factors including the value that Indian families place on education, a *penchant* for that particular discipline which is found in many communities in the country and the quality of our manpower produced by Centres of Excellence almost all of which were set up by the Government of India (*in collaboration with reputed foreign institutions, it may be added*).

6 A fall out of this was the growing demand for skills at a lower level like call centres, where young people with a reasonable command of English are willing to work at a much lower level of remuneration than their counterparts in developed countries.

This competitive advantage became a little more sophisticated with the growth of Business Process Outsourcing (BPO), which requires a large number of knowledge workers. A critical appraisal of the present state of affairs would however indicate that our base of skilled and particularly knowledge workers is rather narrow. One way of looking at this problem is to make a general assessment as to how VET has failed to make an impact in this country. It is not just the government which is worried about the problem but the private sector has, increasingly of late, been sharing the same concern. A document submitted to the Task Force by one of its members, Shri R. Gopalakrishan, Executive Director, Tata Sons ('An approach to Skill Development') has highlighted some of the issues and the paper (*Annexure XXIII a*) makes the following points:

“The huge number of people added to the workforce each year and their low preparedness to avail of the emerging employment opportunities make the issue of skill development self evident. Of the 120 lakh new entrants to the workforce, the ITIs (private and public put together) are able to handle about 7 lakh only. The rest either are fresh hands – they come into the workforce untrained or are trained by the employer on the job. Some others get trained at an unorganized local shop, but mostly they remain untrained or under-trained.

Two challenges are obvious:

a. Large scale skill development is an imminent imperative

b. Responding to this challenge is urgently required, to keep the economy growing

Further, accordingly to a recent survey (Ref Business Line Macroscan Article titled “Growth & employment in organized Industry” by C. P. Chandrasekhar & Jayati Ghosh, Jan 9th 07), aggregate employment in organized manufacturing sector has fallen in absolute terms since 1997. It seems that a combination of high output growth and low employment growth has been a feature that has characterized both India and China during the years they have opened their economies to trade and investment. The trend

seems to suggest that greater employment generation is not a necessary result of more growth in organized manufacturing sector – indeed it could even be associated with falling employment in future as well.

The third challenge is therefore:

c. Skill development needs to widen its focus. It must include non-manufacturing skills, apart from the more traditional organized sector manufacturing skills.”

These points help highlight the central paradox before us, which is the problem of an army of ‘educated’ unemployed (and mainly unemployable) persons on the one hand, and an acute shortage of skilled people on the other. It has been argued by a number of economists, including Stephen Roach (Global Investment Bank-Morgan Stanley) that India should use its service sector more than its manufacturing sector to solve its unemployment problem. At the same time our education system and society follow the lowest common denominator in assigning young people to the service sector, a problem which may continue for a couple of decades. Our focus therefore should be on the manufacturing sector as well, as it is the basic engine of growth for the nation. Besides, an expansion and quality improvement in VET would improve our labour productivity levels, which are very low, make our nation competitive and attract more school leavers and dropouts.

7. As already indicated in *Annexure-I*, there is a plethora of Ministries dealing with the subject and many of the inputs they provide have had little relationship with the requirements of the market place. One of the main reasons for this, according to some members, is that the entire policy has been *supply* rather than *demand* driven; departments or organizations have been created, people appointed, equipment installed, buildings built, training imparted, targets fixed and achieved, and all with a limited impact on the economy (some of our public sector companies come to mind as well). Notwithstanding the efforts by Government providers to involve industry in the process of vocational training and their own significant contribution to skill development, some of them suffer on account of structural inefficiencies which can be compounded in a

supply- driven situation: this apparent divorce from the market place, combined with the fractured mandate of VET in the Central and State Governments has militated against its success. (An expansion of non-formal programmes, based on demand, can help bridge the large gap between demand and supply of skilled manpower.)

8. An underlying reason for the comparative failure of VET has, in the view of some members, been the largely culture-derived mindset of a vast number of our citizens who do not place a premium on blue collar jobs; the aspiration of most families and particularly the upwardly mobile ones is to get white collar jobs even though this may entail lower remuneration, mainly because society views these jobs as 'prestigious'. Policy makers and others have long been aware of this problem and the *Kothari Committee* had, about four decades ago, advocated the de-linking of jobs with degrees, particularly within the government. Given the changing nature of our economy, the new *reference group* comprises technical as well as medical graduates as they can secure suitable jobs in a variety of sectors, including the government (A few years ago, half the officer trainees in the Indian Administrative Service (IAS) were IIT graduates; there were even medical graduates in the Service).

9. At the lower end of the spectrum, however, Vocational Education & Training (VET) has not been considered an attractive option. A number of Industrial Training Institutes (ITIs) have been set up in the country, most of which are run by the State Governments with support from the DGET.

10. The Planning Commission, in the July 2001 report of the *Task Force on Employment Opportunities*, found that 44% of all workers in 1999-2000 were illiterate and another 22.7% had schooling only up to the primary level. That group's findings indicated that, in the age-group 20-24, only 5% of the Indian labour force had vocational skills, which was much lower than other countries including Mexico which had 28%. The latest NSSO Employment/Unemployment Survey (61st Round-2004-05) reinforces this position, even though, in the urban areas, about 6% of the youth are reported to have had formal vocational training. Accurate figures about the labour force in the informal sector,

especially in agriculture, are difficult to get, given the disguised unemployment in villages and the large scale migration in progress, both seasonal and permanent. With a working population of about 500 million, including housewives, very few are in the formal or organized sector (about 30 million) and even fewer (about 1.7 million) undergo formal training. A figure of 10 million can be aimed at in the organized sector during the current 5-year plan, and for the unorganized sector the goals would have to be set by the concerned Ministries and the State Governments: these can be monitored by the Mission. To achieve these goals new mechanisms may need to be worked out from time to time. While the new paradigm would be a demand-driven one, a well thought out strategy would have to be chalked out by the Mission for the remote areas, including the North-East and the hill states, where organized sector jobs would be limited and the building up of employable skills at the national and international level would become an imperative. That the government would need to play a key role in such regions was accepted by the Task Force.

11. It was observed by the *2001 Task Force on Employment Opportunities* that industry must have a much greater involvement in the management of ITIs and, consequently, joint Industry-Institute Management Committees were set-up. In respect of the Industrial Training Centres (ITCs) or “private” ITIs the experience has been somewhat mixed, with the industrialized states showing better results than others in the northern region. That group also observed that *“integration of vocational education at the school level is the only practical way of imparting basic technical skills to a large number of new entrants to the labour force.”* The suggestion of the 2001 group about levying a cess on businesses to fund VET should, it was felt by the present TF, be considered only if the PPP models being worked out fail, as well as other attempts to bring industry into the process.

12. As indicated earlier, VET has not really grown in the absence of demand from employers in the organized sector, let alone the unorganized sector. Neither has it got support through the political process, in the absence of support from the community at large, given the deep rooted social prejudice against working with one’s hands. Notwithstanding this the government have been providing VET opportunities at different

levels. There are short term modules for special skills, being supported by the Central and State Governments, industrial training institutes (ITIs) and polytechnics

13. The main organization connected with *Vocational Training* (VT) has been the DGET. A copy of a Power point presentation made by the DGET to the Task Force on its initiatives can be seen at *Annexure – III*.

The DGET has itself addressed some of the issues that need reform and spelled out the measures proposed to be taken (*Annexure – IV*). The Task Force supports these steps.

Consequent to the Independence Day announcement of the Prime Minister, the DGET submitted a proposal to the Planning Commission for setting up a National Mission for Skills at *Annexure - V*. Relevant issues like the low percentage of skilled workers, low productivity, catering to school dropouts and a focus on the informal sector have been flagged. The Task Force feels that these issues should now be looked at by the Mission on Skill Development, being proposed to be set up in this report.

14. In the meanwhile the National Sample Survey Organization had looked at both employment and unemployment in India and observed that the unemployment situation has not improved despite the considerable jump in employment opportunities; this is reflected in the fact that only 2% of our total work force has undergone skill development training which is almost the lowest in the world. (The same survey mentions that another 8% have acquired skills through informal sources). The other entrants to the job market have soon discovered that education has little bearing on their work situation and they have no choice but to learn while working and through trial and error.

15. The Ministry of Labour & Employment had forwarded a note for the Task Force on Skill Development in which the DGET had proposed a pivotal role for its organization; this can be seen at *Annexure – VI*. This document, *inter alia*, highlights the recent scheme of upgrading ITIs to Centres of Excellence, and proposes expansion and modification of the Apprenticeship Training System (*Annexure – VII*), besides

advocating the use of Distance Learning to cover the unorganized sector. The DGET also forwarded a note on the National Council for Vocational Education and Training which is at *Annexure – VIII*.

The Task Force, as stated in a previous paragraph, met four times and the issues discussed at these meetings can be seen at *Annexure – IX – a, b, c & d*.

16. In the second meeting, the Task Force viewed a presentation by Shri C.V. Som, Director Employment & Training in the Government of Gujarat. The ITIs there, on account of government support and the business ethos which prevails in the state, were able to function in close coordination with the service and industrial sectors and have had, therefore, a greater impact. A copy of the presentation made by the Gujarat Director can be seen at *Annexure – X*. The DGET is separately examining the applicability of such presentations to the other states, given the wide variation in terms of cultural & industrial development of each region, but what is noteworthy is the Gujarat Directorate's rapid response to changing demands, their ISO-9001:2000 certification, placement services, the organisation's industrial culture, an emphasis on self-employment and a replacement of permanent employees by those on contract. It was suggested that the proposed Mission could study the system of a state like Kerala, which has full literacy but not a favourable industrial climate. One fallout of this has been the emigration of skilled workers from Kerala, which has brought incidental benefits to the state and the country

17. The Directorate General of Employment & Training (DGET) had separately proposed a Skill Development Initiative through a Public Private Partnership which, among other things, would provide vocational training to school leavers and ITI 'pass-outs' to improve their employability. This proposal had got the '*in principle*' approval of the Planning Commission in May 2006, long before the Task Force was set-up, and the approval of the Expenditure Finance Committee (EFC) on 19 February, 2007. The Task Force is of the view that the project is in broad harmony with its recommendations, except that the PPP model would be different if its recommendations are accepted.

18. In his budget speech 2007-08, the Finance Minister made the following observations:

“103. Honourable Members will recall that Government had taken up a programme for upgradation of 500 ITIs over five years beginning 2005. Revised courses in the first lot of 100 upgraded ITIs were started in August 2005 and in the second lot of 100 upgraded ITIs in August, 2006. I expect that another 300 ITIs will be covered by August 2009. That would still leave 1396 Government ITIs.”

The Task Force welcomes this announcement.

The World Bank’s involvement in the scheme has certain advantages, not merely on account of the resources it brings to the table, but on account of the discipline and cross-cultural perspective that the Bank and other international agencies bring to such projects, with concomitant reforms in public policy.

19. Coming back to this year’s budget speech, the Finance Minister made the following statements.

“102. To sustain a high level of economic growth, it is essential to have a reservoir of skilled and trained manpower. Shortages have already emerged in a number of sectors. Moreover, we can take advantage of the demographic dividend thrown up by an increase in the working age population only if our young men and women have the required skills. The Prime Minister spoke of a Vocational Education Mission in his Independence Day address in 2006. A Task Force in the Planning Commission is chalking out strategies for vocational education programmes. Alternate models may be adopted, but the approach will be based on public-private partnership. I propose to make an initial provision of Rs. 50 crore for beginning work on this Mission.”

“104. I propose that the 1396 ITIs be upgraded into centres of excellence in specific trades and skills under public-private partnership. Under the proposed scheme, the State Government, as the owner of the ITIs, will continue to regulate admissions

and fees; the new management will be given academic and financial autonomy; and the Central Government will provide financial assistance by way of seed money. ITIs will be encouraged to start a second shift. Once a tripartite MoU is signed among the three stakeholders, I propose to grant an interest free loan up to Rs. 2.5 crore to each ITI for upgradation and revision of courses. I seek the cooperation of State Government in upgrading at least 300 ITIs every year, beginning 2007-08, under the PPP mode. I have kept aside Rs. 750 crore for this purpose.”

The Task Force feels that a holistic view would have to be taken about both these issues and the *nature* of such public private partnerships would have to be looked at. This would be discussed subsequently in the report.

Vocational Education (VE)

20. There has been a strong overlap between Vocational Education & Training and a question is often asked whether the two can *really* be separated. While the dividing line is a very thin one, there would be a need to delineate the role of VT as well as VE, which can cover an introduction to skills even at a pre-school level.

21. Vocational education is under the domain of the Ministry of Human Resource Development (MHRD) and, after reorganization of the Ministry and the creation of the Departments of School Education and Literacy (DSEL) and Higher Education (DHE), vocational education has been split between the two.

22. The DSEL, mainly through the National Council of Education Research & Training (NCERT) has, for a number of years now, been looking at the question of ‘weaving’ vocational subjects into the main curricula. Educationists and policy makers have debated about **when** the vocational stream should be brought in the school syllabus and the prevailing view appears to be that the children can be introduced into the world of work, even at the elementary level, as a part of their life skills modules to better prepare them for the years ahead. Some eminent educationists have worked hard to make the

school a place of joyful learning and it has been widely accepted that a child learns much more by doing something herself rather than being talked to. A major initiative has been taken by MHRD and NCERT in setting up the *National Curriculum Framework* (NCF). Under its umbrella many *National Focus Groups* were formed and the group on *Heritage Crafts* had pointed out that 46% of India's population was illiterate and that crafts people form the largest employment sector, second only to agriculture, a claim which could be disputed by the construction industry. The Focus Group recommended that heritage crafts be included in the school curriculum and they observed, *inter-alia*, “*craft should be taught as an area of professional expertise rather than as a ‘hobby’..... In areas where craft is the primary activity, children should be allowed to use craft as a course option*”.

23. In the meanwhile, another *National Focus Group* had prepared a paper on *Work and Education*, and referred to the Gandhian proposal of *Nai Talim*, which placed productive manual work at the centre of the school curriculum. This National Focus Group made the following observation:

“The exclusionary character of the education system in India is to a great extent founded on the artificially instituted dichotomy between work and knowledge (also reflected in the widening gap between school and society). Those who work with their hands and produce wealth are denied access to formal education while those who have access to formal education not only denigrate productive manual work but also lack the necessary skills for the same. The socio-economic, religio-cultural, gender and disability-related dimensions of this dichotomy have serious implications for education in India. Over a period of time and through systematic practice, such a notion of education has come to be embedded in the knowledge system, representing the dominant classes/castes/cultures/languages with patriarchy in each of these categories playing a decisive role. The education system has tended to ‘certify’ this form of knowledge as being the only ‘valid’ form. In the process, the knowledge inherent among the vast productive forces along with the related values and skills has been excluded from the school curriculum. The legacy of colonial education was built upon precisely such a

Brahminical concept of 'certified' or 'valid' knowledge that is alienated from productive work and its social ethos."

24. The same group strongly advocated a Common School System and felt that work centered education should be mandated; they expressed the view that this should be made applicable to **all** schools including private unaided ones, a matter on which some of the Members expressed serious reservations.

25. The issue of teaching vocational subjects in school and providing credits for the same has also been looked at by some of the State Boards of Secondary Education and the Indian Council of School Education (ICSE). The Central Board of Secondary Education (CBSE) had, on its part, identified a number of vocation-related subjects for which there is a demand from the students and their parents/guardians. Optional courses in these subjects are being provided to the students which will enable them to carry these credits with them. At the same time it needs to be borne in mind that, at the time of admission in college, the university may not accord the same priority for VE/VET for admission of the student to higher education.

26. The Secondary Education Bureau of the MHRD had, in the year 2000, drawn up an ambitious scheme expanding their Vocation Educational Courses with a lead role envisaged for the Pandit Sunder Lal Sharma Central Institute for Vocational Education (PSSCIVE) located at Bhopal. That Institute has sent a preliminary expansion proposal, which can be seen at *Annexure – XI*.

27. The issue of vocational education was taken up recently by the Working Group on Secondary and Vocational Education in the Eleventh Five Year Plan and the observations of that Working Group are at *Annexure – XII*.

28. The Task Force is of the view that there has to be some clear demarcation between vocational education and vocational training and would, *prima facie*, and for

reasons contained in its recommendations, hesitate to support the Working Group's proposal.

29. While the issue of covering the unorganized sector would be touched upon later in the report, there is little likelihood that the skills shortage can be mitigated by direct training programmes alone. There is a felt need for a major initiative in *distance learning*, both at the school and the university level. The National Institute of Open Schooling (NIOS) is already involved in vocational education through open distance learning, the details of which can be accessed from their website www.nios.ac.in/vocpros06. An outline of their proposed reforms can be seen at *Annexure - XIII*. The Task Force accepts that the distance learning mode should cover **all** sectors of learning and that the DSEL could take a view about this proposal, which could be a cost effective method of communication for VET, provided that the necessary domain expertise can be made available to NIOS. The programme can be extended after periodic reviews by the department and other agencies keeping in mind one major weakness, which is the provision of 'hands-on training' (which need not be confined to ITIs alone) which distance learning providers have to coordinate and monitor, so that their inputs do not remain a purely theoretical exercise. (On its part the DGET have taken steps to promote Web-based learning and the requisite competency testing.)

30. Coming to the Department of Higher Education, the Indira Gandhi National Open University (IGNOU) has, for some time now, prepared material and broadcast programmes on VET subjects and can profitably extend their coverage. A note on IGNOU's VET initiative is enclosed at *Annexure – XIV*.

31. The Department of Higher Education, through its Technical Education bureau, has been supporting *Polytechnics* in the country and the note on the scheme is at *Annexure - XV*. It has been accepted that Polytechnics are regarded as a place for those who fail to make the grade to engineering colleges and that this state of affairs could be remedied to some degree if students from Polytechnics- and ITIs, can carry their credits

to the educational mainstream. At the same time there is a need to involve the private sector in running these institutions and provide the students with marketable skills.

32. There is also scheme for *Community Polytechnics*, which has a more specific mandate, as can be seen at *Annexure – XVI*. Such a scheme brings to mind the role of *Community Colleges* in the United States of America which will be touched upon later in the report.

The DGET administers the Apprenticeship Act 1961 and a note on this subject is at *Annexure – XVII*. There is a need to strengthen the system and broaden the scope of coverage of trades as well as establishment, while ensuring that the scheme is development rather than regulation oriented. The Mission could revisit the provisions of this law.

33. It emerges from the foregoing paragraphs that the Ministry of Human Resource Development would have to continue as the nodal agency for vocational education (VE) and play a lead role in this regard. Its two Departments could separately revisit each of their schemes to see whether they need to be modified. (The Centre for Research, Planning and Action in New Delhi's review on the country's VE schemes for the Ministry in 1999 was shown to the Task Force). Some universities and Boards of Secondary Education are encouraging their constituents to conduct 'finishing programmes' for school /college leavers to prepare them for the world of work. This initiative could be built upon by MHRD.

34. Taking a look at the some of the other sectors of the Economy, the Task Force feels the proposed Mission should have an oversight role as far as developing agricultural skills is concerned. There is certainly scope to improve agricultural productivity, but the critical factor here would be a technological breakthrough, driven to a considerable extent by biotechnology and by a revival of the agricultural extension mechanism which has, from most accounts, lost the thrust it originally had. Today, agriculture education is not a

preferred destination for students and the areas that hold out promise are, ironically, processed and organic foods among others.

35. This task would be handled by the Department of Agriculture Research and Extension (DARE) and the proposed Mission would obtain status reports and facilitate their activities. Given the demographic profile of the country, the Task Force is aware that the sector has a crucial role to play in the growth of the country. Substantial investment is expected for setting up rural supply chains, and this would lead to a spurt in demand for semi skilled and skilled jobs in the farm sector, especially in the northern and western regions. The agricultural research institutes would consider broad basing their curricula, and companies with a rural footprint can organise training programmes in partnership with the panchayats. When the Mission on Skill Development *is* set up, the Department of Agriculture Research & Extension should be represented on it.

36. In the Industrial sector, many manpower problems are being addressed by the National Productivity Council (NPC) at one end of the spectrum while the Development Commissioner for Small Scale Industry (DCSSI), is a major player in providing vocational training/ skill upgrades. A summary of the activities of its Small Industries Development Organisation (SIDO) is at *Annexure XVIII*.

37. The Department of Rural Development has, for years, been promoting self employment, with the help of the banks. The original Integrated Rural Development Programme (IRDP) has now been replaced by the Swarna Jayanti Grameen Swarozgar Yojana (SJGSY). Its precursor had a symbiotic link with TRYSEM, and even today banks have been involved in the training process as they are stakeholders in the success of any venture in this scheme, and its urban counterpart. A visit to the Baroda Sarozgar Vikas Sansthan (BSVS) in Jaipur by the convener brought out some insights on how the banks operate in their 'enlightened self interest'; the brief report on the initiative of Bank of Baroda's BSVS is at *Annexure XIX*.

The Ministry of Housing and Urban Poverty Alleviation has been involved in Vocational Training through the Swarna Jayanti Shahri Swarojgar Yojana, a description of which is at *Annexure XX*. The VET coverage here is expected to increase considerably once the *Rajiv Gandhi Employment Mission for the Urban Poor* is launched, with skill development and micro-finance as its key components.

38. From the preceding paragraphs it emerges that the Government of India has been involved in VET for a long period, and a number of agencies have been established. This pattern has, by and large, been replicated in the states with local variations, a good example of which is the initiative taken by the Government of Tamil Nadu's TAHDCO in respect of the weaker sections of society in that State, where job opportunities in the organized and unorganized sector are identified by the agency, the skills required by the employers listed out and training courses designed accordingly. The selection of candidates and the quality of the inputs are monitored, the employers involved in the process and their placement monitored by the agency. The impact of many such programmes in the majority of the states has not been felt to the desired extent, given the variable motivation of those involved in the delivery process and the negligible demand from people and employers in most parts of the country.

39. An encouraging initiative has been taken by the representatives of a major section of employers, the Construction Industry Development Council (CIDC). Reports on their HRD campaign, their financing model and their MoU with the DGET can be seen at *Annexures XXI a, b & c*. The Mission would do well to draw on their experience and also encourage other groups of employers to come forward with PPP proposals.

40. The Task Force has also been able to access, largely on account of the initiative of one of its members, the details of VET practices obtaining in a few countries. Comparisons with India would, understandably, be facile in many ways because most of these countries are at a different stage of development and have a totally different ethos—the 'Protestant' or 'Mandarin' work cultures. At the same time we could leverage our own strengths which include entrepreneurship, the value we place on education in our

individual capacity and what could be termed as ‘white collar diligence’. A ‘position paper’, describing VET practices obtaining in countries like Germany, China and the United States has been prepared by Shri Krishan Khanna, a Member of the Task Force, and these documents (which his organization ‘I’ Watch are willing to supply free of cost to the Mission) can be seen at *Annexure XXII*. Another Member of the Task Force Shri R. Gopalakrishnan, had shared a company development paper “An Approach to Skill Development”; this is available at *Annexure XXIII*.

41. The Task Force is aware that the issues it is looking at have, to some extent, been examined by the National Knowledge Commission (NKC) which was constituted in June, 2005 as a high level advisory body to the Prime Minister of India with a mandate to guide policy and direct reform. The NKC’s time frame expires on the 2nd of October, 2008 but it has already submitted a number of reports including one on Vocational Education and Training which was given to the Prime Minister on the 1st of December, 2006. This report has been looked at by the Task Force, whose response to each recommendation of the NKC is given at *Annexure XXIV*.

Against this backdrop, the Task Force would like to revisit its prescribed mandate, and its comments on the latter can be seen at *Annexure XXV*.

42. It also had look at a paper prepared by the Infrastructure Development Finance Company Limited, whose concept note on the role of PPPs is at *Annexure XXVI* and some documents on different kinds of PPPs. The Infrastructure Leasing & Finance Corporation had drawn up a programme for the creation of gainful employment opportunities for rural families below the poverty line, in the Apparel Industry, on the request of the Ministry of Rural Development (*Annexure XXVII*). This result-based training initiative has already made an impact and requests for partnerships have come from private companies as well as government agencies, as a symbiotic link has been established between the government and industry. The Task Force would like to highlight this as an example of ‘best practice’

43. The Task Force is aware of the large dimensions of the problem, the difficulty in prescribing a single formula and the responsibility involved in drawing up a road map for Skill Development. It also realizes that its own mandate and life span are limited and there is a need to carry the major stakeholders along, including the departments of the Government even though some significant changes would have to be made in the existing public policy, where the employers do not have a central role and responsibility: if a programme is to be sustainable there has to be a convergence of the private (the employers) and the public interest. Government should not, perhaps, provide 'externalities' to private parties unless public interest is involved. In this case it is, as 'educated unemployment' and a national skills shortage continue to co-exist; this situation may not be acceptable in an economy which is on a higher growth path.

44. Keeping this background in mind, the Task Force makes the following recommendations/observations:

- a) The unique feature about vocational education and training (VET) in this country is that it has, for a very long time, been **supply** rather than **demand** driven. Planners, educationists and others considered this a desirable investment though the funding was necessarily limited, not merely in VET but education as a whole. One reason for this could be attributed to the stage of country's development where, through the budgetary process, funds are allocated to the more 'visible' sectors of the economy, whether roads, housing, water, electricity and employment. Apart from ranking low in the hierarchy of needs, education is a *merit* good and priority would have to be given to *public* goods. Education, like other areas in the social sector, tends to get crowded out in the budgetary process although in recent times there has been a realization that the state has to do much more, particularly in the area of *elementary* education which is and should be a national priority. *Secondary* education also envisages a major role for the state, particularly in terms of access and equity. Non technical *higher* education needs a degree of support, given the fact that there is limited demand from the job market for such graduates. In *technical* education, at the higher level, government

institutors are increasingly becoming a minority in view of the rising demand of the market and the response by private providers. VET, on the other hand, has received limited support from the public (and consequently the political class) and even from organized industry, which has shown more faith in its in-house programmes. In a society which still does not respect the dignity of labour and where a blue collar job is not considered an attractive proposition, the VET courses run by the Government and other agencies cater to a large extent to those who are dropouts or have failed to make the grade in the regular education system. This *malaise* extends to a number of heritage crafts all over the country; traditional arts and crafts are dying out and not just artisans (who are unfortunately on the wrong side of history in most countries), but providers of important services like plumbing, carpentry, masonry, tile makers, painters, electricians and related professions are becoming scarce commodities. While their professions are becoming increasingly profitable, they all seem to have one common complaint: their children would rather get a *respectable* white collar job, even if it means less income. **This cultural mindset would need to be tackled by the proposed Mission on Skill Development in an imaginative and sustained manner as it has had an adverse impact on the economic and social development in this country.** A start can be made at the school level through professional career counseling, which can be integrated with VET and the widespread use of ICT in skill training which would not only enhance quality and extend coverage, but make the subjects more attractive. **At the very outset however, the Task Force would like to emphasise that the present state of affairs is not acceptable for a country which seeks to become a knowledge power, a global service and manpower provider and a leading industrial nation. There has to be a paradigm shift in the national policy on skill development with the private sector playing a lead role instead of the government, as they are the job providers. The government's role would have to change from being a vocational training provider to a partner and facilitator and it is this philosophy which underpins the Task Force Report.** What is being suggested is not new: in the July 2001 Report of the Task Force on

Employment Opportunities set up by the Planning Commission, it was observed that: “6.39....*The Central Government should withdraw completely from delivery of vocational training services, and foster autonomous professional bodies that give recognition to training institutes.....Government’s role should be one of monitoring....evaluating and assigning rating to the private training establishments....*” This approach is also reflected in the latest budget speech of the Finance Minister and **the Task Force’s emphasis is on a shift from a *supply* to a *demand* driven policy, a shift which does not seek radical structural changes in the government, but one which signals a change in the way we address the subject. The new approach, which can focus on women and weaker sections in particular, would help release the latent entrepreneurial energies that our countrymen have and provide school dropouts with a more viable alternative to formal education. The other recommendations flow from this basic premise.**

- b) There needs to be much greater role clarity among all the organizations under the GOI which deal with VET. Over the years, this is become a neglected area for most departments where other items are given priority. VET in the majority of Ministries is regarded as a ‘loop’ line and this pattern is replicated in the States. **A distinction, to the extent it is possible to make one, should be drawn between *vocational education* (VE) on the one hand, and *vocational training* (VT) on the other. VE would cover the provision of vocation inputs in the syllabi of the schools and non technical colleges and faculties in universities. Such a distinction would not be applicable to technical institutions which include medical colleges and agricultural universities where ‘hands on’ experience is an integral part of the curriculum.** There would, however, need to be provisions to allow vertical as well as horizontal mobility between different streams of education, and while VE and VT are being dealt with separately, it is essential that both form part of a continuum and a common framework.

- c) **Coming to vocational education (VE) the Task Force feels that the Ministry of HRD should continue to be the nodal agency.** At the elementary level, the children are exposed to the world of work in the Sarva Shiksha Abhiyan (SSA), as a part of their life skills programme. There are taught to make certain articles and ‘learning by doing’ is recognized as an effective form of pedagogy.
- d) As regards Secondary Education, the question that comes up for consideration is at what level should ‘stand alone’ vocational subjects be introduced in school? The GOI is committed to provide free and compulsory education for all children between the ages of 6 to 14, broadly corresponding to Classes I to VIII. On the face of it, vocational subjects can be introduced at the post- primary level (Class VI to Class VIII) and certainly in high schools (Class IX and X). At the same time the Task Force feels that this matter could be best addressed by the educationists: its members are aware that the National Council of Education Research and Training (NCERT) are taking a critical look at this issue as part of their *National Curriculum Framework*. **The question of providing vocational subjects in the secondary school curriculum should be left to the Boards of Secondary Education like the CBSE, ICSE and those in the States, under the overall direction of the Ministry of Human Resource Development and the CAGE.** Data should in any case be obtained about the requirements of the job market on an ongoing basis. The existing 50,000 higher secondary schools and 18,000 colleges in the country should be encouraged to expand their facilities in VE. It needs to be borne in mind that a framework of equivalences is required for various streams and various levels of education, and a VET system has to be referenced taking this structure into consideration. The MHRD may have to oversee this aspect.
- e) The Task Force feels that it may not be advisable to prescribe vocational subjects unless there is a *demand* for the same: the system needs to be flexible because of the changing needs of the economy and the changing perceptions of the students. **Flexibility needs to be provided at different levels of the school**

- curriculum; marks can be awarded for vocational subjects and, wherever applicable, credits can be carried forward.** Care should be taken to ensure that the skills taught have market applicability in a 10 year time frame and what is proposed to be covered in these subjects should be clearly spelled out. The identification of traditional skills which fall in this category can, as suggested by a participant, be got done by an expert body like the Task Force on Cultural and Creative Industries. It would be useful if an *externally aided project* in this sector is posed to multilateral or even bilateral agencies as a global market exists for our crafts and quality benchmarking can be facilitated.
- f) A question of teaching languages in VET institutions has been raised as well as numerical skills. The children who come in after Class VIII *should* have these skills, but they often don't. Remedial programmes can be organized for mathematics while the teaching of languages should be demand-driven; if the students *want* to learn English steps should be taken to provide all facilities, if necessary by resorting to distance learning in order to cover large numbers and keeping in mind the shortage of competent English teachers. (In one particular state a special training programme had to be organized to teach English teachers how to speak English! The Task Force members are also aware that many of those who strongly condemn the use of English send their own children and grandchildren to English-medium schools). Skill training would also need to cater to a large number of drop outs at the class VIII level. **Efforts should be made to make VET programmes available to those who have completed 8 years of schooling, which would be in consonance with the Government's policy of universal elementary education.** For dropouts after Class V, courses can be provided, but only for those over 14 years of age. *Enterprise skills* should be built into all VET programmes, keeping in mind the fact that 58% of the national work force is self-employed.
- g) As indicated earlier in this report, the NCERT are addressing the issue of integrating vocational subjects into the school curriculum and its wing in Bhopal, the PSSCIVE is involved in drawing up and imparting VET programmes in a

large variety of subjects. Because of a number of constraints, many of which are beyond its control, the PSSCIVE has not been able to make a significant impact on skill development, though the organization has the potential to play a meaningful role. The Task Force would therefore hesitate to support the kind of ambitious project put forward at *Annexure XI* which involves a sum of over Rs 17,000 crores, or even the recommendations of the Working Group on Vocational Education, which can be seen at *Annexure XII*. The TF would recommend that the PSSCIVE concentrate on its core competency of imparting vocational education and not branch out into running training programmes in all subjects across the country at the public expense unless they are prepared to this as a commercial venture and plough back the proceeds into the organization. This would indicate that they are competent to face the market and can make their activities viable. We might otherwise be faced with a classic situation of a government organization working out ways and means to justify its own existence. **The Task Force would like to suggest to the Ministry of Human Resource Development that the PSSCIVE can be reorganized, revamped and upgraded into a National Institute for Vocational Education Planning and Development (NIVEPD) at a reasonable cost and with a much closer relationship with the employers and chapters in each state. Its mandate should be limited to promote and facilitate vocational education across the country in partnership with industry, service providers and NGOs, organize and run vocational education programmes in schools and colleges, review the demand for VE subjects across the country, and conduct its own studies.** It should not have the overarching role spelled out by the National Knowledge Commission in *Annexure XXIV*. The MHRD, which is currently examining some of these issues, could consider formulating a proposal for a revised role for the PSSCIVE in the light of the fact that *VET is a largely market driven activity*. To facilitate coordination between VE and VT, the Mission Director/ DGET should be on the Board of the NIVEPD and, pending its establishment, on the PSSCIVE's Board/ Advisory Committee.

- h) The role of *distance learning* in VET has been touched upon earlier in the report and both the NIOS and IGNOU would have to extend their activities to cover large numbers of those seeking such programmes across the country, with a liberal use of broadband, while ensuring that some hands- on training is imparted through approved providers. This would have to be based on *demand*, and **the Task Force would recommend the sanction of additional resources to both institutions to extend their VET coverage and review their curricula and training material.**
- i) The Department of Higher Education supports a number of polytechnics and, even in their own assessment (*Annexure XV*), it emerged that these institutions attract only the ‘leftovers’ or those who fail to get into an engineering colleges. **The Task Force is of the view that new polytechnics should only be opened in those areas where there is a *demand*, in a sector where jobs are available either locally or in other parts of the country where the local people are willing to migrate, and not merely as a welfare measure**, if a talent pool for India is to be developed. An example is the retail sector which is undergoing a major transformation, but there has been little focus on capacity building. The tourism and health sectors are in the expansion mode, and face an acute shortage of skilled personnel. The Mission can involve industry experts to develop capacity building strategy papers on these sectors. In addition, domestic services are an important source of employment and job entrants would need to be trained. At the *university* level, the UGC also caters for vocational subjects, and this matter would be best left to them and the universities concerned. The intention is to create a talent pool which can service industry’s requirements at any geographical location in the country and that there should be no impediments to private investment in polytechnics, as long as they conform to the norms of AICTE.

A suggestion was made to the Task Force that *Community Colleges*, like those existing in the USA, can be established in India. Attention is this regard is invited to *Annexure XXII g* which explains the role of these institutions that have an important role to play in terms of supplementing the work of the universities,

taking the community into confidence and catering to the local job market. Doubts have been expressed about the *applicability* of this concept to Indian conditions, but **the Task Force would suggest that a pilot project be launched by the MHRD to set up 5 *Community Colleges*, on the US pattern, either through green field projects or by building up on the infrastructure in their community polytechnics covered under their existing scheme (Annexure XVI), and upgrading them to community colleges.** The State Government and the local bodies would have to be involved in the process. (The Chinese and German models can be looked at by the Mission and some ideas borrowed, but the situation in those countries is not really comparable to ours).

- j) In respect of **certification and quality control** in Vocational Education, the Task Force recognizes that the **former** would fall under the jurisdiction of the **concerned Board of Secondary Education and the UGC/University**. For the determination of **standards**, this could be looked at by **the PSSCIVE in consultation with industry and model curricula prepared from time to time**.
- k) The demand on the part of students and their parents/guardians for college degrees, even if they do not add to their employment potential, is something which was examined earlier and the *Kothari Committee*, three decades ago, strongly advocated the ‘de-linking’ of jobs from degrees. Since millions of students went into higher education with a view to obtain a government job, many of them joined the ranks of the ‘educated unemployables’ as few could or would go back to the village or take up a blue collar job, thereby fuelling the revolution of rising expectations. *Kothari* envisaged entry into the civil services after a student finishes school, with a competitive examination and a three-year education cum training programme, leading to the award of a degree, which is the system obtaining in the National Defence Academy. Once government jobs are de-linked from degrees, it was anticipated that a large number of students would opt for vocational programmes, which would be advantageous to them -and the economy. There has been a tremendous expansion of job opportunities since the Kothari Commission’s recommendation was rejected by the

Government at the time, but the principle still holds good; the model was extended to provide for a Master's degree after an entrant to a higher civil service completes 2 years professional training. **The Task Force believes that the issue of de-linking Government jobs from degrees is still a relevant one and should be revisited; among other benefits, it would lead to an increased demand for VET.** In case de-linking is *not* possible, those with VET qualifications should be treated at par with those with degrees for purposes of eligibility.

- l) To meet the skills shortage in the country, there is a need to greatly expand the opportunities for vocational training (VT), and not just in one area as *multi-skilled workers* have greater employment potential. **Broadly speaking, VT should focus largely on the industrial (secondary) sector and some elements of the service (tertiary) sector. VE would deal with vocational matters in the school and college curricula and supplement this with inputs at the higher end of the spectrum within the service sector like ICT, an exposure to the world of finance and fashion designing. While the agriculture (primary) sector would be handled by the Department of Agricultural Research & Extension, Agricultural Universities, other professional bodies and private parties, the proposed Mission would review all VT programmes.** The nodal agency for vocational training in the country at present is the Directorate General of Employment and Training (DGET), under the Ministry of Labour & Employment.

- m) In order to accord Skill Development the importance and recognition it deserves, the Prime Minister proposed the establishment of a *National Mission*. The Task Force has looked at this issue and also drawn upon the experience of the Government when such Missions were set up in the past for Oilseeds, Drinking Water and Telecommunications. The purpose of having a Mission is to provide a sharp focus on a particular sector of the economy which has been singled out for special attention and where an impetus has to be provided, by the injection of resources, the streamlining of procedures and the creation of a coordination mechanism. When the earlier Missions were set up, there were teething troubles, a

dilution of responsibility and in at least one case, turf battles. Missions in Government are set up for a particular purpose and are not meant to be '*bodies in perpetuity*' - or they would lose their 'missionary spirit'! The approach of the Task Force is a cautious one and takes into account the existing structures set up by the government rather than place such a body under a staff organisation like the Prime Minister's Office, the Cabinet Secretariat or the Planning Commission, notwithstanding the coordination advantages that such an arrangement may bring. Against this backdrop, **the TF proposes that the National Mission for Skill Development, which is to be set up as per the orders of the Prime Minister, could be a semi-autonomous wing of the Ministry of Labour & Employment. This Mission can be the coordinating agency for all vocational training and directly responsible for the functions currently being handled by the Directorate General of Employment and Training. This Mission should be headed by a senior officer not below the rank of a Joint Secretary and, while it would work under the overall direction of the Ministry of Labour and Employment (the Mission Director would report to the Secretary and the Minister) it should be given substantial autonomy, both financial and administrative. The Mission would have a wing dedicated to quality control where standards can be prescribed in consultation with industry and experts. These would be benchmarks and the process should be *voluntary* like for ISO standards.** For this purpose the Mission should have a dedicated budget and payment made to the experts who would be involved in these periodical exercises. There should also be a provision for *external assessments* to ensure adherence to global standards. The Task Force would like clear norms and principle established in respect of quality to ensure that our industry and services are competitive across the board; quality control in vocational training should not be allowed to become a routine and ad hoc activity. **The Mission would be the coordination agency for VT** and should also have a look at the 'private' ITIs, as some may need to be restructured. Representatives from the State Governments, industry, services and NIVEPD/ PSSCIVE can be included in the Mission at an early stage. The DGET's post would be redesignated as Mission Director & DGET and the

staff of the DGET would stand transferred to the Mission, which can function, at least initially, from the existing premises. The detailed structure of the proposed Mission, its precise mandate [which should include some of the items referred to in the Notification of the Task Force (*Annexure XXV*) and the recommendations of the National Knowledge Commission (*Annexure XXIV*)] along with the proposed delegation of financial and administrative powers, can be worked out by the Ministry of Labour and Employment (MoLE), and possibly processed through the CoS for the approval of the Cabinet. The Mission, as the coordination agency for VT would have to prepare an Action Plan encompassing all sectors of the economy, and this Plan, apart from being monitored by the Mission, would be reviewed by the High Level Committee mentioned in the last paragraph of this report. The Mission could have, among others, branches focusing on mapping of skills and employment potential, coordination with other Ministries and the States, distance learning, MIS and quality assurance. A systemic approach would have to be developed for teacher/ trainer development and separate blueprints should be drawn up by the PSSCIVE/ NIVEPD and the DGET/ Mission in their respective areas. A view was expressed that the Mission should be a fully autonomous body to avoid a linear extrapolation of the prevailing system. This is a matter which can be considered by MoLE.

n) *The Institute of Applied Manpower Research* or IAMR (<http://www.iamrindia.org>) is an organization under the Planning Commission whose mandate is as follows:

- To Study the Nature, Characteristics & Utilisation of Human Resources
- To Extend Co-operation to National & International Organisations on Human Resources
- To Provide Research Services to Government, Public/Private Sectors & Others
- To Impart Training in Techniques of Human Resource Planning

- To Stimulate Manpower Research through Conferences, Study Courses & Networking
- To Evolve Methodologies for Forecasting Demand & Supply and for Training & Development of Workforce
- To Prepare Human Resource Perspectives for Economic Development

A view was put forward that the Planning Commission, being a **staff** rather than a **line** organization, may not be ideally placed to administer such an institution. Besides, there is clear synergy between IAMR's mandate and what the National Mission is required to do. **It is recommended that the expert committee examining the role of the IAMR be requested to look at the relationship between the Mission and the Institute while making its recommendations.** The mapping of enterprises, whether micro, small, medium and large, can be done by the local chambers of commerce and industry, and the data shared with the Mission and the IAMR.

- o) At present, vocational education and training is regulated by both by the All India Council of Technical Education (AICTE) and the National Council for Vocational Training. This has led to an element of duplication. **The Task Force recommends that the NCVT should be the sole regulatory authority for vocational training and that the AICTE's role should be confined to institutions of higher learning that fall within its sphere, and polytechnics.** The underlying principle should be one of openness, with the removal of barriers to entry and exit, both for VE and VT. The present mandate of the NCVT can be seen at *Annexure-VIII*. The Task Force is of the opinion that this should be expanded although it ought to continue to be a non statutory body, but an autonomous one, and headed by a senior person from industry with representatives from the NGO sector, related ministries, two major national industry associations, the Director PSSCIVE, the Director IAMR and the Mission Director or his representative. The reconstituted NCVT should work out its own

methodology and the frequency of its meetings. The details of this body's structure and its revised mandate can be drawn up by MoLE and the necessary approvals obtained. **It is proposed that the NCVT should be the registration body for VT institutions and the certification agency for VT programmes. This certification should be on a 'joint' basis, where the concerned industries association/ industry/service provider takes equal responsibility for the quality of the programme and the validity of the certificate.** Detailed guidelines for this would have to be framed, and the working procedure of the reconstituted NCVT should be a public document: in the view of the Task Force, every single order issued by them should be of a quasi-judicial nature, spelling out very clearly the reasons for approving or rejecting any application for registration or certification and the details of the inspection carried out under their instructions. This information should be placed on their website for public scrutiny and to give the organization a high degree of credibility. MoLE would provide administrative support to the NCVT. NCVT-certified programmes can be treated by academic institutions as 'credits' in schools and even universities in order to provide symbiotic linkages between VE and VT.

- p) The ITIs constitute the flagship programme of the DGET and they would continue to function in their present format when the Mission is formed. The World Bank-supported scheme for creating Centres of Excellence is in its third year, and while it may have had some teething troubles considerable improvements have been made in a system where many ITIs are run down, have few or no competent faculty, whose equipment is outdated and students de-motivated. The recent announcement of the Finance Minister in his Budget Speech cited in para 19 of this Report reaffirms Government's support for the scheme, which will be available for 500 ITIs in all. These institutions will have a degree of private participation and specific parameters have been laid down. The details of the scheme can be seen at the website www.dget.gov.in. **Emphasis would need to be placed on increasing the number of shifts if there is a demand, the use of IT and distance learning, guest faculty and hands on experience. Full autonomy**

should be provided and the ITIs should retain their earnings. The Mission, with the help of IAMR, would map the training requirements in different areas, oversee the training programmes and ensure their quality. IT and IT-enabled services, distance education tools and multi media should be used as far as possible to provide training for faculty and students.

- q) It may be mentioned here that the budgetary allocations announced do not cover the so called ‘private ITIs’ or Industrial Training Centers (ITCs). At this stage it is not proposed to alter their status, but any future expansion would have to be done through the PPP mode. In respect of the remaining ITIs, the Finance Minister has, in effect, preempted the Task Force by agreeing to provide an interest free loan of Rs. 2.5 crore per ITI and ensuring financial and administrative autonomy for these bodies (para 104 of his budget speech, reproduced at page 8 of this report). It may well be that the remaining ITIs would be mainly located in areas which are not fully industrialized because the Centres of Excellence Scheme would have focused on those ITIs which could offer the highest return on investment, after taking geographical considerations into account. The question which arises then is will there be takers for these ITIs? The infrastructure in the shape of buildings and machinery would be present, even if both are in need of renovation. The staff will also be present and they should have been trained. **The Task Force expects that, pending the establishment of the National Mission, the DGET, in coordination with or through the State Governments, should invite expressions of interest/ bids for the take over of these ITIs. The premises could be leased to them for a period suggested by the DGET and the private partner or *concessionaire* would have to enter into a detailed MOU with the State Government/DGET representatives. The Task Force recognizes that running such an organization has to be profitable for the private partner/ *concessionaire*, who should be allowed to leverage the infrastructure, run in-house company programmes and even undertake job work if customers are available.** The profits can be ploughed back into the organization as there may be a need to cross -subsidise the fees of the students,

apart from complying with the prevailing regulations of the Government, in addition to complying with the provisions of the Persons With Disabilities Act 1995, which stipulates that such persons should be given full access to training facilities and skill development. The choice of subjects should be based on local demand, and the number of seats in each course can be indicated in the MOU.

- r) It is abundantly clear that the existing scheme of ITIs cannot meet the skill requirements of the country. It is also clear that any sustainable scheme would have to be *demand* rather than *supply* driven. **The Task Force, therefore, proposes the introduction of a PPP model to establish Skill Development Centres (SDCs) which would be comparable to ITIs but with varying patterns, depending on the nature of the industry/service skills proposed to be taught.** Expressions of interest/ bids should be invited by the National Mission on Skill Development and, till such time as it is formed, by the DGET, in respect of locations identified by the State Government and approved by the Mission/DGET. **The proposal is that the Government of India would provide/ sponsor an interest-free loan of a sum not exceeding Rs 2.5 crores to meet the capital cost of the SDCs which would, at least partly, cover the expense of the buildings and equipment, the details of which can be worked out by the Mission/DGET. The State Government would be expected to provide the land on lease, at a token rent, if not an outright transfer.** The selection of the *concessionaire* could be made by a group comprising representatives of the State Government, the Mission/DGET and a senior representative of the local industry association or the branch of a national association and should be done in a totally transparent manner. A MoU would be arrived at between the parties, where the *concessionaire* will undertake to provide training to a prescribed number of students in one or more industry/trade/service, depending upon the area. Here again **the *concessionaire* should be allowed to leverage the infrastructure and run in- company programmes, besides taking up job works.** Private initiative for establishing skill development centres should also be encouraged by the central and state governments, even if these are run on commercial lines. The

SDCs, which will be set up by private providers would address ‘voids’ wherever they have been identified, and IT relief, if sought, would be incumbent on their ‘ploughing’ back profits for further infrastructure development. As an alternative, the Mission can work on a bankable model for setting up an SDC. In remote and backward areas including the north-east and the Himalayan region, where employment opportunities are few, it would be the government agencies which support VET to play a lead role and help build up skills which the nation would need, as migration might be one of the options that the students may choose.

- s) Any successful PPP would need to **ensure the charging of reasonable fees and these can be negotiated with the *concessionaire* before the MOU is signed. It may be necessary to cross subsidise the fees here too** if the *concessionaire* is able to derive additional revenues; the details of which would have to be worked out by the Mission/DGET and the State Government. For the students, bankable proposals can be worked out in and institutional finance made an attractive proposition for Education in general and VET in particular.
- t) In recent times, the teaching profession has become one of the less attractive options for a person entering the job market. The reasons are many and, in the case of vocational training the task is all the more difficult as a person with the requisite skills and knowledge is far more likely to find a job in industry than in an ITI/SDC. **The Task Force is therefore of the view that where the PPP model is introduced, freedom would have to be given to the *concessionaire*, through the MOU mechanism, to provide pedagogical/skill inputs in a cost effective manner.** This could include the involvement of guest faculty and even the *concessionaire*'s own staff. The issue of a possible conflict of interest should be looked at when the MoUs are signed, but institutions like the ITIs should have the smallest possible number of permanent employees as instructors. In case the State Government or the Mission/DGET wish to start the SDC earlier they could use existing buildings including schools for this purpose. These arrangements could also form the part of the MoU, the model of which can be drawn up by the Ministry of Labour and Employment in consultation with the Planning

Commission. Such a model would be *indicative* and can be tailored to suit local conditions. In the case of the ‘taken over’ ITIs the service conditions of the employees will have to be fully protected, although a VRS can be put in place. The vacant posts can be filled by contract or abolished. For utilising the Rs 2.5 crore the acceptance of the staff for the changed management should be a *condition precedent* for the sanction of a loan to the *concessionaire*.

- u) The Task Force recognizes that the performance of the ITIs has been extremely variable although in those states where there is an industrial culture the conditions are much better. **A state like Gujarat has tailored its policies to the requirements of the market and the outline of their scheme. (Annexure X) gives an idea about what *can* be done if a demand driven model is adopted.** In Maharashtra too, there is a considerable demand for ITIs, and this has made the Directorate of Vocational Education and Training very sensitive to the needs of the market. A market-driven programme can attract bankable proposals for the students of VET similar to that of students in technical education institutions. The creation of quality institutions will generate interest within the financial community and banks which will extend loan and credit facilities to the students.
- v) The Finance Minister’s budget speech indicates clearly that there is support for the Centres of Excellence scheme and the remaining ITIs. A ‘start- up’ grant has been provided to the Mission to enable its activities to get off the ground; resources can be located once the institutions are establishment/revived. A system of institutional loans for SDCs can be proposed by the Mission which can also address the issue of loans to students once MHRD’s new policy is finalized. The question of providing tax concessions was raised in some of the meetings of the Task Force. *Prima facie* the Department of Revenue is not in favour of increasing the list of exemptions under Section 80 of the Income Tax Act although some states can provide tax and other concessions to the PPPs. **The funding pattern can be reviewed by the Mission, but some members of the Task Force felt that income tax exemptions can be given to the ITIs being revamped under the PPP mode, and the new SDCs for a period of 10 years, on a *tapering basis*.**

- w) The Ministry of Small Scale Industries and Agro and Rural Industries, through the Development Commissioner of Small Scale Industries (DCSSI) run a number of vocational training programmes for not only those who are in the business, but a number of potential entrants, in order to enhance the availability of skills for industry, and keeping in mind the fact that the small sector is a major employer. Entrepreneurship Development is another activity that the industry sector has taken up, and although it may be difficult to *teach* entrepreneurship, a number of potential entrepreneurs could be enabled to achieve their goals. Only then would the latent creative energies of Indians, who are an entrepreneurial race, fulfill their potential. The DCSSI operates its programmes through the Small Industries Development Organisation (SIDO), and a brief description of their activities is available at *Annexure XVIII*. In addition, SIDO have drawn up a special plan for the weaker sections of society, and prescribed a coordination mechanism with the State Governments, for optimally using their Tool Rooms. The Central Footwear Training Institutes (CFTIs) and Product and Process Development Centres (PPDCs) run special programmes, and the Small Industry Service Institutes provide training service in a number of sectors. **The TF is of the view that the expansion scheme being proposed by the DCSSI to cover at least 50,000 more trainees should be supported as the organization's facilities are under-utilised. This expansion should, wherever possible, be in the PPP mode to ensure that the stakeholders are fully involved in the process.**
- x) **The Task Force is not in favor of promulgating a separate law on VET at this stage.** This activity has to be market driven to a large extent and it would be premature to think of legislation unless the sector becomes more robust and gains greater acceptance in society in most parts of the country. Besides, it is not clear whether the Apprentices Act of 1961 has not really had the desired impact. This statute could be revisited by the Ministry of Labour & Employment, in consultation with the MHRD. The NCVT would have its own procedures and executive instructions, but would continue to be a non statutory body for the

present. **The question of establishing a fully autonomous National Skills Development Board (NSDB) should be looked at by the Government and the Mission and certain jobs assigned to it like the determination of standards in vocational training, the rating of VE providers and capacity building which would in due course, lower the work load of the Mission which, as the name suggests, should not become a permanent body. The continuation of the Mission should be reviewed by MoLE and the end of the current (11th) Five-Year Plan, and, ideally, it should revert to being the DGET, with many of its functions taken over by the NSDB.** Once the reconstituted NCVT and the Mission are established and the NSDB, which should be set up jointly, and on a cost sharing basis by the Government and Industry, is established, the Government, in consultation with industry, should examine whether a law should be promulgated for vocational training. Flexibility is a key issue in VT and the ITIs, SDCs and other providers can vary the length of programmes looking to the requirements of the clients and the industry. Private participation must in any case be allowed in all segments of vocational training including the setting of standards, running their own programmes and issuing certificates (as the state-prescribed processes should be voluntary), but this should be done through their industry associations/ guilds, and their performance would be judged by the market.

- y) *Post training arrangements and the role of NGOs:* The Task Force envisages a major role for NGOs, both as PPP partners and as facilitators in view of their strengths in terms of reach, dedication, working with communities and understanding their culture. It would however, caution against a system of subsidizing NGOs except through a thoroughly transparent process, as experience indicates that such support can lead to the operation of *Gresham's Law*. Better providers of VET like Don Bosco Tech India (www.donboscotechindia.org) and other members of 'Skills for Progress' (SKIP), a national level NGO based in Bangalore with over 250 members (www.skipindia.org) often arrange follow up services for their trainees. These 'escort services' are only provided by the ITIs in varying degrees but are, more often than not, unavailable. The Task Force would

like this to be an element in the MoUs as ‘follow up’ has been one of the weakest links in vocational training. The Employment Exchanges have not had their desired impact, and the Task Force observes that whenever an organization has both regulatory and developmental functions, the former tend to crowd out the latter, partly because of the time bound nature of regulation, and partly on account of the rent seeking behaviour of some officials, which affects the credibility of the organisation. **If the Employment Exchanges *are* to become facilitation bodies, the law compelling employers to communicate their vacancies- the Employment Exchanges (Compulsory Notification of Vacancies) Act 1959 should be revisited (and possibly repealed) by MoLE.**

- z) *The Unorganized sector:* A view was expressed that the organized sector has managed to obtain its skilled manpower by conducting their own in-house training programmes, and have therefore, little need for institutions like the ITIs and polytechnics, where students have to be trained *de novo* after they get a job. The implication of this is that a *demand-driven* model need not work, so *supply* should be made available and demand can be stimulated. The fact is that our *supply-driven* model only showed signs of dynamism in the more industrialized states, when demand picked up, and no government can afford to sink in large sums of money in the hope that demand (for vocational training in this case) will follow. This debate becomes particularly relevant when we look at the *unorganized* sector where the present work force is estimated at 170 million, as against 30 million in the organized sector. In recent years the divide between the *organized* and *unorganized* sectors has become more blurred on account of a massive migration of people, both seasonal and permanent, a growing information revolution, outsourcing to minor producers and a breaking down of old social structures. Consequent to the opening up of our economy, the growth in the service sector, followed by manufacturing, has stimulated demand for VET, if one were to look at the institutions teaching ICT and the English language to say nothing of the vibrant coaching industry. **The creeping urbanization of India is a process which is gathering momentum and is irreversible. The indication is**

clearly that unskilled manpower *is* available and the skill shortage is acute. This paradox has to be reconciled, and VET should be made available to those who seek it. As training cannot thrive in isolation, as we have experienced all these years, it is imperative that the employers and NGOs come aboard, as equal partners, and help run the new institutions like the PPP- based ITIs and the SDCs. The trainees would not just come from the organized sector, but also the unorganized or informal sector, in semi-urban and rural areas. Industries, other than location-specific ones, are hardly likely to move to remote locations and VET facilities have to be made available in such places. The school buildings can be put to use after classes and, in addition to the existing schemes of the government, an initiative has to come from local employers, NGOs, community leaders and Panchayati Raj bodies. One of the jobs of the Mission should be to draw up an action plan to expedite the expansion of VET into newer areas and cover more candidates for the unorganized sector.

The Task Force hopes that the Mission is created soon and a permanent coordination mechanism established for Skill Development in the country. **It also recommends that a High level Review Committee be set up under the Chairmanship of the Minister in charge of Labour & Employment, (where Secretaries of the concerned Ministries and representatives from industry and the State Governments would be members) which should meet at least twice a year in order to review the Mission's progress and the Action Plan drawn up by it.**

(B S Baswan)

Convener

Task Force on Skill Development

18 May 2007

Annexures

**SUMMARY OF SKILL DEVELOPMENT AND TRAINING PROGRAMMES
UNDER VARIOUS MINISTRIES/ DEPARTMENTS**

Sl. No.	Ministry/ Department	Schemes/ Programmes/ Institutions having provision for Vocational Education and Training programme	Target Group	Duration of Training (long-term / Short-term)
1	<i>HUDCO & others in Construction sector</i>	640 Building Centres (HUDCO) Company run schools (NBCC HCC, L&T, ECC etc.) & association etc. Construction Industry Development Council (CIDC) & others	Persons engaged in Construction Industry Worker & Supervisor having qualification of Vth to XIIth Standard	Short term courses Short term courses 1 month to 6 months
2	<i>Khadi & Village Industries Corporation</i>	51 Training Centres run 35 types of programmes	Unemployed rural youths, In-job Artisans/Supervisors working in KVI instts, Prospective Entrepreneurs, Beneficiaries of different Govt. Schemes desirous of undertaking KVI activities.	2 months to 12 months
3	<i>M/o Agriculture</i>	Training in Agricultural Extension (21 training centres), Training in use of Agricultural Implements & machinery, Soil Conservation Training Centre, LFQC&TI,	Person engaged in Agricultural institutions and support services, members of cooperatives and Farmers.	Short term courses

Sl. No.	Ministry/ Department	Schemes/ Programmes/ Institutions having provision for Vocational Education and Training programme	Target Group	Duration of Training (long-term / Short-term)
		NPPTI, Cooperative Education and Training		
4	M/o Food Processing Industries	<p>Grants were provided to NGOs for setting up of 326 Food Processing & Training Centres (FPTCs) during 1992-93 to 2000-01.</p> <p>Institutions like Central Food Technology Research Institute, Paddy Processing Research Centre, PHTC, Council of Entrepreneurial Development Programme (EDP) are also running training courses.</p>	<p>Persons living in rural areas with preference being given to women, SC, ST and other weaker sections of society</p> <p>Mainly persons in Food Processing Industry</p>	Short term
5	M/o Health & Family Welfare	<p>Basic Training of multipurpose health worker (Female & Male)</p> <ul style="list-style-type: none"> ◆ 478 ANM/ MPW(F) Training Centres ◆ 28 HFWTC & 30 Basic MPWA(M) Schools <p>Promotional training of Female Health Assistant in 42 training centres. Training is also provided by Safdarjung Hospital, St. John Ambulance, NTCP, NPCB, NMHP, NACP, INC, CBHI, CLTRI, PWTRC, ECH etc.</p>	<p>-Educated youth with minimum 10th pass</p> <p>-Persons working in Health & family Welfare programme</p>	<p>12 to 18 months</p> <p>Short term</p>

Sl. No.	Ministry/ Department	Schemes/ Programmes/ Institutions having provision for Vocational Education and Training programme	Target Group	Duration of Training (long-term / Short-term)
6	M/o Human Resource Development	<p>Vocationalisation of Secondary Education (6800 schools covered)</p> <p>Community Polytechnic Scheme (675 CPs)</p> <p>Jan Shikshan Sansthan (157 Vocational Training Centres run by NGOs offering more than 250 courses)</p> <p>National Institute of Open Schooling - Distance Vocational Education Programmes [Practical training through Accredited Vocational Institutes (AVIs)]</p> <p>Apprenticeship Training for student of +2 Vocational stream</p>	<p>Student having passed 10th class</p> <p>Poorer section of society in both rural and urban areas</p> <p>Disadvantaged groups of adults. Priority is given to adult neo-literates/ semi-literates, SC and ST, women/girls, oppressed, migrants, slum/ pavement dwellers and working children</p> <p>School leavers with 5th, 7th, 8th and 10th pass</p> <p>Students passing out of +2 Vocational stream</p>	<p>2 years</p> <p>(3 to 6 months)</p> <p>Need Based (1- 4 weeks)</p> <p>6 months to 2 years</p> <p>One year</p>

Sl. No.	Ministry/ Department	Schemes/ Programmes/ Institutions having provision for Vocational Education and Training programme	Target Group	Duration of Training (long-term / Short-term)
7	M/o Heavy Industries & Public Enterprises	Counselling, Retraining and Redeployment of Rationalized Workers of CPSEs (Formerly NRF)	Workers who opt for voluntary retirement, rendered surplus or retrenched from CPSEs	Short term courses
8	D/o Information Technology	DOEACC - 'O' level CEDTI	Students or working persons with 10+2 pass It conducts courses in the field of Electronics, Telecommunications, IT, Process Control & Instrumentation	Flexible duration for passing examination Short term courses
9	M/o Labour (DGET)	Craftsmen Training Scheme (CTS) (5114 ITIs) Apprenticeship Training Scheme (ATS) (20,700 establishments) Crafts Instructor Training Scheme (CITS) (6 Institutes) Advanced Vocational Training Scheme and Hitech Training Scheme (65 centres)	School leavers with 8 th , 10 th and 12 th pass School leavers with 8 th , 10 th and 12 th pass or National Trade Certificate (from NCVT) Holder Instructors of ITIs Industrial Workers/ Technicians	One to Three years 6 months to 4 years 1 year Short Term courses

Sl. No.	Ministry/ Department	Schemes/ Programmes/ Institutions having provision for Vocational Education and Training programme	Target Group	Duration of Training (long-term / Short-term)
		<p><i>Supervisory Training (2 institutes)</i></p> <p><i>Women Training Institutes (11 institutes)</i></p> <p><i>Central Staff Training and Research Institute</i></p> <p>Model Training Institutes and Model Industrial Training Institutes</p>	<p>Supervisors from Industry</p> <p>Women (School leavers, Instructors and others)</p> <p>Training Executives and Principals</p> <p>School leavers with 8th, 10th and 12th pass</p>	<p>Long and short term</p> <p>Long and short term</p> <p>Short Term</p> <p>One to Three years</p>
10	M/o Rural Development	<p>National Institute of Rural Development (NIRD) Conducts about 150 programmes</p> <p>Swarnjayanti Gram Swarozgar Yojana (SGSY)</p>	<p>Practicising Manager in rural development</p> <p>Focus is on the vulnerable groups among the rural poor. SC/ STs should account for a minimum of 50%, women for 20% and disabled for 3% of the total swarozgaris during a year.</p>	<p>Short term Courses</p> <p>Need based short term</p>
11	M/o Small Scale Industries	<p>Entrepreneurship Development Programme, Skill Development Programme (SDP), Management</p>	<ul style="list-style-type: none"> ◆ Workers ◆ Educated unemployed 	<p>Both short term and long term</p>

Sl. No.	Ministry/ Department	Schemes/ Programmes/ Institutions having provision for Vocational Education and Training programme	Target Group	Duration of Training (long-term / Short-term)
	[Small Industries Development Organisation (SIDO)]	Development Programme <ul style="list-style-type: none"> □ It has 72 institutes/ bodies. <ul style="list-style-type: none"> ▪ SSSI – 30 ▪ Br. SSSI- 28 ▪ RTC – 4 ▪ Tool Rooms – 8 ▪ PPDC – 2 	youth <ul style="list-style-type: none"> ◆ Entrepreneurs 	
12	M/o Social Justice & Empowerment	National Institute of Mentally Handicapped, National Institute for the Orthopaedically Handicapped, Institute for Physically Handicapped, National Institute for the Hearing Handicapped, National Handicapped Finance and Development Corporation, National Scheme of Liberation and Rehabilitation of Scavengers and their Dependents, National Scheduled Castes and Scheduled Tribes Finance and Development Corporation, Rehabilitation Council of India	Disadvantaged and marginalised sections of the society viz., SC, Minorities, B.C., Persons with disabilities, Aged Persons, Street children and victims of Drug Abuse etc.	<ul style="list-style-type: none"> ➤ Short term training upto six months duration ➤ Orientation Programmes upto one week duration
13	M/o Textiles	Decentralised Training Programme, 24 Weavers' Service Centres, Cooperative Training, 13 Powerloom Centres, Indian Jute Industries Research Association, Central Wool Development Board, Central Silk Board, Training Centres for Handicrafts, North –eastern Handicrafts and Handlooms development Corporation	Skill upgradation of Workers in textile industry	<ul style="list-style-type: none"> ➤ Mainly short term (15 days to 3 months). ➤ Some courses under Handicrafts are of 1 year duration.

Sl. No.	Ministry/ Department	Schemes/ Programmes/ Institutions having provision for Vocational Education and Training programme	Target Group	Duration of Training (long-term / Short-term)
		<p>Central Social Welfare Board (programmes are organised by voluntary organisations)</p> <p>Women Empowerment Programme in collaboration with IGNOU (Training programme on “Empowering women through SHG”)</p> <p>Kishori Shakti Yojana</p> <p>Other programmes like UDISHA, Training of Anganwadi Workers, NIPCCB, Rashtriya Mahila Kosh etc.</p>	<p>much needed micronutrients, as well as to provide necessary skills which could be useful for income generation purposes.</p> <p>To train women in marketable trades and also to upgrade their skills for getting remunerative employment opportunities</p> <p>To organise women into effective Self Help Groups</p> <p>To train and equip adolescent girls to improve home based and vocational skills</p>	<p>Minimum 60 days</p>

No. M.13015/6/2006-LEM/LP
Government of India
Planning Commission
(Labour, Employment & Manpower Division)

Yojana Bhavan, Parliament Street,
New Delhi, the December 6, 2006

ORDER

Subject : Constitution of a Task Force on Skill Development.

It has been decided to constitute a Task Force on Skill Development to make recommendations on how to meet the requirements of skilled manpower for India's growing economy in the Eleventh Five Year Plan period and beyond. The recommendations of the Task force will be used as inputs for formulation of the Eleventh Plan.

2. The composition of the Task Force will be as follows:

- | | | |
|-----|--|----------|
| 1. | Dr. Tarun Das, Chief Mentor, CII | Chairman |
| 2. | Sh. Krishan Khanna, Chairman, "i Watch" | Member |
| 3. | Sh. Rajendra Pawar, NIIT | Member |
| 4. | Dr. Naresh Trehan, Executive Director,
Escorts Hospital | Member |
| 5. | Dr. Surinder Kapur, Chairman, Sona Koyo, Steering
Committee | Member |
| 6. | Sh. V. Akula, CEO, SKS Microfinance | Member |
| 7. | Sh. R. Gopalakrishnan, Director, Tata Sons | Member |
| 8. | Vice-Chancellor, IGNOU | Member |
| 9. | Vice-Chancellor, NUERT | Member |
| 10. | Representative, MHRD | Member |
| 11. | Representative, Ministry of Labour & Employment | Member |
| 12. | Representative from a private training establishment | Member |
| 13. | Sh. B.S. Baswan, Senior Consultant, Planning
Commission | Convenor |

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3. The Task Force will have the following Terms of Reference:
- i) To catalogue / map :
 - VET (Vocational Education & Training) courses being presently offered, both by the Government and the private sector.
 - All enterprises employing more than 10 persons, block, district and state-wise, in a standardized nomenclature, so that these enterprises could be used for practical / hands on / on-the-job training.
 - VET institutions, village, block, district and state-wise, along with details of the courses offered, infrastructure available, trainers and teachers, certification etc.
 - ii) To draw a long term plan for redesign of present courses and introduction of new ones, in a phased manner, keeping in view the needs of the economy.
 - iii) To recommend the division of responsibility between the Government at various levels and the private sector in imparting VET and the steps required to facilitate the role envisaged for the private sector. More specifically, to recommend the role that Industry Association and Chambers of Commerce should play in VET.
 - iv) Address the question of VET degrees / diplomas / certificates and recommend certification procedures for the various levels of VET.
 - v) To recommend how the existing physical infrastructure for VET can be optimally utilized. Possibilities of Public-Private-Partnerships should be explored by allowing the private sector to make use of the physical infrastructure that exists in Government institutions.
 - vi) To recommend the appropriate stage (class 8 or 10) at which pre-vocational courses should be introduced in the regular school system so that it has two broad streams to offer – the ‘academic’ and the ‘applied’. Also, to recommend the consequential changes that may be required in the school system.
 - vii) To explore ways to meet the requirement of quality teachers / trainees required for expansion in VET.

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- viii) To recommend setting up of an effective mechanism to enable potential employers and employees to access the information they require.
- ix) To recommend ways in which the general perception about VET can be made more positive, including change of nomenclature and a media campaign.
- x) To consider and make recommendation on any other relevant matters that may include
- the need for a VET law
 - role of distance education in VET
 - the requirements for language training in view of the fact that the trainees may have to relocate for taking up jobs.
4. The Chairman of the Task Force will be authorized to co-opt other members if needed.
5. The Task Force will submit its report to the Deputy Chairman, Planning Commission by February 28, 2007.
6. Expenditure on TA / DA for the non-official Members of the Task Force including co-opted Members, if any will be borne by the Planning Commission as per SR190(a). In the case of official Members, they will be paid TA / DA by their respective Departments as per the rules of entitlement applicable to them.
7. The Task Force will be serviced by the LEM Division of the Planning Commission and Smt. Padmaja Mehta, Director, Planning Commission, Room No. 561, Yojana Bhavan, New Delhi (Tel. No. 2309 6541) will be the nodal officer for the activities of the Task Force. Any further correspondence / query in this regard may be made with the nodal officer.

(K.K. Chhabra)
Under Secretary to the Government of India

To

Chairman & Members (including Convenor) of the Task Force etc.

.....Contd.....

Copy for information to :

- 1) PS to Deputy Chairman, Planning Commission, New Delhi.
- 2) PS to Minister of State for Planning, New Delhi.
- 3) PSs to Members, Planning Commission, New Delhi.
- 4) Cabinet Secretary, Rashtrapati Bhavan, New Delhi.
- 5) Secretary to the President of India, Rashtrapati Bhavan, New Delhi.
- 6) Principal Secretary to the Prime Minister, South Block, New Delhi.
- 7) Sh. N.N. Kaul, Information Officer.
- 8) Plan Coordination Division.
- 9) On the Website of the Planning Commission.

(K.K. Chhabra)
Under Secretary to the Government of India

Subsequently following persons were inducted and the tenure of the Committee was extended upto 31st March, 2007.

- 1) Secretary, Ministry of Housing & Urban Poverty Alleviation, Government of India
- 2) Sh. R. Gopalan, Joint Secretary, National Manufacturing Competitiveness Council, New Delhi.

Annexure-III

Vocational Training

Under



DIRECTORATE GENERAL of EMPLOYMENT & TRAINING
MINISTRY OF LABOUR & EMPLOYMENT

Challenges

- As per 61st round of NSSO survey, 12.8 m (Usual Status Basis) labour force enters the market every year
- Vocational Training infrastructure caters to the training needs of only 2.5 m - 1 m by DGE&T and 1.5 m by 11 other Ministries and Departments
- Vocationally trained workforce – only 5%(One of the lowest in the world)
- 152 m have no access to the VT who enter informal sector for their livelihood
- Productivity of the Indian worker is one of the lowest- US \$ 3.05 per person per hour

Empowerment of Workers

Empowerment of workers through increase in productivity :

- **Education**
- **Skill**
- **Technology**

Role of DGE&T

- **Policy formulation on VT**
- **Laying down standards**
- **Revise course curricula**
- **Granting affiliation**
- **Trade testing**
- **Certification**

Advisory Bodies

Central Govt.

- NCVT
- CAC

State Govt.

- SCVT
- SAC

Preservice VT Programmes

Craftsmen Training Scheme (CTS)- Unskilled to semiskilled

- Number of ITIs : 5114 (Govt.-1896 & Pvt.- 3218)
- Seating Capacity : 7.72 lakh
- Number of trades: 107
- Duration : 6 months to 3 years
- Entry Qualification : 8th to 12th Std.
- Age : 14 to 40 years

Preservice VT Programmes

Apprenticeship Training Scheme (ATS)- semiskilled to skilled i.e. shop floor training

- Establishments Covered : 20,854
- Trades : 153
- Seats Located : 2.53 lakh
- Duration of the Courses : 6 months - 4 years
- Entry Qualification : 12th Std. & ITI pass
- Age : 14 years

DGE&T Institutes

- ATIs - 8 Nos.
 - Advanced Training imparted to
 - Vocational Instructors
 - Industrial Workers
- FTIs - 2 Nos.
 - Training to supervisors from different industries
- CSTARI
 - Curricula development
 - Training of staff
 - Research
- AHI - 1 No.
 - Imparting training in high tech disciplines
 - Vocational instructors
 - Industrial workers

DGE&T Institutes

..... Contd.

- **NVTI/RVTI - 11 Nos.**
 - **Advanced training to Women**
 - **Vocational instructors**
 - **Industrial workers**

- **NIMI - 1 No.**
 - **Development of Instructional Media packages**
 - **Translation into different languages**
 - **Development of question Banks**

DGE&T Institutes

..... Contd.

- **MITIs - 4 Nos.**
 - **Imparts training in multiskills**

- **RDATs - 6 Nos.**

- **CTI - 1 No.**
 - **Imparts training to instructors**

- **VRCs - 20 in 19 States**

- **CGC - 22 in 22 States**

DGE&T Institutes

..... Contd.

Special Focus

- 25% seats reserved for women in general ITIs
- 224 exclusive Women ITIs
- 5 81 ITI s have women wings
- Reservations to SC/ST candidates in ITIs in proportion to their population in their respective States
- Reservation in ATS
 - As per proportion of population in a State
 - 15% to SC & 7.5 % to S.T. – In Central establishments

RECENT INITIATIVES

(i) 500 ITIs proposed to be upgraded into Centres of Excellence

- 100 done by domestic funding-2005-06
- 400 being done by World Bank assistance out of which 100 already started in 2006-07 under retroactive financing.

(ii) North Eastern States

- Estt. of 22 New ITIs
- Upgradation of 35 Existing ITIs
- Total Project Cost Rs. 100 Cr
- Increase in intake capacity - 8900 seats

RECENT INITIATIVES

..... Contd.

(iii) Jammu & Kashmir

- Estt. of one Women ITI at Jammu
- Upgradation of 37 Existing ITIs
- Total Project Cost Rs. 37 Cr
- Increase in intake capacity - 1836 seats

RECENT INITIATIVES

..... Contd.

(iv) Skill Development Initiative

- FM's Budget Speech of 2005-06
- Short term training courses on modular pattern- 148 modules developed
- Objective to provide VT to 1 m persons in 5 years and then 1 m every year
- To be done in PPP mode
- Provision of Rs 555 cr has been made to meet the expenses
- Details being worked out in close collaboration with State Governments, industry, trade associations and other training providers

National Skill Competition

- **Skill Competition for Craftsmen** -- 13 trades – once a year
- **Skill Competition for Apprentices** – 15 trades - twice a year -local, regional & All India Level
- **Work Skills-DGE&T & CII** once a year in nine trades for its member industries .

National Skill Competition Contd.

Awards :

Best Craftsmen, best Apprentices - Merit certificates & Cash prize.

Best State – Certificate of Merit & running shield

Best Establishment - Certificate of Honour from the Hon'ble President of India & running trophy

World Skills Competition

- No Participation at international level at present.
- India decided to become member of World Skill & participate in “Worldskills Competition” .
- Work skill competition jointly conducted by DGE&T & CII are being modified in line with Worldskills competitions .
- Experienced gained would be useful for reorienting the training programme offered in the country to make it world class.

Setting up of National Mission on skills

- **PM’s Independence Day Speech, 2006**
- **Concept paper presented to Planning Commission for setting up of Mission.**
- **Planning Commission formed a Task Force under Dr. Tarun Das, Chief Mentor, CII.**

Our Vision

- **Increase skilled workforce from 5% to about 50% by 2021**
- **Increase the training capacity by five times**
- **Increase the productivity of Indian Worker from US \$ 3 per person per hour to US \$ 20 by 2021.**
- **Increase trades for training from 107 to 2000 by 2021**
- **Improve quality of training for higher employability & productivity of worker**
- **Cover unorganised sector workers also in our formal training umbrella**

Suggestions

...Contd.

Use the spare capacity to the optimum:

- **Provide adequate number of instructors**
- **Provide adequate raw material for training**
- **Provide additional equipment, tools & machinery**

Suggestions

...Contd.

Increase the capacity :

- Can be doubled by running the ITIs in two shifts by simply providing:
 - Adequate number of instructors
 - Adequate raw material for training
 - Wherever necessary, retired instructors and officials can be used on contractual basis

Suggestions

...Contd.

Increase the capacity :

- Give tax incentives to Corporates for opening and running ITIs in different trades according to the needs of the market as was done in case of construction of houses some years back to waive income tax for five years upto a maximum of Rs.1.50 lakh per annum.
 - *Make the investment in training as bankable proposition*
 - *Make available study loans to trainees by banks.*

Suggestions

...Contd.

Increase the capacity :

Opening of ITIs in PPP mode – 33% by Government of India and remaining from private individuals/NGOs/Entrepreneurs with some assurance on employability of trainees.

Suggestions

...Contd.

Improve the quality of training for better employability and higher wage earning:

- Make IMCs compulsory for all ITIs/ ITCs .
- IMC to be headed by a prominent industrialist.
- Trade-wise corporate groups to be members of IMCs with the objective of prescribing training needs, level of technology and futuristic requirement of workforce.
- Corporate to be part of Apprenticeship Training Scheme. Increase the number from 20,854 to about 1 lakh and trainees from 2.53 lakh to about 1 million.
- Training to be imparted on cost plus basis. The fee may be financed by banks. Repayment by the trainee on employment on monthly instalment basis.

Suggestions

...Contd.

- Proficiency in English or some other foreign language, where there is demand for skilled force, should be made mandatory.
- ITIs should be made autonomous bodies within the Government.
- System of campus selection by industry who form the corporate group on IMC.
- Concentration of training efforts in areas of investment as per requirement of industry as L N Mittal Steel Plant in Orissa or Jharkhand or Tata Motors in Singur.
- Increase the number of trades in modular employable format in service sector trades or traditional handicraft sector.
- Modernise the tools, equipments and machinery in all Industrial Training Institutes and Apex Institutes of DGE&T to bring them at par with the latest anywhere in the world.

Suggestions

...Contd.

Use of technology for training:

- EDUSAT
- Web-based e-learning

Suggestions

...Contd.

Create higher capacity for training of instructors:

- About 50,000 instructors but capacity of only 1200 per annum.
- State Governments don't send the instructors for training

Thank you

REFORMS IN THE VOCATIONAL TRAINING SECTOR

There is a huge demand of skilled workforce in the country but we are not able to meet it either qualitatively or quantitatively. Following issues are proposed to be addressed under qualitative aspect :

1. **Disconnect between skills provided and skills required by the industry:**

- (a) Course curriculum should be designed in accordance with the requirement of the industry and in consultation with industry and trade experts. In the last ten years 45 trades have been revised and 47 new trades introduced in consultation with industry and trade experts. 15 trades are under process of revision.
- (b) Trades not currently relevant may be discarded. 11 such un-popular trades have been deleted.
- (c) Introduce new courses as per the current requirement of the industry – 186 modular courses in different new and emerging sectors have already been designed in close consultation with the industry and trade experts. Many more are under process.

2. **Outdated machinery, tools and technology.**

Centres of Excellence (CoE) Scheme addresses this problem partially, but we need to take up remaining about 1400 government ITIs for upgradation. Following are proposed :

- (a) ITIs may be given functional autonomy and delegated financial and administrative powers so that they can run courses on market demand basis and generate additional revenue which can be ploughed back for upgradation.
- (b) Some of the ITIs on selective basis in consultation with concerned State Govts. may be handed over to Industry Associations, if they so desire, with the financial support of the Central Government who can upgrade them in a phased manner.

3. **Skill demand of Services / Un-organised Sector not met.**

Industrial Training Institutes, as the name suggests, by and large have been meeting the skill requirement of the manufacturing sector. However, the skill needs of the un-organised and services sectors like Retail, Construction, Garment Making, Hospitality, Nursing, etc. are largely unmet.

In order to address this problem, 186 modular courses of short duration have already been developed and many more are under process in consultation with industry and trade experts. To address this problem, following are proposed :

- (a) An Apex Institute for Skill Development in the Informal Sector may be set up at a cost of Rs. 34 crore.

4. **Employability of Trainees**

In order to improve the quality of training, Institute Management Committees (IMCs) have been formed in the Centres of Excellence. Following are proposed to address the problem of quality of training:

- (a) IMCs should be constituted in all the ITIs / ITCs of the country with a prominent industrialist as Chairman and different other industry guilds being represented in the IMC.
- (b) Director Employment and Training, representative of the Finance and some trade experts may also be represented in the IMC.
- (c) IMC should be given financial and administrative powers to take care of the quality of training.
- (d) A National Institute for Skill Inventory and Skill Building should be set up at a cost of Rs. 25 crore. This institute will be responsible for assessing manpower needs through surveys, studies, studies, etc. at the micro level and maintain close link between industry and training institutes as well as employment organizations so as to bridge the gap between demand and supply.
- (e) IMCs should be empowered to suitably modify course contents to suit local requirement of a particular trade or industry.
- (f) The industry guilds proposed to be represented in the IMC should give their short term (1 – 3 years), medium term (3 – 5 years) and long term (5 – 15 years) requirement of manpower.
- (g) The industries should provide on-the-job apprenticeship training to the trainees.
- (h) Placement of trainees according to the need of the industry.
- (i) The trainees trained in a particular institute should be tracked for three years to ensure their placement.

5. Shortage of Trained Instructors

Quality of trainers determines the quality of training. At present, the instructor training capacity of the country is 1100 per year while there are more than 50,000 instructors in different ITIs / ITCs. Some of the State Govts. have started setting up their own Instructor Training Centres. In order to address this need the following are proposed:

- (a) Four more Instructor Training Institutes in the Central Sector should be set up at a cost of about Rs. 100 crore. The total capacity of these institutes will be about 4000 per annum.
- (b) Satellite based courses and e-Learning packages should be developed for informal training of the instructors.

With above the qualitative aspects of the vocational training will be, by and large, taken care of. However, the present training capacity of the country is about 2.5 million per annum while about 12.8 million new persons enter the labour force every year. We will, therefore, be required to increase the training capacity by about five times. In order to improve the quantitative aspects of the training, following are proposed:

- (a) 1500 more ITIs in the un-serviced blocks of the country under a Centrally Sponsored Scheme are proposed to be set up, of which 500 are proposed to be residential and meant for minority / SC / ST concentration blocks at a proposed total cost of Rs. 7500 crore, spread in next five years.
- (b) It is also proposed to set up one National Open School for vocational training to impart training through satellite and e-Learning, specially to take care of the emerging needs of services and un-organised sector.
- (c) It is also proposed to set up a large number of ITIs / ITCs in private sector as a business model. The corporates or the entrepreneurs interested in skill development may get a loan of Rs. 3 to 5 crore from a bank and set up a world class institute, train trainees in

relevant skills at market rate and network with relevant industries for placement. The trainees can be provided micro finance of Rs. 10,000 to Rs. 15,000 which can be repaid by them after getting employed, by a tri-partite arrangement between the employer, the trainees and the bank. The ICICI Bank has been requested to develop a business model accordingly.

We might also be required to undertake a “re-branding” exercise so that prestige is attached to vocational training which at the moment is treated as some kind of inferior job. Parents prefer to send their children for a degree course rather than vocational training which in effect means only postponement of his unemployment by three years. So we might have to change the term “vocational training” to “Skill Development” and undertake a media campaign to sensitize the parents to impart skills to their children and encourage higher education only to those who either want to go to academics or scientific research. We also should provide mobility from vocational training to higher education and vice versa so that for an ITI graduate, it may not be the end of the road academically. He may also be given credit for the number of years he underwent vocational training to admission to a college or university.

Concept Paper for Setting up of National Mission for Skills

1. INTRODUCTION

Skills and knowledge are the driving forces of economic growth and social development of any country. The economy becomes more productive, innovative and competitive through the existence of more skilled human potential. The level of employment, its composition and the growth in employment opportunities is a critical indicator of the process of development in any economy.

As per the survey carried out by the National Sample Survey Organisation, out of around 406 million in the labour force around 397 million are working, and the remaining 9 million are openly unemployed. Considering the size of the population of the country, the open unemployment (which means that these persons did not do any work during the last 365 days) is not significant. What is of concern is that a large number of workers (around 125 million) are working poor, i.e. they are working, but are not able to fetch sufficient income to bring their family above the poverty line. The main reason behind such a situation is the low level of productivity and the income earnings from such work. The situation arises because of economic compulsions of the persons, i.e. in order to survive they are forced to work, which actually cannot be termed as quality work at all.

Increase in quality of work has direct relation with productivity, which in turn is connected with skill availability of the workforce. In this context, it is necessary not only to create quality employment but also to equip such quality employment with sufficient skills. Creating quality employment and equipping the labour force with sufficient skills are thus the major challenges before the country.

2. PROBLEMS TO BE ADDRESSED

Lower percentage of skilled persons in the workforce

The skill level and educational attainment of the work force determines the productivity as well as the adaptability of the working class in changing environment. Large majority of workforce, both present & potential, do not possess requisite skills and need to undergo training. Only 5% of the Indian labour force in the age group of 20-24 has received vocational training, whereas the percentage in industrialised countries is much higher, varying between 60% and 80%. The illiterate and literate up to primary level of education constitute a very high proportion of the existing work force; the two together account for nearly 67% of the work force. While on the one hand, the level of educational attainment of the existing work force is very low, the educated without professional skills on the other hand constitute 69% of the total unemployed. A major reason is that the educational system is excessively oriented towards general academic education with little or no vocational honing.

Lower Labour Productivity

The overall labour productivity in India is much lower (\$ 5.45 per person per hour while the figure for Mexico is \$ 20.51).

Large %age of population living below poverty line

As per NSSO survey, large number of workers (around 125 million out of 397 million working population) are living below the poverty line.

Demand for vocational training from school drop-outs

About 63% of the school students drop out at different stages before reaching Class-X. There are very few vocational education training places for early school dropouts. This signifies that a large number of people who dropout of school do not have the necessary education and skills to be productively employed in the industry.

Need to focus on the skills for the informal sector

The largest share of new jobs in India is supposed to come from the unorganised sector that employs up to 92 per cent of the national workforce and produces 60 per cent of GDP. Since small and micro enterprises are supposed to play a central role in the national employment creation strategy, they should be assisted in development of skills. The formal skill training system, because of its educational entry requirements and long duration of courses, is basically not designed to offer skills to the low-educated people.

Training for Specific and Fit-for-Purpose Skill Sets

It has been viewed that there is a great need for employability and outcome based training courses and delivery. Today, we find that a lot of jobs that are available in the market do not require two-three year courses. For a lot of entry level jobs across industries, the skills required warrant merely focused short duration courses. Modular structure of short courses allows a professional to upgrade his skills without compromising on his earning capacity for undergoing a long duration training programme, and provides him with the flexibility to acquire this at his convenience.

Skill upgradation of existing workforce

Total labour force in the country is about 400 million. Due to fast technological changes, regular skills upgradation is very essential to ensure their employability. Further, every year 6 to 8 million new persons are added to the labour force. They also require skill development. But the present facilities for skill development are highly inadequate in the country.

3. PRESENT IMPLEMENTATION OF VARIOUS SCHEMES:

At present various Ministries/Departments have their own employment generation and training schemes, which are primarily implemented, independently at the district level. Total training capacity / persons trained per annum under various programmes is estimated to be about 30 lakh. The number of schemes being very large, involving a large number of departments working independently the following problems arise:-

- Multiplicity of various schemes ;
- Overlapping of various schemes ;
- Lack of optimal utilization of infrastructure
- An individual can take benefit of various schemes at the same time.
- It is practically impossible for the District Collector to keep track of each and every scheme and take necessary action for proper implementation of the schemes ;
- Training activities in a district is seen independent of employment activities. This results in mismatch between the demand and supply of labour in the district.
- No linkage between Employment Exchanges, employment Generation and Training Schemes.

4. PRESENT TRAINING MONITORING

As has already been indicated, skill development with the labour force (existing labour force and the new entrants to the labour force) is of utmost importance in the present context of globalization and economic liberalization in the economy in order to maintain their employability and raise their productivity and income. Though Ministry of Labour is the nodal Ministry at the national level with regard to formulation of policies, laying down standards, conducting trade testing and certification etc in the field of vocational training, various institutions both within and outside the Government are imparting skill training in their own way. Though such efforts are laudable, there should be a synergy among various training providers, so that a minimum standard of skill is maintained. It is imperative that there should be a linkage between all training providers not only with a view to achieving a common certification for their skills but also to ensure proper utilization of infrastructures available in the country.

It is also pertinent to mention here that the additional employment generation in the formal sector is not significant. The labour force will have to be diverted in large numbers to self-employment. The skill development at present taking place is mostly in the informal way, i.e., they acquire skill at the work-place when they help their parents, relatives and employers etc. The skills thus acquired are required to be organised with a view to giving recognition to such skills. The standards which are required to be developed, and all such persons acquiring skill through informal sector need to be certified. This will help them in improving their skill side by side with the work they may be doing.

Keeping in view the fact that most workers in the informal economy are self-taught – they have not benefited from formal schooling and training systems – it is important that institutional mechanisms be established to upgrade workers' skills on an on-going basis. Reorientation of the skills of self-employed and bare foot entrepreneurs is called for. Answers to questions such as how the existing institutions and schemes can accommodate the training needs of the informal economy, therefore, need to be replaced. Once again, the concern mentioned above about the differential access of male and female workers to knowledge will need to be addressed.

Training is a critical input for up-scaling the informal sector activities. This is highlighted in various workshops. Issues such as extending training to workers who are not necessarily educated and who are scattered over wide geographic locales, without easy access to stipulated centres of training and not necessarily able to pay for it, are also required to be addressed.

It is difficult to address the issue of training in the conventional training framework, given the broad band of activities in the informal economy. Most studies suggest that there is very little training available for informal sector activities, and whatever is available, is not necessarily relevant or effective. Some characteristics of a successful approach to training have been identified. These include: (1) the design of effective training programmes requires knowledge of labour markets ; (2) the whole training approach should be demand-driven and job-linked, so as to minimize skill mis-match ; (3) multi-skilling should be a part of the training process ; (4) effort should be made to ensure that training is skill oriented and cuts across occupational specificity ; (5) training, as a matter of principle, should be of relatively short duration, if possible, it should be field based and cost effective and there should be stakeholder participation in the design of training schemes ; and (6) training for the informal sector work should not be linked to degrees or diplomas ; the aim should be to identify effective users of skills.

There is no necessity to establish new training institutions or to allocate new budgets for training. It should instead be possible to create space for informal sector training in the existing institutions and their present budgets should be reoriented to accommodate the new training needs. Some innovative approaches for cost-effective skill transfers can be attempted through a 're-discovery' of hereditary learning processes, wherever applicable, in view of their proven

performance. But it must be remembered that many hereditary learning processes begin at a fairly early age in the life of the informal sector workers. There should, therefore, be a conscious attempt not to put children to arduous work.

Identification of the right agencies forms a critical component in successful training. These institutions should be flexible and trainers should be genuinely committed to the cause of the trainees. A decentralized extension training system should be emphasized. Training should be a package, consisting of credit and backup service in addition to skill transfer, so that its effectiveness is maximized. A typical non-material package could consist of knowledge, skills and attitude.

5. INITIATIVES OF DGE&T TO STRENGTHEN THE VT SYSTEM

Some of the initiatives taken by the DGE&T to strengthen and expand skill development are:

- For North Eastern States, Sikkim and J&K
Under this project 23 new ITIs will be set up and 72 existing ITIs will be upgraded at a cost of Rs 137 crore.
- Testing & Certification of skills acquired through non formal means
 - 93% of the workforce is in the informal sector and they have acquired skills from a wide range of non-traditional methods, but these go largely unrecognized.
 - It is important that the workforce should be able to have its skills recognized as part of a national qualification frame work, irrespective of where the skills were obtained.
 - Therefore, DGE&T has taken up a scheme for testing and certification of skills acquired through non- formal means.
 - The scheme is being implemented initially on a pilot basis.
 - Competency based skill standards have already been developed for 47 skill areas. Skills of around 8000 workers have been certified till date.

- Introduction of multi skilling courses at 500 upgraded ITIs
The objective of the scheme is to upgrade the existing 500 ITIs in to “Centres of Excellence” (CoE)” for producing multi skilled workforce of world standard.

The highlights of the scheme are:

- Introduction of multiskilling courses during the first year
- Advanced/specialised modular courses subsequently
- Selection of CoE based on industry cluster in the region
- Multi entry and multi exit provisions
- Public-Private Partnership in the form of Institute Management Committees (IMCs) to ensure greater & active involvement of industry in aspects of training.

Action has been initiated for upgradation of 100 ITIs from domestic resources and 400 ITIs through World Bank assistance. These are all Govt. owned ITI's .

6. NECESSITY FOR CREATION OF A NATIONAL MISSION FOR SKILLS

In order to address the problems as mentioned in para 2 (lower percentage of skilled persons in the workforce, lower labour productivity, large %age of population living below poverty line, demand for vocational training from school dropouts, need to focus on the skills for the informal sector, skill upgradation of existing workforce), the Government is giving emphasis on skill development. The recent announcements made by Hon'ble PM and also by Hon'ble Finance Minister (in his Budget speech) related to skills development are given below:

Announcements made by Hon'ble PM

i. At the Shram Awards Function on 4th Oct 2004 at New Delhi)

“The skill levels of our workforce is an area of concern. The quality of manufacturing output and the wages paid to labour are critically dependent on the quality of labour force. Investment, particularly of FDI, is based on availability of quality labour. For improving incomes and also productivity and quality, we will need to upgrade very substantially the skill levels of our workers across all sectors. This requires better training facilities. Of a labour force of 397 million, almost 67% is either illiterate or suffers from limited literacy levels. Significantly, only 5 percent of workers in the age group of 20-24 years have vocational skills. Even amongst the educated unemployed, few have vocational skills. A solution is self-evident: we will need substantial investment in skill upgradation and vocational training. This is required to enable us to create a large and expanding pool of skilled workers. Eventually, any strategy to generate employment must ensure that all new entrants to the workforce are equipped with the requisite skills for high productivity and high quality work.

In order to achieve this, we need to think of innovative solutions. While strengthening and modernizing our Industrial Training Institutes (ITI) and the Apprenticeship Training Schemes, we need to realize that there must be active involvement of industry—both in the private sector and in the public sector in the task of curriculum design and management of these programmes. Here, we have much to learn from other countries, particularly Germany, where industry participates actively in apprentice training programmes and, SE Asia, where industry is actively involved in the operations of training institutes.”

ii. At the Independence Day -15th August 06

“ Para 25. India has contributed extensively to human knowledge. Today, we are at the dawn of a new millennium which many call the knowledge economy. In this world, knowledge will determine our progress and the place we occupy in the world. We must continue to be at the forefront of new research and new thinking, especially in science and technology. We must build top-class institutions. We have begun work on three new Indian Institutes of Science, Education and Research in Kolkata, Pune and Punjab. We have also begun work on 19 medical institutions of the same standard as AIIMS. We will need to ensure far greater availability of educational opportunities at the higher education level so that we have not just a literate youth but a skilled youth, with skills which can fetch them gainful employment. As our economy booms and as our industry grows, I hear a pressing complaint about an imminent shortage of skilled employees. As a country endowed with huge human resources, we cannot let this be a constraint. We are planning to launch a Mission on Vocational Education so that the skill deficit in our economy is addressed.”

Announcements made by Hon’ble Finance Minister’s in the Budget Speech 2004-05

I am concerned about the quality of technical education in the country. Lest I be misunderstood, I am not referring to the IITs but to the ITIs. ITIs are the training ground for skilled manpower. The skills imparted by ITIs must keep pace with the technological demands of industry and the expanding universe of knowledge. There is only one benchmark for our technicians – and that is the world standard. In order to produce technicians of world standard, Government proposes to launch a programme in the Central sector to upgrade 500 ITIs over the next 5 years at the rate of 100 ITIs a year. Appropriate infrastructure and equipment will be provided, the syllabi will be upgraded and new trades will be introduced. This is an area where I welcome Chambers of Commerce and Industry to join hands with the Government and create a public-private partnership model for designing and implementing the scheme. The selection of the ITIs will be done in consultation with the State Governments”.

Announcements made by Hon'ble Finance Minister's in the Budget Speech 2005-06

“ To meet the demand for specific skills of a high order, a Public Private Partnership between Government and industry is proposed to promote skills development programme under the name ‘Skill Development Initiative’.... ”.

Announcements made by Hon'ble Finance Minister's in the Budget Speech 2006-07

Skills Development

99. Honourable Members will recall that Government has taken up a programme to upgrade 500 ITIs over five years. 100 ITIs are now covered with the help of the private sector. Assistance has been sought from multilateral agencies to cover the remaining 400 ITIs. I propose to allocate Rs.97 crore for this purpose in 2006-07. The Skills Development Initiative (SDI) announced last year has been taken up through a PPP scheme, and I propose to make an initial provision of Rs.10 crore.

Action taken by the DGE&T to fulfill the above Announcements

Following schemes have been devised to fulfill the budget announcement made by the Hon'ble FM:

1. Upgradation of 500 Government owned ITIs into Centres of Excellence

- 100 ITIs are being upgraded from domestic resources and remaining 400 ITIs will be upgraded through World Bank assistance.
- These ITIs will produce multi skilled workforce of world standard.
- The major focus would therefore be on Quality rather than Quantity aspects. ensure greater & active involvement of industry in all aspects of training.
- The total cost of the project is expected to be in the order of **Rs 1800** crores

2. Skill Development Initiative

A Skill Development Initiative, involving the skilling and certification of one million Indians over a period of five years, and thereafter one million every year, has been taken up. Key features of the scheme are:

- ◆ Market Demand driven Short term training courses (STC)
- ◆ STC will be based on Modular Employable Skills (MES). MES are designed for specific & fit for purpose based on Labour Market demand
- ◆ A matrix of MES /STC for various sectors will be developed
- ◆ Flexible delivery mechanism (part time, weekends, full time, modular programme)
- ◆ Different levels of programmes to meet demands of various target groups
- ◆ Flexibility to run STC in ITIs/ ITCs by optimum utilisation of infrastructure to make training cost effective. Various options for optimal utilisation of infrastructure in the ITIs/ITCs are given in Annex-I.
- ◆ The services of existing or retired faculty or guest faculty to be utilised
- ◆ Estimated cost of the scheme is **Rs 555 crore**

3. Participation in WorldSkills- concept being developed (highlights given below)

□ To foster a spirit of healthy competition, DGET organizes following skill competitions:.

- ✓ All India Skill Competition for Craftsmen, which is held every year in 13 trades.
- ✓ All India Skill Competition for Apprentices which is conducted twice a year in 15 trades..

- ✓ Work skills Competition which is conducted jointly by DGE&T and CII once a year at Regional & National level, in nine trades for its member industries for (one worker below 25 & other for workers above 25).

However there is no participation at international level by India.

- World Skills is a unique, not for profit international membership organization. Its mission is to raise the status and standards of vocational skills and training world wide-in an innovative and forward looking way. Presently 42 world's leading vocational education and training agencies are member of World Skills Competition. It is the biggest skills competition in the world and is held every two years in one of its member countries. It sets world class standards in 48 skill categories.
- World skills offers the chance to test and compare countries training system against that of others and ensure that education & training strategies meet the demands of a modern society. Many countries are participating in this competition for several years seeking an opportunity for benchmarking and networking. It help them for curriculum development, upgrading skill levels and seeking bilateral cooperation.
- **The agencies or bodies that have responsibility for promoting vocational education and training in their respective countries/regions can be member of World Skills.** The primary membership of World Skill organization includes admission fee of EURO 20,500 for the first year which includes the annual fee of first year. The annual fee for each year would depend on the no. of trade/s in which a country would like to participate subject to a minimum of EURO 4215. There is no participation fee for sending the competitors but the sponsoring companies need to bear the actual expenses for travel, boarding & lodging.
- Due to globalization privatization & liberalization, benchmarking of skills standards is the need of the day. It is high time that Indian Workers should also compete at International Level at "World Skill Competition" and experienced gain would definitely be useful for reorienting the training programme offered in the country to make it world class.

Besides, on the specific suggestions of CII, in the meeting held under the Chairmanship of Secretary(L&E) on 14th Jan 2006, the reps. of leading industry associations insisted tat India should participate in the Worldskills competition after obtaining necessary membership. MOLE intends to go into the motion of seeking membership of Worldskills, with a view to India hosting such a global competition in near future. This will facilitate development of workforce in India of world standard by witnessing best practices overseas.

All the three exercises referred to above are crucial to sustain efforts towards the skilling of our youth, with a view to making them employable by our industry.

Necessity of setting up a National Mission for Skills

In order to implement the above-mentioned schemes effectively and to achieve the targets, there is need to:

- have regular and close monitoring and evaluation of scheme;
- have synergy among various training providers under various Ministries and to optimally utilise their training capacity;
- have close involvement of employers organizations and Industry in implementation of the scheme;

World Bank team during visits to India in connection with the meeting with Secretary(L&E) desired to have full time dedicated officers and staff for successful implementation of the scheme for upgradation of 400 ITIs into Centres of Excellence.

Therefore, it is proposed to **set up a National Mission for Skills** , under Ministry of Labour & Employment, for a period of 5 years, which will work full time in close collaboration with State Governments and industry to implement the following :

- Upgradation of 500 ITIs into Centres of Excellence
- Skills Development Initiative
- India's participation in and subsequent hosting of Worldskills competition.
- Synergy among various vocational training providers & industry for optimal utilization of available infrastructure for skill development.

National Mission-

Role

The Role of Mission would be to:

- Coordinate with all the concerned Government and non Government agencies
- To have interface with the industry
- Assess the skill requirement taking into consideration economic challenge , changing technologies and structural adjustments
- To access the capacity of available vocational training providers and recommend corrective measures
- Monitoring and evaluation of the schemes relating to:
 1. Upgradation of ITIs into CoE
 2. Skill development initiative
 3. Participation in worldskills

Recommend suitable measures for improvement for approval of the Government

Structure

It is proposed to set up an National Council under the Chairmanship of Union Labour and Employment Minister and having the following members including experts nominated by GOI .

National Council will comprise of the following:

- | | | |
|--|---|------------------|
| a) Minister of Labour & Employment | - | Chairman |
| b) Minister of State, Labour & Employment* | - | Vice Chairman |
| c) Secretary(L&E) | - | Member |
| d) Secretaries or his rep.- Ministry/ Department
Finance, Health, Industries, DCSSI,
Textile, Food Processing, Tourism,
Rural Development Agriculture
(reps. not below the rank of JS) | - | Members |
| e) DGET/Joint Secretary | - | Member Secretary |
| f) Advisor (LEM), Planning Commission | - | Members |
| State Secretaries (06 nos. by rotation)
(dealing with Craftsmen Training Scheme) | - | Members |
| g) DDG/Director (Employment) | - | Member |
| h) Dy. Director General (AT) | - | Member |
| i) Director of Training | | |
| j) Representatives from Women organisation,
SC/ST and AICTE (one each) | - | Members |
| k) Representatives from leading Industry Association
(04 members) | - | Member |

- | | | |
|---|---|--------|
| l) Experts in the field of Vocational Training(4 Nos) -
(2 members each for formal & non formal) | - | Member |
| m) Other Vocational Training Providers (04 nos.) | - | Member |
| n) Rep of World Bank | - | Member |

* In the absence of MOS in the Ministry, Secretary(L&E) will be the Vice-Chairman
The Council will be the policy making body giving overall direction and guidance to the Mission, approve the Action Plan and will monitor and review its progress and performance. The Council will meet atleast four times a year. The roles and responsibilities of the Council are as under:

- (i) Give overall policy guidance and direction regarding the objectives for better implementation;
- (ii) To consider the recommendation of **National Skill Development Centre** and give direction for its implementation to all concerned .
- (iii) Call for special reports on specific issues on national /regional importance;
- (iv) Suggest for convergence between other programmes and schemes of other Departments/Ministries on vocational training ;
- (v) Help strengthen centre-state partnership in implementation of various scheme covered in mission mode ;
- (vi) Discuss and devise meaningful PPP in the planning and implementation of various scheme covered in mission mode
- (vii) Review the implementation progress of various scheme covered in mission mode in various states;
- (viii) To conduct a regular review of the progress of implementation of various scheme covered in mission mode ;
- (ix) Approve modification in the norms, as may be necessary, within the approved parameters of the various scheme covered in mission mode ;
- (x) Promote convergence of various scheme covered in mission mode with other programmes and schemes of the MOLE;
- (xi) guidance to **National Skill Development Centre** for proper implementation of the schemes

National Skill Development Centre

DGET's experience in the last two years has revealed that there are varying standards between the institutions, faculty and equipment of ITIs covered under the scheme for upgradation of ITIs to CoE. This is largely because of the kind of interest taken by the State Govt. in Vocational Training. Therefore, it is important to sit down , along with industry representatives and World bank reps, State by State and critically review/ monitor implementation of FM's Budget Announcement referred to in this Note.

The work involved in scheme for skilling and certification of one million Indians over a period of five years, and thereafter one million every year, can not be taken lightly. The work will involve close monitoring with vocational training providers, industry and State Governments for successful implementation of the scheme.

The above kind of work cannot be handled routinely by the Ministry of Labour & Employment because of other work assigned to its officials. Hence the suggestion to set up a National Skill Development Centre in the National Mission for Skills under the Societies Registration Act 1860. The society will have an executive Council. This Centre will interalia be responsible for monitoring and evaluation of the schemes with ground realities and provide vital feedback to the National Executive Council and Govt. for its proper implementation.

The Head of **National Skill Development Centre**, will be a person of eminence having knowledge and experience of Vocational Training, labour Market, emerging issues of Skill building in tune with latest technology & structural/economic changes and will be the Chairman of the Executive Council of the Society . The Chairman will also have the experience of working in a manner having interface with Industry Association and Labour Unions. The Chairman will be appointed by GOI on a tenure basis. Besides Chairman, the above Society will have other members as detailed below:

- | | | |
|---|---|---------|
| a) DGET/Joint Secretary | - | Member |
| b) State Secretaries (03 nos.)
(on rotation-dealing with Craftsmen Training Scheme) | - | Members |
| c) DDG/Director (Employment) | - | Member |
| d) Dy. Director General (AT)/DAT | - | Member |
| e) Dy. Director General (T)/DT | | |
| f) Director Finance | - | Members |
| g) Representatives from leading Industry Association
(04 members) | - | Member |
| h) Representatives from workers Associations
(04 members) | - | Member |
| i) Experts in the field of Vocational Training(4 Nos)
(two each from formal and Non formal sector) | - | Member |

The council shall meet every alternate month for the following issues:

1. Monitoring & evaluation of the various scheme covered under the mission.
2. Coordination with various stakeholders for optimal utilization of the resources

Other responsibilities and powers of the Council would be :

- Necessary liaison will also be made with the industry
- To undertake all such activities for implementation of the scheme and including those as advised by the National Council and the GOI , MOLE
- To give recommendations to the National Council based on the review meetings
- To hire consultants
 - for various studies for evaluation of the scheme
 - for accessing the Labour market requirements for various skills
 - to undertake special task as per felt need
- To organise seminar/workshops on various aspects of the scheme
- To suggest participation of India in various trades in Worldskill

The Chairman of the Executive Council will have powers to appoint core officers and staff including on deputation to the max of 25 in numbers with the approval of Government.

Expenditure involved

The following will be likely financial input in the above schemes of GOI :

- | | |
|--|---------------------------|
| (i) Upgradation of 500 ITIs into Centres of Excellence---- | Rs 1800.00 crores(approx) |
| (ii) Worldskill----- | Rs 4.50 crores(approx)# |
| (iii) Skill Development Initiative----- | Rs 555.00 crores(approx) |
| Total----- | Rs 2360.00 crores(approx) |

Other than hosting of Worldskill competition

- (iv) National Skill Development Centre.....Rs 10 crores (to meet the expenditure on Payment of Salary/Hon, Payment for rented accommodation including Office expenditure,

Payment to consultants for specific work, Seminar/ meetings/workshops, etc . Details would be worked out for approval of competent authority) . Considering the total cost of new initiatives taken up by the Ministry of labour & employment, the estimated cost of Rs 10 crores for setting up of **National Mission For Skills and establishing a Society namely- National Skill Development Centre** is very low(even less than 5%).

NOTE FOR USE OF TASK FORCE ON SKILL DEVELOPMENT

1.1 The Indian economy has been growing at a much faster pace – at 9 and 9.2% per year during the last two years as against 4.4%, 5.8% and 3.8% during 2000-01, 2001-02 and 2002-03.

1.2 As is well known, the manufacturing sector has performed particularly well. According to the latest economic survey, the percentage growth during 2004-05, and 2005-06 was 8.7% and 9.11% respectively and is estimated to be 11.3% during this financial year as against 4.4% in 2000-01, 5.8% in 2001-02 and 3.8% in 2002-03.

1.3 Many of the gains which occurred as a result of productivity increase and technological upgradation led to the phenomena of jobless growth in the manufacturing sector in the not so distant past.

1.4 However, the accelerated overall rate of growth has created an upsurge of demand in the economy for skilled labour in the manufacturing sector, both organized and unorganized as also in the services sector which too has grown at the rate of 9.6%, 9.8% and 11.2% for the years 2004-05, 2005-06 and 2006-07. Thus, non-manufacturing sector has also witnessed this demand for manpower. In order for India to sustain its economic growth, it will have to keep expanding its labour force.

1.5 The Directorate General of Employment and Training which was set up in the post W.W.II era, has over the years catered to the demand for shopfloor and foreman level workers for the manufacturing sector. DGE&T has now to cater not only for a much higher demand for skilled labour in this sector but must also devise many courses for the service sector which has burgeoned.

1.6 The ethos of DGE&T and the State level organizations which deal with skilling has tended to be highly affirmative and inclusive. The flexibility of the system as regards age of admission, admission qualifications etc. has benefited thousands of young and no so young job seekers. The system tends to be very modern in approach and has catered to the needs of entry level workers for more than 60 years. It is also proposed to set up new ITIs in the 90 districts which have a preponderance of minority population.

1.7 The DGE&T has 34 apex training institutions directly under its control. Some of these are

- Advanced Training Institutes : 5
- Foremen Training Institutes : 2
- Advanced Training Institutes for Electronics and Process Instrumentation : 2
- National Vocational Training Institute for Women
- Central Staff Training and Research Institute

The DGE&T also runs 43 Employment Institutes including an Apex Institute for Research and Training in Employment Services. The complete list is at **F/A**.

1.8 At the State level, there is a State Council for Vocational Training and a network of 5114 institutions, out of which 1896 are ITIs in the State Government sector and 3218 are ITCs in the private sector. **(F/B)**.

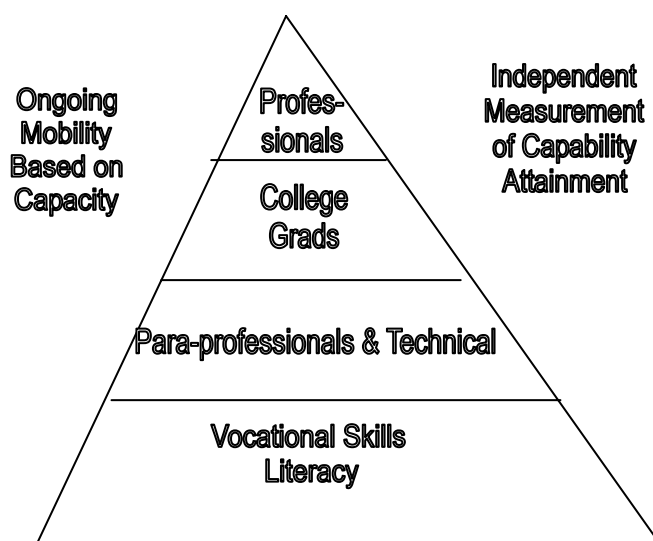
1.9 The total output of trained manpower per annum in these institutes is 1.07 million (including 2.53 lakh under apprenticeship training). Specific industry-wise training and

entrepreneurship development skills are being imparted also by 16 other Ministries – totalling about another 1.5 million. This is to be seen against the assessed current training requirement of 10.2 million persons as well as the entry of 12.8 million every year in the labour force.

- 1.10** The system headed by DGE&T must be capable of responding to the challenges of meeting the shortages of shop floor and foremen level workers in the manufacturing sector and entry level workers in the services sector. Serious steps have already been taken by the Ministry to address the needs of the unorganized sector and proposals made (para 3.10 and 3.11). Shortage of instructors has also sought to be addressed and further enhancement sought. It may be noted that the FM in his budget speech has spoken not only of quality upgradation but also of encouragement to ITIs to run a double shift. It may also be noted that in Gujarat, ITIs are running two and even three shifts. DGE&T focusses on imparting of skills in about 57 manufacturing trades at present and 50 non-manufacturing trades. Several schemes for skilling and upgrading of ITIs are presently being implemented. The details may be seen at F/C. Ministry of Labour and Employment had made several proposals in this regard and these were presented in the Steering Committee meeting in the Planning Commission on 11th January, 2007.
- 1.11** In some of the States where ITIs have changed with the times have very high rates of success. Employment Exchanges in these areas reflect a very different and indeed positive situation. In some States, however, the ITI system needs greater efforts at modernizing, refurbishing and upgrading. This entails revision of curricula, introduction of new trades and greater autonomy at the institution level and a vastly closer relationship with the industry. As regards quality upgradation, DGE&T has taken several steps. Existing 500 ITIs are being upgraded into Centres of Excellence. Details may be seen at para 2.8. FM has given a call for upgrading the balance 1396 ITIs in the PPP mode. The Ministry's concept of PPP has been elaborated in the enclosed note (para 3.13).
- 1.12** As an integral part of the Ministry of Labour and Employment, the DGE&T has an organic connection with manpower planning, maintenance of data pertaining to employment exchanges, issues of the rehabilitation of bonded labour and child labour, vocational rehabilitation of the physically handicapped. The Directorate General is required to collect and disseminate information concerning employment and unemployment and prescribe uniform reporting procedures. The Directorate General also conducts regular training programmes for Employment Officers and develop staff training material for use by the Employment Service personnel working in the 947 Employment Exchanges. DGE&T has to provide vocational guidance and counselling and also assist SC/STs and persons with disabilities by enhancing their capabilities for wage employment and self-employment.
- 1.13** Employment Exchange statistics are maintained by DGE&T. In India, Employment Exchanges are the only agency at All India level which provide assistance to job-seekers and collect labour market information for policy planning purposes of the Ministry of Labour and Employment. DGE&T evaluates and monitors employment and unemployment situation at all India level using various sources of employment data such as census, Labour Force Surveys etc. These are integral to the functioning of the Ministry. A revision of National Classification of Occupations, 1968 has been undertaken inhouse by the Ministry of Labour and finalized.
- 1.14** The eradication of child labour, their rehabilitation and skilling in ITIs after they have finished formal schooling and have attained the minimum age of 14 years is an important programme which is being developed in the Ministry of Labour. Under the existing National Child Labour Programme, the target group of children is in the age group of 9-

14 years. During this period, basic pre-vocational training is imparted which does not make them employable. A provision of systematic vocational training for adolescents (who had been earlier child labour) in the age group of 15-18 years is being evolved in the Ministry in consultation with DGE&T.

- 1.15** DGE&T is an important instrument for the achievement of the objectives of the Ministry of Labour – viz. “to protect and safeguard the interests of workers in general and those who constitute the disadvantaged sections of the society with due regard to creating a healthy work environment for production and productivity and to develop and coordinate vocational skill training and employment services.”
- 1.16** A convergence model is being followed by the Ministry of Labour & Employment with regard to child labour as several cross cutting and inter-Ministerial issues are involved. Recognising that child labour is a by-product of poverty and parental and child illiteracy, the National Child Labour Project scheme also seeks to target the families of child labour under various general developmental programmes of the Government. To ensure that the benefits of various developmental programmes under different Ministries are specifically made available to child labour and their families, a core group with representation from Ministries of Rural Development, Urban Development & Poverty Alleviation, Social Justice & Empowerment, HRD (Elementary Education) and Women & Child Development has been set up. The group seeks to ensure effective convergence of efforts on a sustained basis and to develop inter-linkages between various schemes for children and their families.
- 1.17** Like child labour proposed Vocational Education Mission could perhaps draw on the strengths of the several Ministries including a number of Divisions of the HRD Ministry, Women and Child Development (multiple Divisions again), Urban Development, Rural Development (Self-employment schemes and NREGA) and Labour Ministry.
- 1.18** Finally to reproduce a Capability Attainment Pyramid extracted from a paper of the Aspen Institute, India – It may be feasible for the Mission to provide independent measurement of Capability Attainment at various levels.



Capability Attainment Pyramid

- 1.19** After the mission is set up, the allocation announced in the budget speech of the Finance Minister could form the core of the corpus fund which could be designated as “Skill Development Fund.” The mechanism for utilization can be decided in consultation with the stakeholders so that the fund can be used for continuous upgradation of ITIs,

Polytechnics etc. where these institutions are not able to find internal resources to do so. The mission will have to deal with approximately 16 other Ministries which have several schemes/programmes for skill development. The Mission may consider acting as a Lateral Interlinking Organisation to support the efforts of these various Ministries to meet the challenge.

Present National Vocational Training System :

- 2.1 “Vocational and technical training of labour” is on the concurrent list of the Constitution of India and as per the Allocation of Business Rules, “employment and vocational training of craftsmen and apprentices” are allocated to the Ministry of Labour & Employment. Directorate General of Employment & Training under the Ministry of Labour & Employment has been charged with the responsibility of imparting vocational training and apprenticeship training to the workers for the shop floor level and foreman at supervisory level, both in India and abroad. The role of Directorate General of Employment & Training is to formulate policy on vocational training, lay down standards, frame and revise course curricula for different trades, grant affiliation and accreditation, conduct trade testing and certification.
- 2.2 There are two advisory bodies to help the Central Government in this task. One, National Council for Vocation Training (NCVT) which is a tri-partite body headed by Union Minister for Labour and Employment and consists of representatives from Central Ministries and Departments, State Governments and Union Territories, representatives of employers organizations, representatives from workers organizations and professionals, experts and representatives of SC/ST and women organizations. The second is, Central Apprenticeship Council (CAC), which is again a tri-partite body and advises the Central Government on different aspects of apprenticeship training in the country. There are two parallel bodies at the State Government level also, known as State Council for Vocational Training (SCVT) and State Apprenticeship Council (SAC) with similar responsibilities.
- 2.3 Vocational training is imparted through two major schemes, one, Craftsman Training Scheme (CTS) and the other, Apprenticeship Training Scheme (ATS). The Craftsman Training Scheme is run through a network of 5114 Industrial Training Institutes (ITIs) / Industrial Training Centres (ITCs) out of which 1896 are under the control of different State Governments and the remaining 3218 are run by the Private Sector (Annexure-I). The total seating capacity of these ITIs / ITCs is 7.72 lacs and they impart training in 107 trades out of which 57 are engineering and 50 are non engineering trades (annexure-II). The duration of training is between 6 months to 3 years and the entry qualification is 8th to 12th standards. The qualifying age is a minimum of 14 years and a maximum of 40 years.
- 2.4 The Apprenticeship Training Scheme (ATS) is run through a network of 28,540 industrial establishments in the country in 153 trades. The total number of seats located are 2.53 lacs, the duration of the courses ranges between 6 months to 4 years, the entry qualification is 12th standard and / or ITI pass and minimum age is 14 years. No maximum age has been prescribed for Apprenticeship Training.
- 2.5 After training, All India Trade Tests are conducted, both for CTS and ATS trades under the aegis of NCVT. Trainees after completion of their courses in either of these schemes appear in the Tests and the successful trainees are awarded National Trade Certificate (NTC) for ITI trainees and National Apprenticeship Certificate (NAC) for ATS trainees which are valid for employment within the country as well as abroad.

- 2.6 In addition to above, there are 16 other Ministries and Departments of Government of India like Health and Family Welfare, Human Resource Development, Information Technology, Small Scale Industries, Tourism, Urban Development, Urban Employment and Poverty Alleviation, Agro Rural Industries, Agriculture, Textiles, Heavy Industry and Public Enterprises, Food Processing Industries, Rural Development, Tribal Affairs and Women and Child Development. All these Ministries and Departments taken together train about 1.5 million persons every year.
- 2.7 In addition to above, there are specialized Advanced Training Institutes (ATIs) under Directorate General of Employment & Training which impart training to trainers, upgrade skills of in-service industrial workers, train supervisors and middle management level in the industry, train Training Managers and Principals of ITIs, impart advanced training in Electronics and Process Instrumentation, etc. In addition to above, there are National and Regional Vocational Training Institutes for Women which offer basic, advanced and instructor training courses for women which include Electronics, Architectural Assistantship, Dress Making, Hair and Skin Care, Secretarial Practice, Computer Operator and Programme Assistant, etc. In order to offer employment opportunities to physically challenged persons, 20 Vocational Rehabilitation Centres (VRCs) are also run in 19 States of the country. Similarly, 22 Coaching-cum-Guidance Centres (CGCs) for providing larger employment opportunities to members of SCs and STs are run in 22 States of the country. In addition, there is one specialized institute, National Instructional Media Institute (NIMI) for development of course curricula and instructional media packages in different languages for the benefit of ITI trainees and instructors . The total number of persons trained each year by these institutes is 1.02 lacs.
- 2.8 Certain recent initiatives have been taken by the Directorate General of Employment & Training to improve the quality of training of the ITIs. Existing 500 ITIs are being upgraded into Centres of Excellence (CoE) with the World Bank assistance. In each of these ITIs, a Broad Based Basic Training course is being provided to the trainees and then multiskilling courses are offered in the trades of their choice so that they are better employable. Institute Management Committees (IMC) are being constituted in all these ITIs which are headed by a prominent industrialist of the area and all industrial guilds are represented in the IMC. Another significant recent initiative is setting up of 22 new ITIs and upgradation of 35 existing ITIs in the North East States which will increase their intake capacity by 8900 seats. Similarly, one new women ITI is being set up and 37 existing ITIs are being upgraded in Jammu & Kashmir which will increase their capacity by 1836 seats.

3. Deficiencies in the Vocational Training System and Remedial Measures :

The vocational training system in the country has largely served the need of the industry for almost last six decades. According to various surveys conducted, about 60-70% graduates from ITIs / ITCs get employment. In the recent past, about 40% of the awardees of Prime Minister's Shram Awards have been graduates from ITIs. However, keeping in mind the present level of requirement of the industry, a lot needs to be done to improve quantitative and qualitative aspects of the vocational training. Following are major problems which need to be addressed urgently in order to fulfill the requirement of the industry in a meaningful manner:

- 3.1** There has been a general feeling that there is a disconnect between the skills provided to the trainees of ITIs / ITCs and the skills required by the industry and it has happened primarily because of lack of close involvement of the industry in the management of ITIs. There is also a feeling that revision of course curriculum lags behind the need of the industry. Though in the recent past course curricula have been revised for 45 trades, 47 new trades

have been introduced in close consultation with the industry and trade experts, 15 trades are under revision and 11 un-popular trades have been dropped, there is need to increase the number of trades from 107 to encompass all sectors of the economy. In the latest revision of National Classification of Occupations, about 2900 trades have been listed. An effort, therefore, should be made to develop course curricula in a phased manner for all the occupations / trades in the country which require skilled workforce.

- 3.2** Vocational training efforts cannot be successful until there is close involvement of the industry at every level starting from the assessment of requirement of skilled workforce, development of course curricula, supervision of the quality of training, participation in on-the-job apprenticeship training programme and assessment of competencies. An effort in the recent past has been made to constitute Institute Management Committees (IMCs) under the Chairmanship of a prominent member of local industry. Other members are representatives of different industrial guilds at the local level who not only decide the policy issues but also supervise quality of training, modification of course curriculum according to the local requirement, etc. But these IMCs will be effective only when administrative and financial autonomy is granted to them. What is needed is to get these ITIs to function under the Government with complete financial and administrative autonomy so that the employees working in the ITIs remain government servants and draw the same emoluments and perks as they were getting under the government. Service Rules of the Government servants could be adopted by these societies to protect their interests.
- 3.3** The fee structure in different States is different, but the general feeling is that the fee charged from the trainees is much less than the cost of actual training. What happens at present is that whatever fee is charged from the candidates, it goes to the Consolidated Fund of the State and in the allocation of resources for vocational training, generally a very low priority is accorded by the State Government as a result of which almost 90% of resources go towards payment of salaries and only 10% are spent on the actual training. The result is that the quality of training is not up to the mark. The effort, therefore, should be made to increase the sources of revenue and try to plough them back for improving the quality of training and meeting the requirement of raw material for training purposes as well as upgradation of tools, equipments, machinery and technology. Greater priority is accorded to create new institutions by the State Governments, as compared to the upkeep of the existing institutions.
- 3.4** Recently, Directorate General of Employment & Training has started a scheme of upgradation of 500 Government ITIs into Centres of Excellence by providing additional resources to the State Governments in next five years. However, there are still about 1400 government ITIs which need upgradation of infrastructure and technology. Government may consider evolving a model by which these remaining ITIs could be upgraded in a Public-Private-Partnership (PPP) mode wherein technical inputs and supervision, etc. could be provided by the industry and part of the resources could be provided by the Central / State Governments and part generated through internal efficiency of the Institute.
- 3.5** While it is a good idea to upgrade these ITIs / ITCs to the current level of technology, as a long term strategy, it is advisable to encourage them generate their own resources by giving financial autonomy to finance their day-to-day and upgradation needs. However, they may not be able to generate internal resources for large expansion or replacement of costly machines. It is, therefore, suggested that a Skill Development Fund may be created for continuous upgradation where these institutions are not able to do it on their own.
- 3.6** The Apprenticeship Training System also needs expansion and modification. At present, only 28,540 industries are participating in the Apprenticeship Training Programme whose total seating capacity is 2.53 lacs only. In a fast growing economy like India, and huge requirement of skilled workforce, we need to increase the number of participating enterprises

to about one lac and also cover enterprises in the services and un-organised sector as majority of the job opportunities are available in these sectors. There also needs to be continuous supervision and monitoring of the quality of apprenticeship training so that the candidates become real world class technicians.

- 3.7** The medium of instruction in the ITIs /ITCs is local language but there is a huge and growing demand for skilled workforce out side the country. In order to meet this requirement, it is suggested that a small language proficiency module of about three months in English or any other foreign language be also included in the training system so that some of these trained persons would opt for working overseas as well.
- 3.8** The Services Sector has been growing very fast in our economy and most of the self-employment opportunities are available therein. It is, therefore, suggested that a basic course in entrepreneurial development in close partnership with Ministry of Small Scale Industries could be included in the vocational training system so that some of these ITI graduates could take up self-employment.
- 3.9** Use of computers has become common in almost every industry and is growing day-by-day in every walk of life and, therefore, it is suggested that a basic computer course and the communication skill be included as part of the vocational training so that these skilled persons do not find them out of place and get readily accepted in technologically savvy organizations.
- 3.10** About 93% of the workforce is engaged in the un-organised sector in the country and this is the sector where maximum employment potential exists. The skills required are also not very high-tech and specialized. The sectors like retail, construction, hospitality, tourism, nursing, garment, security guards, leather, etc. need training courses of very short duration ranging from 100 hours to 500 hours. About 200 million students enroll at class-I level every year, out of which 63% drop out before reaching class-X and 90% drop out before reaching class-XII for various reasons. We need to tap the potential of this group of youth by devising short-term courses, set up the training infrastructure at doorstep, involve private training providers in their skill training, get them assessed by the industry bodies and provide employment opportunities close to their homes. Directorate General of Employment & Training has started a Skill Development Initiative which will take care of these requirements. 156 modules of Modular Employable Skills (Annexure-III) have already been developed and the target is to develop about 2000 such modules to take care of the growing skilled workforce requirement of the un-organised sector. However, the effort needs to be multiplied manifold so that skill requirement of the un-organised sector is largely met and multitude of youth gets decent and gainful employment.
- 3.11** The requirement of workers for un-organised sector is very large. In order to meet this requirement, use of technology must also be made. A National Open School for Vocational Training may be considered to be set up which may develop Instructional Media Packages in soft form and provide CDs to anybody who wants to use it for training in a particular skill. E-learning Packages may also be developed on Modular Employable Skills through which any candidate can learn sitting at home. The Directorate General of Employment & Training must create an assessment system and conduct tests at periodic intervals so that skills acquired through such means are assessed by the industry bodies on the basis of which NCVT certificate could be granted by Directorate General of Employment & Training so that they are employable within the country as well as abroad.
- 3.12** There is huge shortage of quality instructors in the country. The quality of training depends upon the quality of trainer. At present, Directorate General of Employment & Training imparts training to the instructors in five Advanced Training Institutes and one

Central Training Institute with a total capacity of about 1100 persons per year. There are more than 50,000 instructors in the ITIs / ITCs in the country. If these instructors are needed to be trained and re-trained every five years in view of continuous advancement of technology, the training capacity of the instructors should be enhanced to about 10,000 per year. It is, therefore, suggested that the capacity of training of instructors must be enhanced by Directorate General of Employment & Training by ten times. State Governments also should be encouraged to set up their own Instructor Training Institutes to cater to the needs of specialized training in their respective States.

3.13 The total vocational training capacity of the country is 2.5 million while about 12.8 million persons enter the workforce every year. Thus, there is a huge gap of about 10 million. At present, there are only 5% workers vocationally trained between the age of 20-24 years through formal training institutions which is one of the lowest in the world. This percentage varies between 60% - 96% in developed economies of the world. Korea has got as high as 96% trained workforce. Even the developing countries like Mexico at 28% and Peru at 17% are much higher than India. All out efforts, therefore, are needed to increase this number to about 50% in the next 10-15 years. The training provided by the private sector should be assessed by the industry bodies and certification should be done by the Directorate General of Employment & Training so that the trainee graduates from these institutions are of high quality and readily employable.

3.14 In order to enhance the training capacity, the State Governments may also be persuaded to run 2-3 shifts wherever it is feasible in the ITIs and ITCs to impart training to more number of persons. Government of Gujrat has already started running three shifts in their ITIs.

3.15 Another problem which needs to be addressed in a big way is lack of dignity of labour in our education system. Skill development is regarded inferior to general education which puts a kind of stigma on the candidate opting for vocational training in comparison to one who opts for general graduation and post graduation courses without realizing that he is only postponing his unemployment by another 3 or 5 years. About 69% of the persons registered on the live registers of Employment Exchanges have graduate or post graduate qualifications without any employable skills for which there are no jobs available. General education can generate marketable skills if vocational training is integrated into the school syllabus. It is, therefore, suggested that vocational training as a discipline should be included after 8th standard so that students can branch out to different vocational streams or academics according to their aptitude and liking.

3.16 Mobility from vocational training to academic education is at present missing in the system. This problem could be addressed if graduates of ITIs are eligible for entry into polytechnics and plus two level of medical or engineering courses. This would help to inculcate a culture of shifting between training and work in the formative stages of career of a professional and an ITI graduate will not feel that it is the end of the road for him for academic attainment.

3.17 In order to attract a larger number of youth to the vocational training, it may be worthwhile to consider change the name of ITIs / ITCs to “Skill Development College” and carry out massive publicity campaign to change the mind set of parents and young persons and make them realize that going to a Skill Development College provides much better career prospects than going to a general education stream.

3.18 The objective of skill development programme is to provide world class skilled workforce to the industry so that it becomes globally competitive and to provide jobs to teeming millions of youth and, therefore, it is necessary to develop a national portal which

can keep the details of each and every trainee graduating from any ITI / ITC with his name, address, educational qualification, technical qualification, telephone number, mobile number, etc. so that any industry wanting to recruit persons with certain skills may access this portal and select the best amongst them for his purpose. This portal may also be used by the industry to put all its requirement of skilled workforce so that any desirous candidate could apply to the concerned industry to seek gainful employment. This data base will have to be developed at the ITI level and then networked with the national portal so that the information is updated regularly. The Directorate General of Employment & Training has started the exercise but it needs to be done expeditiously so that it can serve the growing needs of the industry and the skilled youth.

3.19 The purpose of imparting vocational training is to make youth employable and, therefore, there should be a Placement Cell in every ITI / ITC which in close coordination with the industry can help the graduates in getting placed in different industries. Campus selections may be organized by these Placement Cells for ready placement of their trainees. These Placement Cells should also track the graduates till they are suitably employed.

3.20 There are certain disadvantaged groups of society like SC/ST, backward classes and minorities who do not have adequate access to vocational training. Keeping their large numbers in mind, it is advisable to give a focused attention to the skill development of the youth from these sections of society. It is, therefore, suggested that adequate number of ITIs should be set up in un-serviced blocks of the country and train the youth belonging to these communities in these ITIs, particularly, with reference to traditional skills which these communities possess in good measure. Only Short-term Modular courses will be required for most of the trades because skills in these communities are passed on from parents to their children for generations.

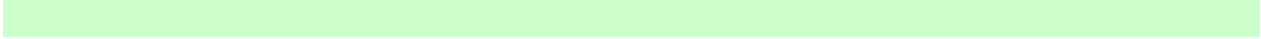
3.21 There is need for strengthening the certification system in vocational training. Though Directorate General of Employment & Training has been conducting trade tests and awarding National Trade Certificates and National Apprenticeship Certificates which make these certificate holders employable within the country and abroad, the set up is becoming unequal to the task in future as against certification of one million at present, it will require to certify about 10 million persons every year for which the infrastructure is awfully inadequate. It will, therefore, be worthwhile to consider setting up a National Trade Testing, Certification and Accreditation Authority to take care of the growing numbers for certification.

3.22 Though data about drop outs, from the schools, addition to the workforce and requirement of skills are available at the macro level through census data or various National Sample Survey Organisation reports, it is impossible to get data on requirement of skills, employment potential at the micro level so that ITIs / ITCs could plan their intake of trainees on the basis of local requirement of the industry. With the setting up of IMCs in every ITI / ITC, short-term, medium-term and long-term requirement of the local industry could be assessed from the members of the industry guilds represented in the IMC, it is advisable to set up a National Institute for Skill Inventory and Skill Building which can carry out studies and surveys at the State / district level to forecast the manpower requirement which can be used by the ITIs / ITCs for restructuring their training courses.

The Directorate General of Employment & Training, set up in 1945, has been taking care of the skill needs of the country. Its interaction with the industry, the State Governments and workers organizations has been excellent and all its bodies are tri-partite in nature which takes into consideration the interests of various stake holders. The skills imparted to youth are for their employment. NCVT and NAC are tri-partite bodies. What is, therefore, needed is to build upon its strengths and remove various deficiencies by systematically applying the correctives as detailed above. However, there are certain aspects which are not fully attended to, like integration of education with skill

development, mobility of skilled persons to academics, assessing demand of skilled workforce, etc. and, therefore, an overarching autonomous body may be created which can take care of the coordination needs with different Ministries and Departments of Government of India, State Governments, assess their needs of skilled workforce, conduct research, surveys and frequently interact with industry bodies to apply corrective measures wherever needed.

* * * * *



**Modular Employable Skills (MES)
under Skill Development Initiative**
A National Vehicle for Skill Building (to reduce unemployment)

The need for giving emphasis on the Skill Development, especially for the less educated, poor and out of school youth has been highlighted in various forums. The skill level and educational attainment of the work force determines the productivity, income levels as well as the adaptability of the working class in changing environment. Large percentage of population in India is living below poverty line. One of the important causes is lower percentage of skilled persons in the workforce

The skill development at present is taking place mostly in the informal way, i.e. persons acquire skill at the work-place when they help their parents, relatives and employers etc. Such persons do not have a formal certificate and thus earn lower wages and are exploited by employers. They have come through informal system due to socio-economic circumstances of the family and the compulsions of earning a livelihood rather than attending a formal course. While their productivity is low, their contribution to the national GDP cannot be ignored. If the country can create a system of certification which not only recognizes their skills but also provides education and training in a mode that suits their economic compulsions, it will not only benefit the workforce to earn a decent living but also contribute to the national economy by better productivity of this workforce.

Another related problem to be tackled is large number of students drop outs (About 63% of the school students drop out at different stages before reaching Class-X).

Frame work for Skill Development based on ‘Modular Employable Skills (MES)’

Very few opportunities for skill development are available for the above referred groups (out of school youth & existing workers especially in the informal sector). Most of the existing Skill Development programmes are long term in nature. Poor and less educated persons can not afford long term training programmes due to higher entry qualifications, opportunity cost etc. Therefore, a new frame work for Skill Development for the Informal Sector has been evolved by the DGET to address to the above mentioned problems. This was essential considering their educational, social and economical background. The **key features of the new frame work for skill development** are:

- ◆ Demand driven Short term training courses based on modular employable skills decided in consultation with Industry
- ◆ Flexible delivery mechanism (part time, weekends, full time)
- ◆ Different levels of programmes (Foundation level as well as skill upgradation) to meet demands of various target groups
- ◆ Training to be provided by Vocational Training (VT) Providers under the Govt., Private Sector and Industrial establishments.
- ◆ Optimum utilisation of existing infrastructure to make training cost effective.
- ◆ Testing of skills of trainees by independent assessing bodies who would not be involved in conduct of the training programme, to ensure that it is done impartially.
- ◆ Testing & certification of prior learning (skills of persons acquired informally)
- ◆ The essence of the scheme is in the certification that will be nationally recognised by both the government agencies and industry/trade organisations.

The Short Term courses would be based on ‘Modular Employable Skills (MES)’.

The **concept for the MES** is :

- ❑ Identification of ‘**minimum skills set**’ which is sufficient for gainful employment in the labour market.
- ❑ MES can be acquired by informal or formal training (with flexible delivery)
- ❑ It allows skills upgradation, multi entry and exit, vertical mobility and life long learning opportunities in a flexible manner.
- ❑ It also allows recognition of prior learning (certification of skills acquired informally) effectively.
- ❑ The modules in a sector when grouped together could lead to a qualification equivalent to National Trade Certificate (ITI) or higher.
- ❑ Courses could be available from level 1 to level 3 in different vocations depending upon the need of the employer organisations.

Target Group

- ❑ MES would benefit different target groups like :
 - Workers seeking certification of their skills acquired informally
 - workers and ITI graduates seeking skill upgradation
 - early school drop-outs and unemployed

Sl No.	Target Group	Training			Testing & Certification of Competencies
		Skills acquisition	Skills gap	Skills up-gradation	
1	Workers				✓
			✓		✓
				✓	✓
2	Less educated/ Out school youth/ unemployed	✓			✓
3	ITI graduates			✓	✓

Benefits of the MES

For the Individuals

- Better employability & mobility
- Higher productivity, wages and less exploitation
- Identity, improved social status & Pride
- Easier to get loans for self-employment

For the Employers

- Improved Quality & Productivity
- Less downtime
- Compliance with Quality Assurance systems like ISO
- Availability of skilled workforce helps in getting export orders

For the Society & the country

- Reduced poverty
- Social harmony & peace
- Higher GDP

Pathways to acquire Qualification:

Access to the qualification could be through:

- ❑ An approved training programme; **Or**
- ❑ A combination of an approved training programme plus recognition of prior learning including credit transfer; **Or**
- ❑ The recognition of prior learning that provides evidence of the achievement of the competencies for the qualification.

Training

DGET will facilitate training by providing curricula, learning material, training of trainers & assessors. Training can be provided by any training / educational institution, industry, NGOs etc. Training will be imparted by adopting flexible delivery mechanism (part time, weekends, full time, onsite/ offsite) to suit needs of various target groups

Testing & Certification

Testing of skills of trainees by independent assessing bodies who would not be involved in conduct of the training programme, to ensure that it is done impartially. Respective State Govts. would be associated. NCVT certificate to the successful persons would be awarded

Monitoring

- ❑ Web based MIS would be used. Key features are:
 - ❑ Online registration of :
 - candidates
 - training & testing centres
 - New MES courses
 - ❑ State/ District/ Taluka / course wise
 - candidates registered
 - MES certified skilled persons available
 - Job opportunities
 - ❑ Matching of Job opportunities & skilled persons available
- ❑ List of courses, curricula, training & testing centres would be on website
- ❑ Smart cards would be issued to the certified persons
- ❑ Post training evaluation of 1% persons certified to be done every year

DGET has started development of curriculum for short term courses in association with Employers Organisations, State Governments, experts, vocational training providers etc. Curriculum development has been taken up for 35 sectors. Course curricula for 166 courses developed. Curricula for about 90 courses are being developed. Skill development will also be undertaken for sectors like Agriculture, Khadi & Village Industry, Glass ware/ Brass ware, Jute, Cane & Bamboo, Carpet, Fisheries, Fragrance & Flavour etc. These are the sectors where large number of unskilled workers are employed. Modular Employable Skills programme to be implemented in close cooperation with all major stakeholders like Industry, State Governments, NGOs, Vocational training providers etc. would help such workers, out of school youth, unemployed persons in acquiring employable skills and help them in getting gainful employment. They could also become self-employed and thereby generate employment opportunities for others also. The Industry would benefit by way of improved Quality & Productivity, less downtime, compliance with Quality Assurance systems like ISO and availability of skilled workforce helps in getting export orders.

Apprenticeship Training Scheme

Objective

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 prescribed syllabii, period of training etc. as laid down by the Central Apprenticeship Council; and
- To utilize fully the facilities available in industry for imparting practical training with a view to meeting the requirements of skilled manpower for industry.

Evolution of the Apprentices Act 1961

- National Apprenticeship Scheme started in 1959 on Voluntary Basis.
- Apprentices Act was enacted in 1961 and implemented w.e.f. 1.3.1962 making it enforceable.
- 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.
- The Act was again 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.

Categories of Apprentices

There are four categories:

- (i) Trade Apprentices
- (ii) Graduate Apprentices
- (iii) Technician Apprentices
- (iv) Technician (Vocational) Apprentices

Monitoring Mechanism

For Trade Apprentices

Central Government Departments : Union Ministry of Labour and Public Sector
Undertakings : Employment through six Regional Directorate of
Apprenticeship Training located at Chennai,
Faridabad, Hyderabad, Kanpur, Kolkata and
Mumbai

State Government Departments : State/UT Governments
and Public Sector Undertakings
& Private Sector Establishments

For Graduate, Technician and Technician (Vocational) Apprentices

All Establishments : Union Ministry of HRD through
Four Regional Boards of Apprenticeship
Training located at Chennai, Kanpur,
Kolkata and Mumbai.

Trade Apprentices

Number of establishments : 20800
Number of Trades : 153
Period of Training : 6 months to 4 years for freshers.
Rebate in period of training for ITI for ITI
graduates in relevant trade.
Educational Qualification : 8th pass to B.Sc.

Graduate & Technician Apprentices

Number of subject fields : 104
Period of Training : One year

Technician (Vocational) Apprentices

Number of subject fields : 97
Period of Training : One year

Training Statistics

Category of Apprentices	Seats Located	Seats Utilized	% of utilization
Trade	255990	186122	73%
Graduate, Technician Technician (Vocational)	87011	39405	45%

Rates of Stipend

Trade Apprentices

First Year : Rs. 1090 p.m.
Second Year : Rs. 1240 p.m.
Third Year : Rs. 1440 p.m.
Fourth Year : Rs. 1620 p.m.

List of designated trades under the Apprentices Act, 1961

Trades having entry qualification Class VIIIth Pass

Name of Trades		Period Training
Lineman	Wireman	3 years
Furniture & Cabinet Maker	Plumber	
Mechanic (Marine Diesel)	Tractor Mechanic	
Pattern Maker	Painter General	
Driver-cum-Fitter		
Mason (Building Constructor)	Sports Good Maker (Wood)	2 years
Auto Mechanic (Two Wheeler / Three Wheeler)	Book Binder	
Tailor (General)	Leather Goods Maker	
Footwear Maker	Finished Leather Maker	
Upholsterer	Rigger	
Gas Cutter	Ceramic Moulder	
Ceramic Caster	Ceramic Kiln Operator	
Ceramic Press Operator	Ceramic Decorator	
Moulder (Refractory)	Painter Marine	
Tailor (Men)	Tailor (General)	1½ years
Jewellery and Precious Metal Worker		1 year
Weaver	Doffer-cum-Piecer	6 months
Tenter (Drawing Speed/ Fly Frames)	Winder (Textile)	
Printing Textile	Barber/Hair Cutter/Dresser	
Tyre Repairer	Pruner Tea Gardens	
Trades having entry qualification Class Xth Pass		
Electrician Aircraft	Tool & Die Maker (Die & Mould)	4 years
Tool & Die Maker (Press Tools, Jigs & Fixture)	Mechanic (Earth Moving Machinery)	
Mechanic (Instrument Aircraft)	Power Electrician	
Plastic Mould Maker	Mechanic Radio and Radar Aircraft	
Operator Cum Mechanic (Power Plant)		

Trades having entry qualification Class Xth Pass		
Fitter	Turner	3 years
Machinist	Machinist (Grinder)	
Foundryman	Forger & Heat Treater	
Sheet Metal Worker	Electrician	
Mechanic Machine Tool Maintenance	Mechanic Maintenance (Textile Machinery)	
Shipwright (Steel)	Mechanic (Dairy Maintenance)	
Mechanic Maintenance (Chemical Plant)	Material Handling Equipment-Cum-Operator	
Instrument Mechanic	Mechanic Watch and Clock	
Mechanic Diesel	Mechanic (Motor Vehicle)	
Refrigeration and Air Conditioning Mechanic	Construction Machinery Mechanic-Cum-Operator	
Draughtsman (Civil)	Draughtsman(Mechanical)	
Surveyor	Fitter Structural	
Boiler Attendant	Mechanic Mining Machinery	
Switch Board Attendant	Lino Operator	
Mono Keyboard Operator	Process Cameraman	
Retoucher Lithographic	Engraver	
Offset Machine Minder	Optical Worker	
Sirdar (Colliery)	Mate (Mines)	
*Attendant Operator (Chemical Plant)	*Instrument Mechanic (Chemical Plant)	
*Laboratory Assistant (Chemical Plant)	Mechanic (Agriculture Machinery)	
Maintenance Mechanic for Leather Machinery	Insulator Maker/ Machine Operator (Ceramic)	
Pipe Fitter	Shipwright (Wood)	
Electronics Mechanic	Brick Layer (Refractory)	
Apprentices Food Production (General)	Steam Turbine Cum Auxiliary Plant Operator	
Winder (Armature)	Cable Jointer	
Electrician (Mines)	Electroplater	
Carpenter	Mechanic Television (Video)	
Attendant Operator (Dairy)		

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

Trades having entry qualification Class Xth Pass		
Welder (Gas & Electric)	Motor Vehicle Body Builder	2 years
Auto Electrician	Mono Castor Operator	
Plate Maker (Lithographic)	Shortfirer/Blaster (Mines)	
Steward	Baker and Confectionery	
Hotel Clerk/Receptionist/ Front Office Assistant	Apprentice Food Production (Vegetarian)	
Fibre Reinforced Plastic Processor	Plastic Process Operator	
Designer and Master Cutter	Dress Maker	
Embroidery and Needle Worker	Horticulture Assistant	
Stockman (Dairy)	Pump Operator Cum Mechanic	
Sports Goods Maker (Leather)	Photographer	
Beautician	Steel Melting Hand	
Crane Operator (Overhead Steel Industry)	Furnace Operator (Steel Industry)	
Hair Dresser	Health and Slimming Assistant	
Hair and Skin Carer	Enamel Glazer	
Fruit And Vegetable Process		
House Keeper	Knitter (Hosiery)	1 ½ years
Mechanic Sewing Machine	Gardener	1 year
Battery Repairer		
Creel Boy-Cum-Warper	Screen Printing	6 months
Beautician Assistant	Cable Television Operator	
* Call Centre Assistant		
Trades having entry qualification Class XIIth Pass		
Operator Advanced Machine Tool Maintenance	Mechanic Advanced Machine Tool Maintenance	3 years
Mechanic Industrial Electronics		
Data Preparation and Computer Software	Desk Top Publishing Operator	2 years
Operator Cum Mechanic Pollution Control Equipment	Mechanic Medical Equipment for Hospitals and Occupational Health Centre	
Medical Laboratory Technician (Pathology)	Medical Laboratory Technician (Radiology)	6 months
Medical Laboratory Technician (Cardiology and Physiology)		
Trades having entry qualification B.Sc. Pass		
Advanced Attendant Operator (Process)		1 ½ years
Trade having entry qualification National Trade Certificate in “Computer Operator And Programming Assistant” issued by National Council for Vocational Training		
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.

Subject fields in Engineering and Technology designated for Graduate/Diploma Apprentices	
1. Civil Engineering	2. Public Health Engineering
3. Structural Engineering	4. Highway Engineering
5. Construction Technology	6. Mechanical Engineering
7. Refrigeration and Air Conditioning	8. Machine Tool Technology
9. Production Engineering	10. Automobile Engineering
11. Electrical Engineering	12. Electronics and Telecommunication Engineering
13. Computer Engineering	14. Television Engineering
15. Industrial Electronics	16. Radio & Electronics Engg
17. Nuclear Engineering	18. Avionics
19. Metallurgy	20. Textile Engineering
21. Agricultural Engineering	22. Chemical Engineering
23. Sugar Technology	24. Marine Engineering
25. Nautical Engineering	26. Aeronautical Engineering
27. Mining	28. Plastic Technology
29. Textile Chemistry	30. Naval Architecture
31. Architecture	32. Regional & Town Planning
33. Textile Technology	34. Glass Technology
35. Ceramic Technology	36. Silicate Technology
37. Pharmaceutical Science	38. Oil & Soap Technology
39. Pigment & paint Technology	40. Dye Stuff Technology
41. Printing Technology	42. Leather Technology
43. Leather Goods and Footwear Manufacture	44. Rubber Technology
45. Food Technology	46. Bio-Chemical Engineering
47. Instrumentation-Technology	48. Petroleum Engineering
49. Petroleum Technology	50. Applied Geology
51. Applied Geophysics	52. Jute Technology
53. Paper Technology	54. Catering Technology
55. Plastic Engineering	56. Foundry Technology
57. Sound Engineering	58. Ground Water Engineering
59. Drilling Engineering	60. Cinematography
61. Fisheries and Navigation	62. Medical Laboratory Technology
63. Industrial Engineering	64. Knitting Technology
65. Secretarial Commercial Practice	66. Interior Decoration
67. Library Science	68. Costumes Design & Dress making/ Garment Technology
69. Fine Art Sculpture Commercial etc	70. Computer Science/ Computer Applications
71. Polymer Technology	72. Dairy Engineering Technology

73. Mining Machine Engineering	74. Mineral Engineering
75. Fabrication Technology	76. Transportation Engineering
77. Wood/Timber Technology	78. Safety Engineering
79. Handloom Technology	80. Plant Engineering Technology
81. Ship Building Technology	82. Man-made Fibre Technology
83. Tool Engineering Technology	84. Bio-Medical Engineering
85. Energy Engineering	86. Production Engineering and Industrial Management
87. Architectural Assistantship	88. Electrical and Electronics Engg.
89. Environment Pollution and Control Engineering	90. Footwear Technology
91. Computer Aided Design Computer Aided Manufacturing/ ROBOTICS Application	92. Bio-gas Technology
93. Petro-Chemical Engineering / Technology	94. Water Management
95. Water Resource Engg.	96. Machine Tools and Maintenance
97. Industrial Electronics and Instrumentation	98. Air Craft Maintenance Engineering
99. Mechatronics	100. Cement Technology
101. Information Technology	102. Materials Management
103. Packaging Technology	104. Beauty Culture and Cosmetology

Subject fields designated for Technician (Vocational) Apprentices

1. Accountancy & Auditing	2. Banking
3. Marketing and Salesmanship	4. Office Secretaryship/ Stenography
5. Food Preservation	6. Poultry Farming
7. Fisheries/Fish Processing	8. Dairying
9. Medical Laboratory/Technology Assistants	10. Health Worker
11. Nursing	12. Child Care & Nutrition
13. Crop Cultivation/Production	14. Sericulture
15. Agriculture	16. Floriculture
17. Plant Protection	18. Textile Designing
19. Civil Construction/Maintenance	20. Mechanical Servicing
21. Agricultural Chemicals	22. Inland Fisheries
23. Plantation Crops & Management	24. Seed Production Technology
25. Swine Production	26. Vegetable Seed Production
27. Medicinal & Aromatic Plant Industry	28. Sheep and Goat Husbandry
29. Repair & Maintenance of Power Driven Farm Machinery	30. Veterinary Pharmacist-cum- Artificial Insemination Asstt.
31. Agro Based Food Industries (Animal based)	32. Agro Based Food Industries (Crop based)
33. Agro Based Industries (Feed based)	34. Post Harvest Technology
35. Fish Seed Production	36. Fishing Technology
37. Cooperation	38. Export-Import Practices and Documentation
39. Insurance	40. Purchasing & Store Keeping
41. Taxation Practices/Taxation Laws/ Tax Assistant	42. Audio Visual Technician
43. Maintenance Repair of Electrical Domestic Appliances	44. Health Sanitary Inspector
45. Hospital Documentation	46. Hospital House Keeping
47. Ophthalmic Technician	48. Physiotherapy & Occupational Therapy
49. X-Ray Technician	50. Multi Rehabilitation Worker
51. Catering & Restaurant Management	52. Institutional House Keeping
53. Pre School & Crèche Management	54. Commercial Garment Designing and Making
55. Interior Design	56. Library and Information Science
57. Tourism and Travel Techniques	58. Instrumental Music (Percussion Table)
59. Classical Dance (Kathak)	60. Indian Music (Hindustani Vocal Music)
61. Horticulture	62. Soil Conservation
63. Industrial Management	64. Receptionist
65. Basic Financial Services	66. Office Management
67. Building and Road Construction	68. Building Maintenance
69. Ceramic Technology	70. Computer Technology
71. Rural Engineering Technology	72. Material Management Technology
73. Rubber Technology	74. Structure and Fabrication

	Technology
75. Sugar Technology	76. Tanneries
77. Clothing for the family	78. Health Care and Beauty Culture
79. Bleaching, Dying and Fabric Painting	80. Knitting Technology
81. Bio Medical Equipment & Technician	82. Dental Hygienist
83. Dental Technician	84. Multi Purpose Health Worker
85. Pharmacist	86. ECG and Audiometric Technician
87. Nutrition and Dietetics	88. Auxiliary Nurse and Mid Wives
89. Primary Health Worker	90. Photography
91. Commercial Art	92. Physical Education
93. Bhartnatayam	94. Cotton Classifier
95. Printing Technology	96. Surveying
97. Printing & Book Binding	

A NOTE ON NATIONAL COUNCIL FOR VOCATIONAL TRAINING

Name of the Tripartite Committee/Board: **National Council for Vocational Training (NCVT)**

Date of constitution of the committee: **22nd May 1956, Last Constituted for a period of three years from July 2003 to June 2006 & extended upto March,2007**

Whether Statutory/Non Statutory : **Non Statutory**

Functions : **The important functions of the council are**

1. **Prescribing standards in respect of syllabi, equipment, and space norms , duration of courses and methods of training;**
2. **Arrange trade tests in various trade courses and lay down standards of proficiency required for a pass in the examination leading to the award of National Trade Certificate;**
3. **Arrange for ad-hoc or periodical inspections of training institutions in the country to ensure that the standards prescribed by the council are being followed;**
4. **Grant of affiliation to trade/ units of government or by private agencies for purposes of the grant of National Trade Certificates and lay down conditions for such recognition;**
5. **prescribe qualification for the technical staff of training institutions;**
6. **prescribe the standards and conditions of eligibility for the award of National Trade Certificates;**
7. **Advice the Central government regarding distribution to State governments of the contribution of the Government of India towards expenditure on the Craftsmen Training Scheme;**
- 8 **perform such other function as may be entrusted to it by the Government of India;**
9. **perform such functions as are assigned by or under the Apprentices Act, 1961.**

Method for discharging functions:

- **Meeting of NCVT is conducted once in a year to discuss various issues on vocational training. Recommendations made during the meeting are accepted by Govt. of India for implementation.**
- **Meeting of Sub-committee of NCVT dealing with affiliation is conducted three to four time in year to deal with affiliation and other issues of Craftsmen Training.**
- **Approval /comments from members of NCVT on syllabi & other urgent issues are sought through circulation of documents before implementation .**

Names of Official and Non Official Members : **List of Official and Non Official Members of out going council is Annexed.**

**List of members of National Council for Vocational
Training w.e.f. 1.7.2003 for a period of three years upto 30 June,2006 & extended up to
31st Mach,2007 .**

1. The Union Minister for Labour Chairman
State Minister for Labour
New Delhi.
2. The Secretary to the Govt. of India
Minister of Labour
New Delhi – 110001
3. The Director General of Employment &
Training and Joint Secretary to the Govt. of India
DGE&T , M/o Labour , New Delhi
4. Director of Training
DGE&T , M/o Labour
5. Financial Advisor ,
M/o Labour
6. Dy. Director General (Apprenticeship Training)
DGE&T , M/o Labour

Central Departments/Ministries

7. Shri Pankaj Agarwal
Joint Secretary
Dept. of Information Technology
Electronics Nektan
6-C.G.O.Complex
Lodi Road, New Delhi
8. Shri P.K.Goel.
Industrial Advisor (Ancillary).
Office of the Development Commissioner (SSI),
Room No.713, A Wing, Nirman Bhawan,
NewDelhi-110011. Tele No.23019363.
9. Shri P.S.Rana,
Senior Executive Director
HUDCO,
236,Asiad Village
Asiad Village Complex, Khelgaon Marg
New Delhi-110049
10. Shri. P. K. Gupta
Director, Vocational Education
Department of Secondary & Higher Education
Ministry of HRD, Shastri Bhavan
New Delhi.

**Representatives of State Governments and Union Territory –
18 members**

State Governments and Union Territory (State Directors dealing with Craftsmen Training Scheme) Andhra Pradesh, Assam, Gujarat, Haryana, Madhya Pradesh, Maharashtra, Orissa, Karnataka, Kerala, Punjab, Rajasthan, Tamil Nadu, Uttar Pradesh, Jammu & Kashmir NCT Delhi, Pondicherry, Arunachal Pradesh and Sikkim.

Representative of Employers Organisations :

- 29). Sh. Ashwin Dani
Vice Chairman & Mg. Director
Asian Paints (India) Ltd.
6-A Shanti Nagar
Vakola Pipeline
Santa Cruz(E)
Mumbai 400055.
- Federation of Indian Chambers
of Commerce & Industry
(FICCI)
- 30) Sh. S.Sen
Deputy Director General
23, Institutional Area
Lodi Road, New Delhi-110003
- Confederation of Indian
Industries (CII)
- 31) Sh. Procyon Mukherjee
Asstt. General Manager- Manufacturing
Indian Aluminium Co. Ltd. (INDAL)
39, Grand Trunk Road
Belurmath – 711202
Distt. Howrah, West Bengal
- The Associated Chambers
of Commerce and Industry
of India (ASSOCHM)

Representative of Workers Organizations

- 32) Sh. Sukhdev Prasad Mishra
4/3, Dada Nagar, Labour Colony
Kanpur- 208001
- Bhartiya Mazdoor Sangh
(BMS)
- 33) Sh. R.B.B.Singh
President
Tata Workers Union
17 K Road, Bistupur
Jamshedpur – 831001
- Indian National Trade Union
Congress (INTUC)
- 34) Sh. Ardhendu Dakshi
Secretary, CITU &
President, Steel Workers Federation of India
1, Vidyasagar Avenue
Durgapur WB – 713205
- Centre of Indian Trade
Unions (CITU)

Representatives of Professional & Learned Bodies

- 35) Dr. A.K.Yadav
Chief,
Institute of Applied Manpower Research
Plot No. 25, Sector A-7, Institutional Area
- Institute of Applied
Manpower Research
(IAMR)

- 36) Narela, Delhi – 110040
Sh. P.R.Swarup
Director General
Construction Industry Development Council
8th Floor, Hemkunt Chambers,
89 Nehru Place
New Delhi – 110019
Construction Industry
Development Council
(CIDC)
- 37) Prof. Arbinda Tripathy
Indian Institute of Management
Vastrapur, Ahmedabad – 380015
Indian Institute of Management
(IIM, Ahmedabad)
- 38) Prof. Arun Mudbidri
Director
Symbiosis Institute of Business Management
Senapati Bapat Marg, Pune – 411004
Symbiosis Institute of
Business Management
(PUNE)
- 39) Prof. R.Sagar
Department of Mechanical Engineering
Indian Institute of Technology Delhi
Hauz Khas, New Delhi – 110016
Indian Institute of
Technology, Delhi
(IIT, Delhi)
- 40) Prof. K. Subramanian
Adviser(Admn./PG)
All India Council for Technical Education
Indira Gandhi Sports Complex
I.P.Estate , New Delhi – 110002
All India Council for
Technical Education
(AICTE)

Experts

- 41) Sh. G.C.Tewatia
316, Sector – 15
Faridabad, Haryana
- 42) Sh. R.K.Bhandari
Scope Complex, Core – 8
ITDC Office, 6th Floor, CGO Complex
New Delhi
- 43) Sh. Suresh Srivastava
Managing Director,
Rashtariya Academy for Computer
C-7/84-A, Keshav Puram
Delhi- 110035
- 44) Prof. R.P.Tyagi
Banaras Hindu University
Varanasi, Uttar Pradesh

Representative of SC/ST

- 45) Smt. Sheela Devi
RZ-64, H Block
Near Tent Wala School
West Sagar Pur
New Delhi- 110046
SC
- 46) Sh. Ram Lal Prasad
2/7, Labour Colony
ST

Nati Imly
Varanasi, U.P.

Representative of All India Women Organization

- 47) Smt. Renana Jhabawala SEWA
National Cordinator C /O SEWA,
Opp. Lokmanya Tilak Marg , Bhadra
Ahmedabad - 380001 , Gujarat

No. M.13015/6/2006
 Planning Commission
 (Labour, Employment & Manpower Division)

First Meeting of the Task Force on Skill Development held on 20 December, 2006;
- Highlights of the Discussions.

28 December 2006

The list of participants is attached.

2. Introducing the backdrop of the constitution of the Task Force on Skill Development (TFSD) , the Convener referred to the inadequacies of the present system of skill development: the disconnect between Vocational Education and Training (VET) and the skill requirements of the Employers, the national mindset, perhaps caste-derived, which tends to look down upon blue collar jobs, an absence of a political constituency for VET, the fractured mandate on this subject within the administrative set up – responsibility resting with multiple departments at the Centre and at States and the need for clarity on the design for a massive scale-up of the skill development effort.
3. The Chairman welcomed the group and sought their initial impressions on the subject.
4. The Deputy Chairman, Planning Commission (DCH) referred to the what the Prime Minister and Chairman, Planning Commission had told the National Development Council, which approved the approach to the Eleventh Plan on the 9th December, 2006 that this Task Force will, *inter-alia*, come up with a blueprint for a Mission on Skill Development which would address the problems of VET and cater to the needs of the new entrants to the labour force. The current assessment is that double digit growth of the economy will be severely hampered by the shortage/mismatch of skills. The Prime Minister, as also the Finance Minister, sought a different approach to skill development than the conventional government programmes and indicated that the issue could be looked at by the *users* of skills i.e. the industry and the employers. Given that no more than 5 to 6% of the youth in the work force have exposure to formal training, and that the present outturn of two million or so will have to become ten times so as to reach out to all new entrants to the labour force, resources are a definite constraint. The options are – (i) a critical review whether the existing systems of VET be upscaled (but then with what reforms?), (ii) foster a large scale skill development industry in the private sector, and (iii) public private partnerships. Whether and how far tax incentives can help is also an issue. An earlier Task Force on Employment Opportunities (2001) had also looked at this subject and made recommendations which need to be critically examined by the TFSD. Copies of this report were circulated.
5. The problems with the existing VET system were highlighted by the participants, and a number of issues raised.
 - Dilapidated buildings and outdated equipment at many of the State Governments' Industrial Training Institutes (ITIs).
 - Inadequate revenue income from fees and government grants not even sufficient to buy raw materials and consumables for training.
 - Resistance to institutional reforms in the administration of ITIs.

- Political will to improve the vocational training set up exists only in one or two States.
- Low priority to vocational education in the States' educational system (only Rs. 65 crore could be spent out of the Tenth Plan outlay of Rs. 350 crore; one of the reasons being inadequate matching contribution from State Governments to this Centrally Sponsored Scheme).
- Non-existence of, the long discussed but not shaped, National Vocational Qualification system (NVQ) that can facilitate vertical and horizontal movement across VET and the technical and professional education (TPE) streams, and make participation in VET a promising effort for the children and youth. Certification procedures are important and can cover the state, national and global levels of skills. There is a global market which countries like Sri Lanka are exploiting, while Indians in the Middle East, and elsewhere, are being pushed into low skill jobs
- Reforms required to better utilise the land and building infrastructure available in the public institutions for school education, technical education and vocational training.
- The current effort at 100 ITIs being evolved into centers of excellence is miniscule compared to the 5000 ITIs that exist: and no clarity on how to reach out to non-government ITIs.
- The private ITIs are by and large, not the effort of the private corporate sector.
- ITIs and Polytechnics ought to become preferred destinations. Incentives for placement can be an alternative, as private players need to be involved.
- Local initiatives, like that of Abhishek Industries in Batala, can be looked at.
- The question of mapping the problem was discussed as also the alternative of providing flexibility to respond to the changing needs of the market, as NIIT have done; response mechanisms should be entrepreneurial.
- The group could be divided into 'verticals', to examine some issues in depth.
- The question of providing loans with little or no collateral needs to be gone into.
- With the number of children entering secondary education increasing as a result of the *sarva shiksha abhiyan*, more candidates for VET would be available. Even at school, they can be given 'in-house' or 'in-shop' training.
- The regional divide may be exacerbated on account of the mismatch of skills. Imparting *relevant* knowledge and skills, including linguistic ones, becomes a priority. Social cohesion needs to be maintained
- The Task Force should not pull its punches and recommend all necessary reforms, if there is a need for them. Accountability should be built in to all models.

- The TF should submit at least its interim report by the end of February, if not earlier.
- VET, unlike the other areas of education, can be 'for profit' as well.
- Our labour productivity is very low and one million workers have to be trained each year for the home and global markets, given the aging problems of most other countries.
- As large numbers have to be covered, full use should be made of distance learning.
- Can VET be started from Class IX or Class XI? (Earlier exposure?)
- How do we stimulate demand? Glamourise VET? Change its nomenclature?
- The TF could look at the performance of some states.
- The unorganized sector's needs have to be addressed. More children drop out of school than pass out, and they should be the main target group.
- There has to be genuine private participation in VET. Many private ITIs are in the hands of *rentiers*.
- Another matter that needs to be addressed is that of teachers. They can come from the trade/industry as teaching in general and VET in particular, is not considered an attractive employment option.
- Productivity in knowledge also matters and there is also a very large domestic market, with skilled workers needed for 230 SEZs alone.
- Are there IT solutions in this field?
- The Government Departments can make a presentation to the group.
- Can the TF synthesise the discussions? Get a knowledge partner?
- Can the Planning Commission get the AIMA Report for the services sector - 2020?
- The suggestions of the National Knowledge can be discussed in the next meeting.

6. The need for visualizing skill development at three levels, so as to cover all the local youth including the rural areas, i.e., the skills relevant to:

- Utilizing the youth at their location,
- Facilitating migration to other districts, and
- Availing opportunities overseas.

7. The Mission needs to consider:

- What kind of effort at skill development should be mounted in backward districts that have no large scale local industry, but have surplus unskilled manpower?

8. At the end, the Chairman suggested that every member should put down their data on available resources in one or two pages and share their knowledge and views with the Group to arrive at some decision. If possible, Members should also interact with each other through e-mail to exchange their views. It was decided that the next meeting will be held on 3 January, 2007 at 3.00 P.M. in the CII Building.

The meeting ended with a vote of thanks to the Chair.

Annexure

List of Participants

1. Dr Montek Singh Ahluwalia, Deputy Chairman, Planning Commission. -
2. Dr Tarun Das, Chief Mentor, CII - In the Chair.
3. Shri Tejendra Khanna, Chairman, Ranbaxy Ltd.
4. Shri Krishan Khanna, Chairman, “i Watch’
5. Lt. Gen. (Retd.) S.S. Mehta, DG, CII
6. Dr. Pronab Sen, Principal Adviser, Planning Commission.
7. Shri K.M.Sahni, Secretary, Ministry of Labour & Employment.
8. Shri H. N. Gupta, Principal Adviser, Planning Commission.
9. Shri Rajendra Pawar, NIIT
10. Dr. Naresh Trehan, Executive Director, Escorts Hospital
11. Dr. Surinder Kapur, Chairman, Sona Koyo Steering Systems
12. Shri V. Akula, CEO, SKS Microfinance
13. Shri R. Gopalakrishnan, Director, Tata Sons
14. Prof V.N.R. Pillai, Vice-Chancellor, IGNOU
15. Prof Krishna Kumar, Director, NCERT
16. Dr. S. Mehrotra, Adviser (RD), Planning Commission.
17. Shri S.C. Khuntia, Jt Secretary, Department of School Education.
18. Shri Sharda Prasad, DGE&T, Ministry of Labour and Employment
19. Shri B.S. Baswan, Senior Consultant, Planning Commission (Former Education Secretary and Convener Task Force)
20. Shri Shailendra Sharma, Consultant, Planning Commission.
21. Shri Y.P. Sharma, Director (Trg), Ministry of Labour & Employment
22. Smt. Padmaja Mehta, Director (LEM), Planning Commission.

Issues discussed at the Second Meeting of the Task Force on Skill Development held on the 3rd January 2007 at CII House, 172, Jor Bagh, New Delhi.

The list of those present is at *Annexure I*. Mr R Gopalakrishnan and Mr Rajendra Pawar joined the discussion through a teleconference.

The Chairman, initiating the discussion, highlighted the following:

- i) Much greater private participation
- ii) The Task Force (TF) may have to submit an *Interim Report* by the end of January.
- iii) The scale of the problem is huge and we need to look at innovative ways of dealing with it.

The Secretary, Ministry of Labour & Employment emphasized the urgency of the matter and indicated that her Ministry had also made a budget provision for the Mission.

The Director-General of Employment & Training (DGET) then made a power point presentation to the group. This can be seen at *Annexure II*. It was followed by a presentation by Mr C V Som, the DGET of Gujarat, which is at *Annexure III*.

The discussions were then held and questions/clarifications raised/sought in respect of the presentations by the participants. A number of points were made, and these are as follows:

1. The ITIs are short of teaching staff and materials but have spare capacity which can cater to 'multi-shifting'. The existing procedures for purchases are tortuous.
2. Do we really need to pour money into the ITIs/ Polytechnics or rework the whole system?
3. Can Industry set up ITIs in 'difficult' places, and would an incentive work? The DGET could meet 1/3rd of the costs, Industry another third and the rest could come from fees. The Trainees are reportedly willing to pay up to Rs 1,000 a month or even more if there's hope of getting a job.
4. Can investment in training become a bankable proposition? The proposal to guarantee employment would not work.
5. There is a demand for VET in this country and industries are in a position to take over an ITI if they have full autonomy to run it. (Mr L N Mittal is reportedly willing to take over all the ITIs in Jharkhand)
6. Serious doubts were expressed about the viability of industry taking over existing ITIs. This exercise would involve a high 'sunk cost' and the existing mindsets of the faculty and students might militate against efficiency. The Task Force could, in the circumstances, recommend the establishment of 'green field' ITIs. The model that the TF proposes should be much more market driven and we could have two parallel streams, the existing government-run system and an industry-led one. An alternative viewpoint would be to avoid models and just put a demand driven system in place.
7. Emphasis needs to be placed on *entrepreneurship* and *self-employment* in the ITIs.

8. The Task Force discussed the question of providing loans to ITI students. Defaults may have to be underwritten because most cannot provide collateral.
9. The Group evinced interest in a number of points made by Shri C.V. Som in his presentation. For example, his faculty was employed on contract, with excellent results. In-house training was provided by the State Government to faculty members of the ITIs and e-learning made liberal use of.
10. Deputing ITI trainees to industry should be built in to the curricula and there should be career counseling.
11. There is a need to dovetail VET with the 'normal' education system. For example, two years in ITI after Class X should be treated as equivalent to a Class XII Certificate. The possibility of such students facing difficulty in getting admission to a college cannot, however, be ruled out, given the prevailing bias against VET.
12. One of the main factors behind Gujarat's performance has been the strong measure of political support, which tends to be absent in most other states. Their scheme covers the unorganized sector as well.
13. A *National Accreditation system* would need to be established and the ITIs *rated. Quality Assurance* ought to be built in to the model.
14. The ITIs should be given full autonomy and a sinking fund established so that their earnings do not go into the Consolidated Fund of the Government, but are ploughed back into the institution, which can make them self financing. The present system of 'in-breeding', where only departmental people can become ITI Principals is not conducive to excellence.
15. The Government should make it easy for private industry to run ITIs and not create obstacles. Rating could be done by the companies themselves or a group of companies in that sector, and standards prescribed by outside agencies. As the country is moving towards a 'pull model', VET should be increasingly demand driven and not supply driven.
16. The question of establishing a National Skill Development Authority/ National Foundation for Vocational Education & Training can also be looked at. Such a body would have to be autonomous, accountable, transparent, and managed by professionals.
17. Should VET be 'embedded' in education? In other words, credits may have to be given which would count as a subject in the Class X and Class XII examinations.
18. English is now a vehicle for economic and social mobility and should increasingly become the medium of instruction.
19. The question of involving the Employment Exchanges in the placement of students undergoing VET can be explored. The role of these exchanges can also be changed to one of facilitation rather than exercising discretionary power in sending names to certain employers. The SMEs could be mapped and a classification of skills done for the unorganized sector.
20. The VET providers could be periodically assessed by an independent body.

21. It was suggested that the TF could call a group from Pune, headed by Shri Pradeep Wagh, to meet the Task Force.
22. The question providing counselors in schools to guide students about their alternatives after Class VIII was also discussed. There was a view that getting students into VET from Class IX would be a more practical proposition.
23. How far would the experience of our Missions on Atomic Energy, Space, Literacy, Drinking Water, Telecommunications and Oilseeds be relevant in respect of VET.
24. Do we need an Act on Skill Development like South Africa has?

It was decided that the next meeting of the Task Force will be held on the 15th of January, 2007 in Yojana Bhavan.

Summary of the discussions that took place at the 3rd meeting of the Task Force on Skills Development held at 1445 on the 15th of January 2007 in Yojana Bhavan.

The list of participants who attended the meeting is enclosed as the *Annexure*.

Opening the proceedings, the Chairman highlighted the magnitude of the problem in ‘upscaling’ vocational education and training (VET) to meet the requirements of the nation, adding that this would entail dynamic policies and new parameters which the *Task Force* members could take a look at. A note on “An Approach to Skills Development” which was sent by Mr R Gopalakrishnan, was circulated to the members: he was available at a teleconference to interact with the participants.

The issues that came up at the meeting were as follows:

1. There is a need to disseminate best practices, like those adopted by the Government of Gujarat, in a big way. A knowledge creation cell and a website can be set up for this purpose and matrices drawn up. Standards should be prescribed and a Regulatory Mechanism put in place.
2. The private sector could be involved in putting the infrastructure in place.
3. Special ‘finishing’ programmes can be organized for students clearing their Class X examinations and willing to take up jobs in call centres and other BPO outfits.
4. At present, Govt has 1076 ITIs, and 820 are in the ‘private’ sector. Their combined capacity is one million students, which falls far short of the country’s requirements. While these ITIs can be improved and expanded, we need to look at alternative strategies to address the national-and global shortage of skills.
5. There are 1,600 Community Colleges in the USA, and most of them are connected with local businesses. Europe has a number of vocational colleges and schools, many of which provide ‘hands on’ experience. We could emulate them and run, even through private providers, vocational courses in our 18,000 colleges and our 50,000 Higher Secondary Schools, as it may be easier to revamp existing institutions than open new ones. There was no legal bar to the *VET* programmes being introduced in the curricula, but many are outdated, lack dynamism and have little connection with the needs of the market.
6. Some sectors, like leather and garments, don’t require ITIs, but rather short training courses in these areas where the demand is sizable. The Task Force would do well to look at the *lower end* of manufacturing; in places like Tiruppur and Ludhiana thousands of jobs are already available to those who have the skills.
7. Although the *National Urban Renewal Mission* (NURM) does not address the issue of urban unemployment, the *Ministry of Housing and Urban Poverty Alleviation* (MHUPA) will be launching the *Rajiv Gandhi Employment Mission for the Urban Poor* shortly, which would focus on skill development and micro-finance. Millions of young people need to be trained, and NGOs and companies have a key role to play, especially in the slum pockets, where the problem of unemployment and rising aspirations is the most acute. Short skill-based training modules are required and non-engineering ITI students have a problem finding jobs.
8. A central regulatory body, like a *Skills Authority of India*, can be established by the Government to lay down norms, certify providers and oversee curricular reform. Private players can then come in large numbers, since the total number of people trained in programmes run or financed by the Central Government’s Ministries would be about 2.2 million at the most, and the focus of the government’s programmes would have to be on the more backward areas of the country.

9. A view was expressed that the regulatory mechanism ought not to be over-centralised: the trainer should not be a certifier, and the certifying authority should not provide quality assurance.
10. There is a need to provide a diploma for those attaining a level of competence in certain skills. This would facilitate employment in India and even abroad, where certification is insisted upon.
11. We need to look beyond the ITIs, which cater mainly to SMEs and not the service and the unorganized sectors. Entrepreneurship can form a central component of a number of programmes and the initiative of the Tamil Nadu Government may be studied. (The website <http://tahdco.tn.gov.in> can be visited.)
12. A *Skill Development Corporation* can be established and empowered to issue franchises, which can provide a focus on local demand. A placement centre and an accreditation mechanism can form a part of its mandate and it could be a PPP venture.
13. Should there be such bodies in all the States?
14. A *business model* can be developed for VET and providers can compete for this business.
15. A student would opt for VET if his certificate is marketable and bankable.
16. There need not be a centralized curriculum. The *Community Colleges* in the US don't have a regular syllabus.
17. The proposed *Mission* can set standards, provide quality assurance and arrange for a loan mechanism. Centres of Excellence can be established and there is room for both a Regulatory Body and a Corporation.
18. The skills shortage did not, till recently, really affect the companies, or the market would have found a solution. Many of the larger companies are 'doing their own thing' in any case. The situation has changed now, and appreciation of the problem has grown among the employers as well as the government.
19. State Corporations may not be the answer though, but a new umbrella organization, like *C Dot* can be set up to provide a vision and a framework. Modules would cater to the lower levels of skills and a degree of standardization provided, keeping in mind the paucity of suitable trainers.
20. The question of what prevents the private players from entering VET in a big way was discussed. Views were expressed in favour of an 'open-skies' policy and it was felt by some that the National Council of Vocational Training (NCVT) and the All-India Council of Technical Education (AICTE) were creating barriers to entry. This could be clarified by the DGET and the Joint Secretary (Technical Education) in the MHRD at the next meeting, to which the latter would be invited. He would also explain the role of the *polytechnics*.
21. There are many examples of 'in-house' skill training where the students can take up a job with any other company as they have acquired a qualification, like the Taj Hotels Training School in Ahmedabad. A system of franchising such training can be considered.
22. There are other examples of industry employees being sent for training to the ITIs, once an agreement is arrived at, with the industry recruiting a number of new candidates from these ITIs.
23. E-learning packages can be an effective method of covering large numbers of students, and VC IGNOU had agreed to give the Task Force a note/presentation on this.
24. The comments of the members on the notes of the *National Knowledge Commission* and Mr Pankaj Agarwal are still awaited.
25. The Task Force can keep in mind the need for skills in the informal sector where the scope of training is considerable, as also the benefits that can accrue to large numbers of people.
26. They could also examine why private industry has not got involved on VET in a big way.

27. The structural inefficiencies that bedevil some government organizations connected with VET could be addressed by the ministries/state governments concerned. At present the bulk of their funds goes into salaries
28. A business model may need to be drawn up to facilitate greater participation by industry and trade. This could, in turn, lead to the preparation of a road map for participation by industry for skill development nationwide.
29. Details of the VET programmes supported by the various Ministries/Departments of the Government of India need to be obtained.
30. The next meeting of the Task Force would be held on the 29th of January at 11a.m in Yojana Bhavan (Room 134 and not 136).

Summary of the discussions that took place at the 4th meeting of the *Task Force on Skills Development* held at 1100 hrs on 29 January 2007 in Yojana Bhavan.

The list of participants who attended the meeting is enclosed as the *Annexure*.

Opening the proceedings, the Chairman recalled the observations of the Deputy Chairman, Planning Commission that the *Task Force on Skills Development* (TFSD) might consider making interim recommendations for immediate consideration by the Government with reference to the 2007-08 budget.

He also wondered whether there should be a single agency for implementing *vocational training and education (VET)*, with a major budget to give it a big push (like IDBI in the 1960's) and referred to the suggestion made by the *National Knowledge Commission* (NKC) that the subject be placed under the charge of the *Ministry of Human Resource Development* (MHRD). The Chairman did not agree with this suggestion, given the volume of work on vocational training being done by the *Directorate General of Employment & Training* (DGE&T) and agencies in other Ministries, and keeping in mind a new model where the major intervention would be from trade and industry.

The issues that came up at the meeting were as follows:

1. Initiatives for skills development need not be taken up only at the national level, but also through village clusters, to leverage local support and involvement, as the Chairman observed, based on a note sent by a member.
2. Since the Government cannot be the *sole* provider of *VET*, the private sector should be enabled to play a much larger role. A *National Skills Board* could be set up to:
 - a. Design a regulatory framework
 - b. Facilitating a system of quality ratings for *VET* providers.
3. Any new framework should cover not just skills at the national level, but also at the local and global levels.
4. We need to be cautious about creating 'hybrid' structures without real accountability, when we talk about PPPs.
5. Skill development is a continuing affair, throughout a working person's career,
6. At present the Income Tax regulations limit the incentives for providing vocational training to rural areas (population unit less than 5 lakh persons) – Could this be extended to *all* areas?
7. Loans from financial institutions for education and training are linked with the expectations of income and the prospect of getting a job in the formal sector. A credit model for financing *VET* can be drawn up after identifying what prevents it from being a bankable activity.
8. For *VET* providers, *quality* is a central issue, and a system of inspection and control may not serve the purpose. The market would be the best judge, where

independent rating agencies can keep students and donors informed about the performance of these providers.

9. The extent of which *VET* inputs can be woven into the curricula would need to be examined, as there may be a trade- off between employability on the one hand and a proper education on the other.
10. Two bodies could be established: a *National Mission* and a *National Skills Promotion Agency*, which can comprise highly qualified people who can establish and support centres of excellence.
11. As industry has its peak seasons, there may be a large number of skilled persons who can get employment for only some time in a year, and credit would be difficult for them to obtain.
12. An alternative proposal would be to set up an apex body *without* a big budget, which would oversee the progress on skill development being undertaken by the Departments and the PPP entities and not impact their autonomy.
13. ‘Skills modules’ developed by one agency can be brought into the public domain.
14. The negative perception of *VET* can be addressed by teaching ‘life skills’ to school children.
15. There is a need to resurrect the idea of a composite education, where the world of work and knowledge would be open to the young students, instead of compartmentalizing education into different disciplines. The present system seems to discourage initiative and leadership, and shackles human motivation.
16. This problem and that of making education *flexible, lighter* and *fairer* is being addressed in the *National Curriculum Framework* (NCF); a holistic view of education would address culture and value- related problems, and bridge the gap between knowledge and skills, both of which have a place in the curriculum. ‘Hands-on’ experience would emphasise the dignity of labour
17. The supply of equipment to *VET* centres cannot keep pace with technological change; its purchase and maintenance remains a major challenge.
18. *VET* sessions can be run outside the school in many cases, and a roster drawn up. The students’ aptitude can be assessed, as well as his performance, and there is space for academic and vocational streams after class X.
19. A view was expressed that any National Body must be housed in some Ministry. We would also have to carry the States with us, especially as education is a concurrent subject.
20. Standards could *evolve* and there may be a case against fixing standards, at least for ten years.
21. While we can avoid ‘crossed wires’ in PPPs, there should be a meaningful partnership and joint accountability.

22. The National Body, which could be a Foundation, can raise funds from corporates and NRIs. An initial grant can be given by the Government to start a *corpus*, but this body should not depend on the vagaries of budget formulation.
23. If *VET* is made a *priority sector*, there could be better access to loans.
24. The group would need to look at the unorganized sector and its linkages with the economy.
25. *The National Council for Vocational Training* (NCVT) is a tripartite body, headed and supported by the Labour Ministry. The States have SCVTs which examine syllabi, provide norms for affiliation, assess institutions and provide certification. NCVT lays down standards, curricula, assessment norms and conducts verification exercises and trade tests and issues national level certificates which are recognized in other countries. Apprentices and ITI students can appear for the tests.
26. No presentation could be made about AICTE and Polytechnics as the Joint Secretary (Technical Education), MHRD, was on a training programme. This can be arranged subsequently as the Task Force would like to familiarize itself with the functioning of the polytechnics and take a view on whether agencies like the NCVT and AICTE facilitate or hinder the growth of *VET* in the country.
27. It was pointed out that the *genesis* of the Task Force could be traced to the model ITI scheme, while another view was that it was set up as the issue needs to be looked at in its entirety, beyond the vision of any single department, or even the government itself.
28. The role of the National Body would have to be clearly defined. If the government departments continue to implement the scheme, the new body could interface with industry and work out a system of *VET* over and above what the government is doing, as the numbers we are looking at are very large and the existing schemes inadequate. Reaching out to the masses would have to be built in to such a scheme, observed a member.
29. Coming to the number of persons to be trained, a figure of 460 million 'active' persons was cited, including housewives, while another figure put forward was 200 million excluding agriculture, of which only 30 million would be in the organized sector. The 5000 odd ITIs can cover 1 million per year and the other institutes another 1.5 million, but this leaves the majority of unskilled workers beyond the pale of training.
30. Seeking the views of the state governments on PPPs in respect of *VET*, the Ministry of Labour & Employment found that the responses were mixed, and therefore a flexible approach could be adopted in this respect.
31. *The National Council on Competitiveness in the Manufacturing Sector* (NCCM) has identified garments (4-5 million), gems and jewelry (2.5 million), leather processing (1 million), construction (17 million) as some of the employment generating sectors, and there are other industries where employment opportunities for skilled personnel will increase in the order of millions of workers. The Council is working towards an initiative whereby

industry associations could convert millions of semi- or unskilled persons into skilled workers: models could be validated and then ‘scaled’ up. Initiatives of the kind taken up by ILFS and the Tirupur garment producer’s association in respect of *VET* can be looked at.

32. The proposed National Body, which could be a Mission, can be given a sizable *corpus* to leverage matching resources from the private sector to develop a scheme for PPPs in the organized sector.

33. The unorganized sector represents an altogether different and bigger challenge. Conducive conditions for partnerships between employers, the participants in the scheme, the NGOs and local bodies can be developed, and here the government can facilitate the project through collaborative models.

34. The DGET are reviewing their training modules, and dropping those where there is no demand from the market. More are being developed, especially for the informal sector, with low fees and multi-entry and multi-exit provisions. These ITIs can be viable if they are allowed to retain their fees and not deposit them with the Consolidated Fund of the State. At present the ITI’s employment is between 62 and 70%, and ICICI was to give the DGET a business model for the organized sector. For the unorganized sector the institutes could be set up at the block headquarters, and local conditions taken into account. Ideally the ITIs should get more autonomy and initial funding by the government, with fees being determined by an autonomous body

The date of the next meeting would be intimated separately. In the meanwhile the Chairman would consult some TFSD Members individually and look at interim suggestions that could be placed before the government.



Centre of Excellence – Gujarat Experience

A presentation by

C V Som, IAS, Director

Directorate of Employment & Training

Gujarat State

(ISO 9001:2000 Certified Organisation)

Block No.1, 3rd Floor, Dr.Jivraj Mehta Bhavan, Gandhinagar



Presentation is divided into **THREE** parts

- **First Part – Implementation of CoE Scheme**
- **Second Part – Best Practices in the ITIs**
- **Third Part – New Courses started in ITIs**



ISO 9001:2000 Certification of the Directorate of Employment & Training

- 135 ITIs and 43 employment exchanges functioning under this Directorate.
- Around 6500 staff members working under the Directorate
- Directorate imparts training to around 50,500 students every year.
- High volume of work - felt necessity to modernise the management systems.
- The Directorate of Employment & Training became the First Heads of Department in Gujarat to obtain this prestigious **ISO:9001: 2000 Certification**
- This has led to quality improvement in the systems, processes, structures and management of the organization.
- As an immediate consequence of these improvements, the Directorate of Employment & Training utilised 100% Budget Grants released to the Directorate upto March 2006
- Provided employment to around 1.31 lakh people through employment exchanges, making it a record number and highest in the country.
- 15 ITIs have also obtained **ISO:9001: 2000 Certification** and 08 are in the process



Benefits of ISO 9001:2000 Certification

- **Standardisation of Office Procedures**
- **Develop systems for efficient working**
- **Action Plans and Time schedule are devised for completing various types of tasks**
- **Effective Monitoring Systems to assess the progress of the tasks aimed at achieving the annual targets and goals of the organisation**
- **Organisation of Official papers and documentation in a systematic manner**
- **Introduction different coloured file folders for different branches for easy identification**
- **Computerisation of Record Keeping**
- **Regular training to staff members to improve the quality of their working**
- **Improvement in the office environment**
- **Housekeeping of the office has been improved**
- **Effective use of Computers, E-mail and Internet has increased the speed and efficiency of electronic data collection and management of information**
- **Quality of services delivered to the society has improved with quick response time to processing applications and transparency in the system.**



Implementation of CoE Scheme requires

1. Understanding of the Scheme
2. Proper Planning
3. Understanding of the budget available
4. Commitment of Stakeholders
5. Training of Persons
6. Leadership
7. Regular Monitoring



15 CoE (2006-07) : On roll Position as on 30.11.2006

Sr. No.	Name of ITI Selected in 2005-06	Sector	BBBT	
			Sanctioned Seat	Filled Seat
1	Jamnagar	Chemical	96	112
2	Dashrath		96	105
3	Pardi		96	95
4	Vadnagar	Automobile	96	106
5	Modasa		96	95
6	Palanpur		96	102
7	Bhavnagar		96	113
8	Bhuj	Electrical	96	102
9	Godhra		96	99
10	Amreli		96	124
11	Gondal	Fabrication	96	95
12	Visnagar		96	106
13	Sarkhej	Instrumentation	96	97
14	Palana	Agriculture Machinery	96	81
15	Junagadh		96	50
Total			1440	1482



8 CoE (2005-06) : Civil Works

Sl. No	Name of ITI Selected in 2005-06	Expenditure for 2005-06	Percentage Achievement (Construction) till 30.11.06	Expected Date for Completion of works	Expenditure upto 30.11.06	Percent Expenditure
1	2	3	4	5	6	7
1	Kubernagar	6.99	75 %	31/1/2007	29.68	74.20
2	Rajkot	14.9	100 %	31/12/2006	34.29	85.73
3	Saraspur	1.2	6 %	28/2/2007	7.00	17.50
4	Surat	25	100 %	1/12/2006	30.00	75.00
5	Ankleshwar	8.1	30 %	1/2/2007	23.91	59.78
6	Bilimora	11	75 %	31/12/2006	28.50	71.25
7	Gandhinagar	0	45 %	31/12/2006	14.30	35.75
8	Tarsali	0	8 %	1/2/2007	5.94	14.85
	Total	67.19			173.62	54.26



Model Civil Works Development Plan Guidelines

- Approach road from Gate upto the entrance of the building
- Tree-guard and plantation along the approach road.
- Colouring and painting of the front face of the building housing the workshops and classrooms for Centre of Excellence ITIs.
- Frontage and garden with the help of Industrial Sponsorship and work of the students.
- Colouring of porch, entrance passage and the entrance gate of the building.
- Wherever applicable repair and maintenance of the staircase.
- Water proofing of the top of the roof wherever applicable.
- Aluminum frame glass or acrylic windows in theory classrooms.
- Concealed wiring for all electrical works.
- Wherever possible, within the limitation of the budget, false ceiling of gypsum in the theory classrooms.





Model Civil Works Development Plan Guidelines

- Internal painting of the workshops and theory classrooms should be of very highly quality, preferably washable distemper paint.
- The flooring in the theory classrooms should be vitrified tiles as has been done in ITI-Gandhinagar and in the workshops it should be of best quality material (for example polished Kota Stone or as technically required for workshops). The theory classes should have flush door with latch lock.
- There should be a high quality white board for teaching purposes and the size should be such that it could be used as a Projector Screen also, whenever a Projector is to be used for the Audio-visual purposes.
- The electrical fans and tube lights to be installed in the theory classrooms should be of very high quality.
- The chair and the tables or the study benches and tables for the students in the classrooms should be of very high quality and symmetrical for all the classrooms.
- A shoe rack should be installed outside each theory classroom and students as well as staff members should be encouraged to enter the classroom without any shoes.
- Each classroom and workshop should be given a unique name or number and that should be clearly displayed in acrylic name plate outside the classrooms.
- As far as possible separate Toilet blocks should be provided for CoE classrooms and workshops.
- As far as possible separate drinking water facilities for workshops and classrooms under the CoE Programme.



Performance Indicators - Review of ITIs in 20 Points Format

Sr. No.	Information	Gandhinagar	Saraspur	Kubernagar
1	I.S.O.Certification whether completed or not	Yes	Yes	YES
2	IMC reconstitution whether completed or not	Yes	Yes	Yes
3	Total sanctioned seats	2379	1364	2884
4	Total On Roll Trainees	2195	1334	2814
5	No. of Trades	40	32	40
6	No.of Batches	103	72	184
7	No of Teaching Staff	114	69	174
8	No of Non Teaching Staff	37	29	73
9	Total expenditure till date	191 lakhs	144 lakhs	301 lakhs
10	Students retention rate during the current year	94.90%	97.80 %	91.00%

 Directorate of Employment & Training, Gujarat State. ISO 9001:2000 Certified Organisation 				
Sr.No.	Information	Gandhinagar	Saraspur	Kubernagar
11	Pass out ratio in July 2006.	98.07%	98%	89.63 %
12	Seat utilization in percentage	92.26 %	100%	97.57%
13	Students-instructor ratio.	20 : 1	29 : 1	16 : 1
14	No. of short term courses conducted till date 2006-07 during the year	55	61	74
15	No. of trainees who have completed Driving School Training.	22	N.A.	N.A.
16	No. of trainees undergoing training in Driving School.	10	N.A.	N.A.
17	No. of trainees completed Apparel Park Training	305	319	360
18	No. of trainees undergoing Apparel Park Training.	59	120	90
19	No. of trainees undergoing CCC Course.	80	40	48
20	No. of trainees who successfully completed and passed the CCC Course.	38	33	57

 Directorate of Employment & Training, Gujarat State. ISO 9001:2000 Certified Organisation 				
Subject covered during 1 st and 3 rd Saturday - Training of Trainer's				
Sl. No.	Subjects covered during training on TWO Saturdays every month			
1	Orientation & Objectives of Training			
2	Principles of Teaching			
3	Effective teaching method			
4	English language training			
5	How to communicate effectively with students			
6	Training on Specialized Subject – Sector Specific			
7	PowerPoint presentation training			



Saturday Training of Trainer's - Sample Time Schedule - Rajkot

SR NO	TIME	SESSION NO	SUBJECT	NAME OF GUEST FACULTIES	NO OF PARTICIPANTS
1	10 AM TO 11 AM	1	Principles of Teaching	Shri Dr P S Bhatt	10
2	11 AM TO 12 PM	2	Effective Teaching Method	Smt Kalpanben manek	10
3	12 PM TO 12.15 PM	-	Tea Break	-	
4	12.15 PM TO 2.15 PM	3	English Language Training	Shri S N Adesara	10
5	2.15 TO 3.00 PM	-	Lunch Break		
6	3.00 PM 4.00 PM	4	How To Communicate Effectively with Students	Shri B T Moradiya	10
7	4.00 PM TO 5.00 PM	5	1 Electronics	Shri R L Patel	6
8	4.00 PM TO 5.00 PM	5	2 Electrical	Shri P N Shah	12
9	4.00 PM TO 5.00 PM	5	3 Cad Cam	Shri G.B. Pithwa	10
10	4.00 PM TO 5.00 PM	5	4 Mechanical	Shri P V Jethva	7
11	4.00 PM TO 5.00 PM	5	5 P L C & Automation	Shri V C Jagani	5
12	5.00 PM TO 5.10 PM	-	Tea Break		
13	5.10 PM TO 6.10PM	6	Power Point Presentation Training	Shri A.A.Lohia	10



**Making a difference through excellence
Some of the Best Practices in ITIs of Gujarat**

- **DRESS CODE**
- **IDENTITY CARD WITH BAR-CODED ID**
- **CAMPUS WORK OPPORTUNITIES**
- **INCUBATION CENTRE**
- **Own Website www.itigandhinagar.org Registered**
- **PLACEMENT ADVISORY BUREAU IN 23 ITIs**



Functioning of the Placement Advisory Bureau

- Placement Bureaus have been started in 23 CoE ITIs.
- Every Placement Bureau has got one employee from employment exchange to deliver necessary employment related service to the ITI students.
- One room, preferably in the administrative block of the ITI should be dedicated for Placement Service Bureau.
- Newspapers, magazines and books which may be helpful to the ITI trainees to get employment should be made available in this Placement Bureau.
- Necessary furniture like big reading tables, chairs, one or two glass almirahs for keeping books and other necessary furniture may be made available.
- Depending on the size of the ITI at least two or more computers with internet connection would be made available, so that the students could access employment related information by pre-booking the computers for a session of 15 minutes to half an hour depending on the availability.
- Proper documentation of trainees passing out through ITIs – Regular Courses and Short-term Courses should be maintained in the Placement Bureau by the advisor in-charge of the Placement Service Bureau (Placement Adviser) from employment wing. This will include the name of the trainee, qualification, date of birth, complete address for correspondence, telephone No., e-mail address and a proper data base should be maintained by the Placement Adviser, so that the trainees could be contacted whenever vacancies, notices, advertisements, etc. come to the knowledge of employment services. This information should be maintained course-wise per every short term courses and regular courses.



Roles and Responsibilities of Placement Bureau Advisor

- The Placement Advisor should make best efforts in coordination with the local exchanges so that the pass-out trainees are registered with the employment exchanges immediately after passing the course.
- The Placement Advisor must maintain a record of trainees passing out with effect from August 2006, every individual trainee where they have received employment or self-employed or they have taken up higher education.
- It will be the duty of the Placement Adviser to co-ordinate with ITI principals and arrange for at least one seminar and workshop every month in the ITI campus for vocational guidance and employment opportunities.
- It will be the duty of the Placement Adviser to organize campus interviews, recruitment fairs or inform all ITI trainees who have passed out about the recruitment fairs being organized by government or private organizations from time to time in the nearby cities.
- The Placement Adviser should closely co-ordinate with Apprenticeship Adviser and all other government staff or officers who could provide employment to the ITI trainees.
- The Placement Adviser should put up a big notice board outside the Placement Bureau office where paper cuttings or notices regarding vacancies will be displayed and updated every week. Placement Adviser will help the students to prepare CV and organize orientation programmes before interview.
- Placement Adviser should organize workshops by District Industries Centre and Banks at least 3 times in a year so that ITI trainees who are seeking self-employment could take loans and start their own business/industry. Also the Placement Adviser should make available on a separate notice for employment information regarding all government schemes by which people seeking self-employment could take advantage of these schemes.

New courses started by Directorate of Employment & Training, Gujarat.

- To improve the efficiency of vocational training by optimum utilization of infrastructure facilities with mix off need base training programme, short term courses are started.
- To encourage people to engage in self-employment, the Directorate of Employment & Training completed around 511 batches of Short term courses with the help of existing infrastructure in the ITIs.
- This will particularly to help generate employment in the rural areas. For example we have started Marble cutting and polishing course in Ambajee.

Apparel Park Operator Training Programme

Under the W.T.O. agreement, w.e.f. Jan'05, Quota system has been abolished in textile sector and therefore there is great opportunity for Textile sector in the International arena.

Directorate of Employment and Training has taken proactive actions and as a result "Apparel Park Operator Training Programme" started w.e.f. August'05. It is started at different 10 institutes, with intake capacity of 810 seats in first phase.

Almost 2185 youth has been trained so far under this training in three different types of courses run by ITIs.

Sr.	Name of Course	Course Duration (In Month)	Tution Fees per Month
1	Sewing machine operator	3	1000
2	Pattern Cutting	3	600
3	Garment Finishing Checker	3	600

AIR HOSTESS / FLIGHT STEWARD TRAINING PROGRAMME

- The sky revolution has touched India in a big way with the domestic air travel alone expected to grow annually by 21% making India the fastest growing air travel market in the world.
- However, Training opportunities to become Air Hostess / Flight Steward is available at few places.
- In an attempt to provide trained manpower for the fast growing Airlines Industry, Directorate of Employment & Training (Gujarat State) has started with effect from 16th January 2006, first batch for Air Hostess / Flight Steward training program.
- Tremendous response received from youth. Total 50 candidates trained and many candidates got employment in Jet Airways, SpiceJet, Air Deccan and other prominent Air lines making course most successful.
- Entrance Qualification :-12th Std.
- Tuition fees :-15,000/-

CALL CENTRE ASSISTANT TRAINING PROGRAMME

- India's leadership in Information Technology and IT enabled services and played a dominant role in service sector. Service sector also provides large no. of job generation and contributes in economy.
- Call Centres also offers good employment opportunity to educated youth having fluency in English language. Hence, the Directorate of Employment & Training, Gandhinagar has launched the "Call Centre Assistant" Training programme at 3 ITIs with intake capacity of 20 each started from June-2006.

- Duration of Training : 8 weeks ■ Tuition Fees : Rs. 2000/- per course
- Qualification for admission : 12th Pass with fluency in English & knowledge of good computing skill
- Age Limit : 18 years and Above
- Selection Procedure : Written Test & Personal Interview
- Examination & Certification : Examination conducted through G.C.V.T., Gandhinagar

DIAMOND CUTTING AND POLISHING TRAINING

Objective:

The objective is to provide trained manpower to the Flourishing Diamond Industry

Training Programmes

At present the Institute is running the following training programmes:

NO	TRADE	Duration	Tuition Fees Rs./Month
1	Certificate course in Diamond Polishing	Four Months	100
2	Certificate course in Diamond Bruiting	Four Months	100
3	Certificate in Rough Diamond Planning & Marking	Three Months	500
4	Certificate in Rough Diamond Assortment	Three Months	500
5	Certificate in Polished Diamond Grading	Three Months	500
6	Certificate in Jewellery Designing	Three Months	500

Tourist Guide Training Programme

- To develop Tourism Sector in Gujarat a vast potential is to be explored for providing self employability and to cater the need of skill men power of Tourism industry. The State Government decided to celebrate year 2006 as “The Tourism Year”.
- Keeping in view Tourism potential of

Gujarat, Directorate has started short term course on “Tourist Guide” with the co-operation of “Rajya Sainik Board”.

- Tourist Guide Training Programme were conducted in 14 different districts ITIs across the state and total 360 trainees have successfully completed training as Local Tourist Guides. Which helped to encourage Tourism as well in the resettlement of the Ex-Servicemen

Driving Training Schools

- To provide Good Quality Training at affordable prices, promote safe driving practices and ITI certificate Directorate of Employment and Training has started Motor Driving course at different 12 ITIs across the state.
- One batch will be of 10 trainees. Thus in a year each ITI can give training to 120 candidates and total around 1200 persons.

General Information

- Course Name :- Motor Driving ■ Duration : 01 Month (24 Days)
- No. of Trainees :- 10 ■ Minimum Qualification : 5th Standard Pass
- Training Hours :- 14 Hours (4 Hrs. Theory, 10 Hrs. Practical Training)
- Age Limit :- 18 to 40 Years ■ Tuition Fees : Rs. 1000/- Month

Hand Pump Repairing

- Majority of unskilled work force are rural base and it is most important to encourage rural youth to make them employable through a skill imparting mechanism.
- Keeping in mind to provide self employable suitable training on hand pump repairing is design.
- Directorate of Employment and Training has started the Hand Pump Repairing course to provide skills of pipe fitting, fault finding in pump and repairing of pump and various applications.

General Information

- No. of ITIs :- 1
- Duration of Course :- 12 Weeks
- Minimum Qualification :- 7th Standard Pass
- Tuition fees per Month :- Rs.50/-
- No. of trainees trained :- 20

Mobile Repairing

- Due to revolution in communication entire world became a global village and which helped a lot in industrialization and job generation.
- Directorate of Employment and Training has started the Mobile Repairing course to meet the need of educated youth and skilled men power of industry
- The Course provided Study of different circuits, fault finding and repairing skill of Mobile Phones,
 - No. of ITIs : 5
 - Duration of Course : 12 Weeks
 - Tuition fees per Month: Rs.50/-
 - Minimum Qualification : ITI Electronics / Radio TV Mechanic or ITI Information Technology passed
 - No. of trainees trained : 110

Marble Cutting Operator

- Gujarat has a mining area on the border of North-West area having vast deposit of marble stones.
- To meet the need of local mining industries skill on marble cutting is to be developed through this training programme.
- Directorate of Employment and Training has started the Marble Cutting Operator course to provide skills of identification, measuring, marking and cutting on marble.
 - No. of ITIs : 1
 - Duration of Course : 3 Months
 - Tuition fees per Month : Rs.100/-
 - Minimum Quali. : 4th Standard Pass
 - No. of trainees trained : 10

Jardoshi

- Art of hand craft is a tool to earn the bread and butter for rural people, which is derived as a hereditary.
- Directorate of Employment and Training has started the Jardoshi course to provide skill of identification of different materials, colour selection , measuring and designing skills on cloths.

- No. of ITIs : 8
- Duration of Course : 4 Weeks
- Tuition fees per Month : Rs.50/-
- Minimum Qualification: 4th Standard Pass
- No. of trainees trained : 90

4 Wheeler/ 2 Wheeler Repairing

- Country is emerging as a manufacturing hub for a automobile industries, which will expand in many fold and create job revenues for youth.
- To meet the need of local industries and to provide skilled to youth Directorate of Employment and Training has started the 4 Wheeler/ 2 Wheeler Scooter Repairing course, which will provide skills of fault finding, repairing of vehicles and different applications related to it.

- No. of ITIs : 1
- Duration of Course : 4 Weeks
- Tuition fees per Month : Rs.50/-
- Minimum Qualification: 7th Standard Pass
- No. of trainees trained : 20

Security Guard

- Security is the need to feel safe, to feel assured as an individual or as a group.
- Concept of security on all levels is related to basic concepts of human psychology.
- If threatened people will react and take necessary defensive measures as an individual or as a group.
- Directorate of Employment and Training has started the Security course to provide skills in detecting and resolving the problems, handling the situation.

- No. of ITIs : 10
- Duration of Course : 2 Months
- Tuition fees per Month : Rs.100/-
- Minimum Qualification : 12th Standard Pass

Airline Ground Staff

- Aviation industry is progressing very fast with liberalization of open sky policy of the country.
- More local and multinational airlines are joining the club of aviation industries, which will need skilled men power of Airline Ground personnel
- Directorate of Employment and Training has started The “Airline Ground Staff” course.

- Place of Training: Institute of Hotel Management (IHM), Gandhinagar
- Duration of Course : 12 Week
- Tuition fees per Month: Rs.1000/-
- Minimum Qualification: 12th Standard Pass

House Keeping

- Due to industrial revolution concept of house keeping is became important issue and growth of service sector has enhanced employment opportunities.
- House keeping training is going to play a vital role in providing crucial skill manpower for industries.
- Directorate of Employment and Training is going to start The “House Keeping” course to provide skills of cleaning, hygiene, caretaking and cultural issues.

- No. of ITIs : 20
- Duration of Course : 6 Month
- Tuition fees per Month : Rs. 100/-
- Minimum Qualification: 10th Standard Pass under 10+2 system

Gas Fitter

- Natural and Petroleum gas are vital energy resources for industries and domestic uses and which is cost effective and environment friendly.
- Gujarat is emerging as a petro capital state of the country and consumes 35% of natural gas, with the help of network of approximately 22000 Kilometer gas pipe line spread in the state.
- Directorate of Employment and Training has started the Gas Fitter course.

- No. of ITIs : 3
- Duration of Course : 6 Months
- Tuition fees per Month : Rs.125/-
- Minimum Qualification : 10th Standard Pass under 10+2 system

Micro Irrigation System Technician Training

- Optimum utility of water resources is prime important in a state where rain fall is varying.
- Drip irrigation system is only solution to address the problem of scarcity of water resources, and to obtain more production in agricultural.
- Directorate has started (from 2nd October 2006), the drip irrigation system technician training programme, which will help to maximise agricultural production per acre.

- No. of ITIs : 4
- Duration of Course : 2 Week
- Tuition fees per Month : Rs.250/-
- Minimum Qualification : 10th Standard Pass under 10+2 system

CONCLUSION

- Capacity Building – CoE upgrades the skills of ITI Principals and Instructors
- Change in attitude of the staff members – learn more
- CoE students are more likely to be “industry ready”
- Increased the employability of the students
- Strengthen the infrastructure of the ITIs – better facilities
- Interaction between the ITIs and Industries has increased
- Encourage increased participation of industry - IMCs
- CoE has encouraged re-look at the existing Courses – drop unpopular courses and introduce new courses
- In a sense CoE Scheme has galvanized the ITIs

PSS CENTRAL INSTITUTE OF VOCATIONAL EDUCATION

131, ZONE – II, M.P. NAGAR, BHOPAL–462011,(M.P.) INDIA

PROPOSAL FOR A NEW SCHEME ON VOCATIONAL EDUCATION AND TRAINING IN INDIA DURING XI FIVE YEAR PLAN**I. Background**

- 1.0 The National Curriculum Framework-2005 prepared by NCERT and approved by CABE in 2005 has made certain recommendations for bringing about necessary reforms in Vocational Education and Training (VET). It has suggested that “we move in a phased manner towards a new programme of Vocational Education and Training, which is conceived and implemented in a mission mode, involving the establishment of separate VET centres and Institutions from the level of village clusters and blocks to sub-divisional/district towns and metropolitan areas”.**
- 2.0 The NCF-2005 proposes that VET centres/ institutions also need to be evolved in collaboration with the nation-wide spectrum of facilities already existing in this sector. This will imply the expansion of the scope of institutions like ITIs, polytechnics, technical schools, *Krishi Vigyan Kendras*, rural development agencies, primary health centres (and their auxilliary services), engineering, agricultural and medical colleges, S & T laboratories, cooperatives and specialized industrial training in both the private and public sectors.**
- 3.0 In view of the proposed systemic reforms, the NCF (2005) has envisaged that “the VET shall offer flexible and modular certificate or diploma courses of varying durations (including short durations) emerging from the contextual socio-economic scenario. Decentralised planning of these courses at the level of individual VET centres/ institutions and/or clusters thereof would have to keep in mind the ongoing rapid changes in technology and patterns of production and services in a given area, along with the diminishing access to natural resources and livelihoods for the vast majority of the people.**
- 4.0 The courses would provide multiple entry and exit points with in-built credit accumulation facility. Each course will also have an adequate academic component (or a provision for a bridge course or both) in order to ensure lateral and vertical linkages with the academic and professional programmes. The strength of a VET centre would lie in its capacity to offer a variety of options depending upon the felt need of the aspirants.**
- 5.0 In India about 1.6 crores children go to school every year, out of which only about 15 lakh students go for higher education and training. The remaining 1.5 crore youth are dropping out the school at different stages. According to UNESCO’s estimates 13.5 million children in India in the age group of 6 to 13 are out of school.**
- 6.0 The dropouts enter the world of work in certain period of time either with or without skills and competence in the chosen occupation. A large majority of them are under employed and without sufficient income to take care of their families.**

7.0 The employers prefer a person who has transferable skills and is able to deliver goods and services. The person who lacks employable skills is not able to enter and sustain in the labour market and hence they try to get involve in anti-social activities for their survival. Therefore, the future economic growth of the country will be in crisis if we do not make the youth of our country employable, with the capacity to make a reasonable income for decent living.

8.0 At present the system of preparing manpower is not competency based, rather it is more of knowledge-oriented and teacher centric. This results into skill shortages in many sectors of economy. The gap of mismatch between ‘what the employer wants’ and ‘ what is available’ is widening day-by-day.

9.0 A proposal to adopt a strategy for providing VET is submitted herewith as a key tool for providing necessary skill development opportunities to the school leavers/dropouts through a separate system of VET to be implemented in partnership and collaboration mode at the local level, involving existing Institutions, Community Organizations, Civil Society Organizations, Employers Associations, Industries and other Stakeholders.

II. Proposed Strategic Plan

1.Mapping of Skill Requirements in the Informal Sector: It is not yet done in our country, even though nearly 92 percent of the workforce is in this sector. It is a huge task, which needs to be taken up on priority. Details need to be worked out for providing quality training to these target groups. The focus should be on quality training for earning reasonable income for decent living and not just add on certain inputs in the present system of vocational education and training.

2. Large number of skills to be covered: The number of vocations available for the youth are very less when compared to the availability and requirements of our country. It should be increased many fold, from 150 courses to 3000 courses of different durations.

3. VET in a Mission Mode: The VET is to be implemented in a Mission Mode taking into all sectors of economy, target groups, and occupations, with different levels of competencies.

4. Development of a National Vocational Qualification System: Modular competency based vocational courses would be offered under the NVQ system. Provision for recognition of prior learning through a system of testing and assessment of skills would be made through the NVQ system.

6. Establishment of National Institute of Vocational Education and Training: An umbrella body, National Institute of Vocational Education and Training (NIVET), involving various Ministries and Departments for policy planning and coordination of VET under mission mode would be established. The PSS Central Institute of Vocational Education (PSSCIVE), Bhopal would be assigned the role and function of NIVET.

7. Strengthening of Bureau of Vocational Education and Training: To execute the policies and strategic decisions, the Bureau of Vocational Education and Training at MHRD, Govt. of India would be activated to deal with the new strategic initiatives.

8. Research on Pedagogy of Training: A wide range of pedagogical researches and development projects would be carried out to emphasize the importance of finding new ways of organising the students' learning possibilities in VET.

9. Establishment of labour market information system: Labour market demands assessment, analysis and monitoring in the form of employer surveys and student tracer studies would be introduced as a key element for designing need-based VET. A Labour Market Information System would be established to collect necessary information on the skill requirements and skilled manpower needs for different sectors of economy.

10. Development of Skill Standards and Qualifications: A national approach to VET, based on Skill Standards and Competency Based Assessment and Certification would be developed by setting up **Training Boards** for various sectors of economy.

11. International Skill Training Hub: To capture job opportunities available in the international job market, VET on international standards would be facilitated through setting up of International Skill Training Hubs.

12. Open and Distance Learning mode: Access through Open and Distance Learning mode to those who live in rural, tribal and remote areas and those who could not avail the benefit of VET would be enhanced. Educational Satellite (EDUSAT) would be utilized for popularization of VET programmes and for providing necessary soft skills to the target groups.

13. Private sector participation in VET: Participation of private sector and NGOs in improving facilities and resources of VET Institutions/Centres, developing skills standards, training packages, and competency based curricula and instructional materials, conducting tests, and providing joint certification would be encouraged.

14. Flexible mode of delivery in VET: Use of new learning technologies to deliver flexible and learner-centred VET programmes would be introduced

15. Arrangements for Competency Testing and Certification: A National Board of Vocational Education and Training (NBVET) would be established for implementing competency based assessment and certification system.

16. Strengthening of PSS Central Institute of Vocational Education, Bhopal: In order to develop curricula and learning materials for more than 3000 courses, the PSSCIVE, Bhopal would be expanded to include **17 more Departments.**

17. Establishment of Separate VET Institutions: A separate institutional mechanism and sound management structure for effective implementation of VET, with quality checks at the State, district and block levels would be established. The Institute will be established initially one in a district and will be extended to Block level. The Institute will offer 30-40 vocational courses/ trades in different areas. The duration of the course will be 6 months/ 12 months/ 18 months / 24 months depending upon the nature of the course.

18. Training of Teachers and Trainers: Professional training of Teachers/Trainers will be done for providing the basic skills needed by a new teacher/trainer, teaching the principles of learning, developing practical skills in delivering effective training.

19. Large Investment in terms of infrastructure, preparing trainers, evaluation and research is required for making reforms in the present system of VET.

III. Budget Estimate for XI Five Year Plan

A summary of cost estimate and the total budget required for implementing quality VET programme by establishing new Institutions and strengthening existing Institutions is given in table below:

Table: Financial Statement of Outlay proposed for VET in the XI FYP

S.N	Particulars	Non-Recurring (Rs in crores)	Recurring (Rs in crores)	Total (Rs in crores)
1.	Cost estimate for National Institute of Vocational Education and Training (NIVET)/Expansion of PSS Central Institute of Vocational Education (PSSCIVE)	0.30	17.9	18.25
2.	Cost estimate for National Board of Vocational Education and Training (NBVET)	0.20	7.40	7.60
3.	Cost estimate for establishment of flexible delivery system in VET, development of Competency based Curricula and teaching-learning materials and promotion of Career Guidance and Counselling.	--	5.0	5.0
4.	Cost estimate for Researches in Pedagogy of Training	-	10.0	10.0
5.	Cost estimate for establishing Labour Market Information System (LMIS)	-	50.0	50.0
6.	Cost estimate for establishment of National Vocational Qualification (NVQ) System	-	200.0	200.0
7.	Cost estimate for training of target groups in Informal sector	-	5000.0	5000.0
8.	Cost estimate for Establishment of International Skill Training Hub	30.0	70.0	100.0
9.	Cost estimate for promotion of Public- Private Partnership in VET (1 lakh per year @ Rs 5000/- per trainee)	--	250.0	250.00
10.	Cost estimate for 600 District Institutes of VET (DIVETs) (Cost for establishing one DIVET is Rs20.0crores). *	8.50	11.50	12000.0 (20.0 X 600)
11.	Cost estimate for Training of Teachers and Trainers	--	50.0	50.0
Total = 17690.85 crores				

7.2 VOCATIONAL EDUCATION

7.2.1 The Kothari Commission on Educational Reforms, 1966 had visualized that 25% of the students at the secondary stage would go for the vocational stream. The Kulandaiswamy Committee Report had pitched this number at 15% to be achieved by the year 2000. However, at present only about 5% of the children of the 16 to 18 age group are in the vocational stream. According to the recent NSSO data, only 5% of the population of the 19 to 24 age group in India have learnt skills through the vocational education stream.

7.2.2 The corresponding figure for Korea is as high as 96% and there are several countries, which have figures above 60%. Therefore, it is imperative to impart sound vocational and skill education to those who require it to enable them to be part of the productive force in the interest of the growth of the Indian economy.

7.2.3 The Prime Minister in his Independence Day addressed on 2006 has talked of setting up a Vocational Education Mission and a Task Force has already been constituted by the Planning Commission. It is in this context that vocational and skill education has to be taken earnestly during the 11th Five Year Plan if we have to maintain high economic growth through increased productivity, which in turn will be possible through acquisition of necessary skills.

7.2.4 During the 10th Plan there was an allocation of Rs. 350 crore to introduce vocational courses and streams at the +2 stage. The outcome has not been very satisfactory with a total utilization of only Rs. 61 crore. There is a need to design courses so as to reduce the mismatch between demand and supply. While Government can act as a facilitator, involvement of the corporate sector with intimate linkages between vocational institutions and industries would be a must.

7.2.5 Background of Vocational Education

7.2.5.1 Education and Training are powerful instruments for bringing changes required to achieve the key objectives of economic development i.e., to create more employment and thereby increasing income.

7.2.5.2 MILLIONS OF YOUNG WOMEN AND MEN IN THE AGE GROUP 15 TO 24 JOIN THE LABOR FORCE EVERY YEAR. OF THESE, MANY ARE UNEMPLOYED, OR UNDEREMPLOYED, AND NOT EARNING SUFFICIENT INCOME TO MEET THEIR FAMILY EXPENSES. A VAST MAJORITY OF THEM ARE IN THE INFORMAL SECTOR (FORMAL SECTOR PROVIDES EMPLOYMENT HARDLY TO 7% OF THE LABOUR FORCE). THEY LACK REQUISITE SKILL, KNOWLEDGE, ATTITUDES, SOCIAL PROTECTION, SECURITY ETC.

7.2.5.3 THE PATHWAYS FROM SCHOOL TO WORK ARE NOT WELL ESTABLISHED, LEAVING MANY YOUNG WOMEN AND MEN SEARCHING FOR SUITABLE JOBS. FACILITATING AN IMPROVED SCHOOL-TO-WORK TRANSITION MAY OVERCOME THE UNEMPLOYMENT SITUATION IN THE COUNTRY TO A GREAT EXTENT.

7.2.5.4 A large number of students are not able to pursue education due to socio-economic constraints. For example, out of 100 students enrolled in class I, hardly 20 complete their school education and the remaining drop out at different stages. The education they receive

may not be useful for a sustainable livelihood with quality. They try to enter the world of work without required skills and competencies to face the labour market competition. As a result, they remain unemployed, marginalized and poor.

7.2.5.5 Secondary and Higher Secondary Education are important terminal stages in the system of general education. At this stage, the youth decide whether to pursue education, opt for technical training or join the workforce. Educationists and experts have recommended that vocational education and training (VET) is suitable to specific target groups who want to enter into the world of work VET (Vocational Education & Training) will help in solving the unemployment problem to a considerable extent by equipping the youth with Tradeable skills.

7.2.5.5.1 In India, the vocational education programme at secondary school level was introduced in the year in 1976-77 as a state scheme. Due to financial constraints, the programme was introduced initially only in a few states. These states could not achieve the objective of the programme as expected. Many States/UTs felt the need for central assistance to run the programme. Accordingly, a Centrally Sponsored Scheme of Vocationalisation of Secondary Education was introduced during 1987- 88. This gave new impetus to the programme. Since then around 6000 institutions at plus two stage of education have introduced the programme. Around 150 vocational courses are offered in these schools with an intake capacity of around ten lakh students per year. This is the largest single vocational education and training programme followed by ITIs and Polytechnics in India. The programme covers all major career areas like Agriculture, Engineering and Technology, Business and Commerce, Home Science, Health and Paramedical, and Humanities, Science and Education.

7.2.5.6 Changes in technology and financial markets, emergence of global markets for products and services, international competition, new forms of business organization, and new business strategies and management practices are transforming the **world of work**.

7.2.5.7 Globalization offers both opportunities and **challenges for Vocational Education and Training (VET)** to meet the need of skilled manpower for increased pace of **national development**.

7.2.5.8 The National Curriculum Framework (2005) has suggested that Vocational Education and Training should be implemented in Mission Mode, involving establishment of separate VET Institutions and Centres from the level of village clusters and blocks to sub-divisional/districts, towns and metropolitan areas.

7.2.6 VET Framework suggested for XI Plan

7.2.6.1 During the XI Five Year Plan, Vocational Education and Training (VET) should be provided to those who need skills for sustainable livelihood and to meet the challenges of the world of work. The concept of **Vocational Education and Training to All** should be promoted through **the formal education system and non-formal education system**. It should cater to the needs of different target groups, with special provisions for disadvantaged groups viz., girls/women, scheduled castes, scheduled tribes, persons with disabilities, and persons living in difficult circumstances.

7.2.6.2 VET may be implemented as a Central Sector Scheme, (with 100 % Central Government Funding) with an outlay of Rs. 7070 crore.

7.2.6.3 It is estimated that 1.5 crore youth need initial vocational training every year. During XI FYP, capacity for about 0.5 crore persons should be created for providing initial training

through strengthening of existing VET Institutions and by setting up new VET Institutions. The remaining **1.0 crore** people should be trained through non-formal/informal mode.

7.2.6.4 In India, about 4.21 crore persons are working in the informal sector. Only 5 % of this population could receive skill training through the formal system. The remaining about 4.0 crore unskilled and semi-skilled persons, who are already in the world of work, should be given continuous or further training for upgradation of their skills through a variety of delivery systems, including part-time, sandwich system, day release system, block release system, open and distance learning system, etc.

7.2.6.5 The emphasis in VET would be on development of generic, specific, personal and multiple skills so that persons may respond to changes due to technologies and market demands. Generic skills that cut across a number of occupations would enable an individual to transfer from one field to another during his/her working life.

7.2.6.6 VET programmes preparing for occupations in Farming, Artisan Trades, Crafts, Small and Medium Enterprises, particularly for self-employment, should include entrepreneurship development and elementary training in information and communication technology to enable persons to take responsibility for production, marketing, management and rational organization of enterprise.

7.2.6.7 VET should be offered in flexible mode through modular courses of varying durations, with credit transfer facility. Strategies for encouraging access to VET for marginalized groups, including SCs, STs, OBCs, Minorities, girls, street children, working children and differently-abled children, should be adopted.

7.2.6.8 Skill development in organizational planning, **entrepreneurship**, safe and environmentally sound procedures related to materials and equipment, importance of safe working conditions, first aid training, etc., as an integral part of all VET programmes should be promoted.

7.2.6.9 Competency based curricula should be reviewed and updated from time to time so that the courses do not become moribund and irrelevant to the vocations and livelihoods in a given area or region. Also competency based teaching-learning materials should be developed to suit the requirements of competency based training and assessment.

7.2.6.10 Professional training of all teachers and trainers, focused on implementation of flexible teaching-learning practices in VET, should be organized.

7.2.6.11 Career Guidance and Counselling as a critical development tool to enable children to systematically plan their movement towards their future vocations or livelihoods, and also guide the institutional leadership in curriculum planning and evaluation should be introduced in VET Institutions.

7.2.6.12 An umbrella body with nomenclature “National Vocational Education and Training Commission (National VET Commission)”, involving all stakeholders, may be set up for providing overall vision and coordination in planning and delivery of VET by different agencies. Among other things, it should undertake key systemic tasks, lay down guidelines and broad approaches and will mobilize support and cooperation from different stakeholders.

7.2.6.13 In order to execute the policies and strategic decisions of the Council, the Division dealing with Vocational Education and Training in MHRD, Govt. of India needs to

be strengthened. A separate bureau for vocational education needs to be set up also along the lines of the Ministry of Labour (DGET).

7.2.6.14 A National Institute for Vocational Education Planning and Development (NIVEPD) may be established as a public-private academia partnership. It should be adequately represented by Government, Industry, Academia, Labour Unions, NGOs and other social community organizations. This autonomous body should work in close cooperation with the concerned Ministries and Agencies, such as the Directorate General of Employment and Training, the National Council of Vocational Training, the Labour Bureau, the Bureau of Vocational Education, and the Ministry of Human Resource Development.

7.2.6.15 **Quality research and dissemination** to increase understanding in pedagogical, technical and managerial aspects of flexible VET and learning should be promoted. A wide range of pedagogical innovative and developmental projects should be carried out to emphasize the importance of finding new ways of organizing the students' learning possibilities in VET.

7.2.6.16 A **Labour Market Information System** should be established to collect necessary information on the skill requirements and skilled manpower needs for different sectors of economy.

7.2.6.17 **VET in informal sector should also be strengthened** by using available facilities and mobilizing community resources for upgradation of skills of workers. Many skilled workers, working in unorganized sector, need some certification for their competencies and skills. Such certification is needed to give them some status and respectability by way of recognition of their competencies and skills.

7.2.6.18 (i) A National Vocational Qualification (NVQ) system in which public and private system of VET collaboratively meets the needs of Industry and Individuals should be developed. Under this, modular competency based vocational courses will be offered along with a mechanism of testing skills under the NVQ system. Bridge courses to facilitate people without any formal education to get enrolled in the regular system of courses should be developed through NVQ system.

(ii) Major vocational clusters in areas like transportation, manufacturing, consumer and home industries, public services, hospitality and recreation, personal services, marketing and distribution, health, business and office, agro business and natural resources, communications, marine science, construction, fine arts and humanities should be taken up for identifying skill requirements at different levels of competencies. Guidelines for training, assessment and reporting under the National Vocational Qualification system should be developed in all major vocational clusters.

7.2.6.19 A system of life-long learning for acquiring skills through VET Institutions, colleges and universities should be developed. Access, through Open and Distance Learning (ODL) mode to those who live in rural, tribal and remote areas and those who could not avail the benefit of VET, will be enhanced. Educational Satellite (EDUSAT) should also be utilized for popularization of VET programmes and providing necessary soft skills to the target groups.

7.2.6.20 Participation of private sector and NGOs in improving facilities and resources of VET Institutions/Centres, developing skills/standards, training packages, and competency based curricula and instructional materials, conducting tests, and providing joint certification should be encouraged. Accreditation of private VET providers (schools, colleges, universities, industry and community organizations) for quality assurance and uniformity in

skills development should be taken up. On an average, an expenditure of Rs 5000/- per person could be incurred for imparting training and certification through the private sector.

7.2.6.21 A National Board of Vocational Education and Training (NBVET) should be established for competency based assessment and certification.

(i) A national approach to VET, based on Skill Standards and Competency Based Assessment and Certification should be developed. Skill standards that will guide the direction for entry-level training should be identified in collaboration with the Industry and Professional Associations. Delivery of VET through a new partnership between the government, employers, professional associations, industry, employee's trade unions, local community and Ngos would be done. VET programmes responsive to the needs of the business, industry and stakeholder's and their advice on issues impacting on the national VET system, such as skills forecasting, labour market survey, skill standards, etc., should be developed.

(ii) Strategies for involvement of civil society institutions, NGOs, communities/ public and private sector industries in VET should be evolved. The apex industry associations like Confederation of Indian Industry (CII), Federation of Indian Chambers of Commerce and Industry (FICCI), Associated Chambers of Commerce and Industry (ASSOCHAM), etc., should be involved to a greater extent in implementation of VET. Based on labour market analysis, skill requirements in different sectors of economy should be identified, and accordingly vocational courses will be offered through separate VET Institutions to enhance the relevance of VET provision for the economy.

7.2.6.22 A view of the statement in the report of the High Level Strategic Group (HLSG) constituted by the All India Management Association (AIMA) that about 40 million jobs would be generated to meet the international demand of skilled manpower in the areas such as telemedicine, plumbing, auto repairs, tax advisory services, e-learning etc, study of at least one foreign language of international use for meeting the requirements of skill passports and employment in multicultural work environments should become part of the vocational curriculum. Further, to capture job opportunities available in the international job market, VET on international standards should be facilitated through setting up of International Skill Training Hub.

7.2.6.23 Industry-Institution collaboration should be established for identification of manpower, development of sector-wise skill profiles, identification of courses, development of modular competency based curricula and learning materials, experts for providing training, workplace training/in-plant training (practical training, on-the-job training and apprenticeship training), competency based assessment of trainees by the assessors, competency based joint certification, sharing of resources and placement of students.

7.2.6.24 (i) New learning technologies such as modularization, combining modules fit together horizontally and vertically to deliver flexible and learner-centred VET programmes should be introduced.

(ii) Lateral and horizontal mobility should be provided through multiple VET delivery systems in the following modes:

- FULL-TIME PROGRAMMES INCLUDING GENERAL EDUCATION AND PRACTICAL TRAINING, PROVIDED IN AN EDUCATIONAL ESTABLISHMENT;
- PART-TIME PROGRAMMES IN INSTITUTIONS AND/ OR INDUSTRIES;
- DAY-RELEASE SYSTEM, PROVIDING FOR WORKERS AND APPRENTICES TO ATTEND AN EDUCATIONAL ESTABLISHMENT ONE OR TWO DAYS A WEEK;

- SANDWICH SYSTEM UNDER WHICH PERIODS IN AN EDUCATIONAL INSTITUTION ALTERNATE WITH TRAINING PERIODS IN A FACTORY, FARM, BUSINESS ESTABLISHMENT OR OTHER UNDERTAKING;
- BLOCK-RELEASE SYSTEM, WHEREBY WORKERS ARE RELEASED TO ATTEND COURSES OF 10 TO 15 WEEKS PER YEAR;
- open and distance learning system provided through correspondence, radio and television broadcast, and Internet and other computer-based media.

(iii) The concept of personal education plan and the educational portfolio or "log-book" should be introduced to place the students' learning at the centre of the teaching carried out by the training Institutes and business enterprises/industries.

7.2.6.25 The PSS Central Institute of Vocational Education (NCERT), Bhopal can serve as a **National Resource Institution** for policy planning, implementation and monitoring of VET programme and for developing a National Vocational Qualification in the country. Presently, the PSS Central Institute of Vocational Education has six divisions, viz., Agriculture, Business and Commerce, Engineering and Technology, Health and Paramedical, Home Science, and Humanities, Science and Education. In order to develop curricula and learning materials in more than 1500 vocations, the Institute may be expanded to include 17 more Departments such as Department of Animal Husbandry, Department of Research, Policy, Manpower Planning and Department of Information and Communication Technology etc.

7.2.6.26 A separate institutional mechanism and sound management structure for effective implementation of VET, with quality checks at the State, district and block levels may be established. Establishment of a **State Institute of Vocational Education and Training (SIVET)** in all the States or conversion of State Institute of Vocational Education (SIVE) as SIVET may be taken up for effective implementation and monitoring of VET programme in mission mode in all the States/UTs. Initially arrangement for establishing **600 District Vocational Education and Training Institutes (DIVETs)** in the States/UTs may be made. It should be followed by establishment of separate VET institutions at the block or village cluster level.

7.2.6.27 VET Institutions/Centres in collaboration with the existing institutions/organizations like Industrial Training Institutes, Polytechnics, Technical Schools, *Krishi Vigyan Kendras*, rural development agencies, primary health centres (and their auxiliary services), S & T Laboratories, cooperatives, and engineering, agricultural and medical colleges may also be established.

7.2.6.28 Greater autonomy may be given to VET Institutions to design their own programmes using flexible delivery modes, with involvement of business and industry.

7.2.6.29 About 7,000 existing Vocational Education Institutes/Schools under the Centrally Sponsored Scheme on Vocationalisation of Education, which cater to the needs of about 10 lakh secondary students, may be strengthened and restructured keeping in mind local/ regional market demands, generic and specific vocational skills.

7.2.6.30 Professional training of Teachers/Trainers is required for providing the basic skills needed by a new teacher/trainer, teaching the principles of learning, developing practical skills in delivering effective training. Guidelines for competency based training of teachers/trainers may be developed. Based on the guidelines, training programmes for teacher/trainers may be organized with the help of professional institutions/organizations and industries. It may be necessary to have a separate stream of Vocational Teachers imbued with the right attitude and a penchant for practical work.

7.2.6.31 (i) A scheme of scholarships to meritorious trainees, particularly those belonging to SCs/STs/OBCs/BPL and girls, may be introduced. Catering to about 10 lakh trainees,

(ii) Free boarding and lodging to about 10 lakh VET trainees may be provided as an incentive for joining vocational courses, especially in rural areas.

7.2.6.32 (i) For effective monitoring of VET programmes, a comprehensive Vocational Management Information System (VMIS) may be set up to provide to decision makers accurate, usable, and timely data and information concerning input, output, and impact of VET. Searching of vocational education pass outs would be necessary & a constant feedback provided to schools.

(ii) The monitoring will be done at the following levels:

- Institutional level
- District level
- State level
- National level (PSS Central Institute of Vocational Education, Bhopal will maintain the data base and will submit periodical reports to the MHRD).

(iii) A network may be established to link various institutions and agencies involved in implementation of the VET programme. At the State level, all the institutions may be linked with the State Directorate of Vocational Education/ SIVET. At the national level, the PSS Central Institute of Vocational Education, Bhopal may serve as a clearinghouse for exchange of information.

(iv) Physical monitoring of the performance of VET Programme at the field level may also be done from time to time.

7.2.6.33 Collaboration with other countries: Pilot projects may be set up in collaboration with countries like Germany which have successful dual mode VET programmes. Multilateral/ bilateral assistance for this purpose may be availed for this purpose.

7.2.7 Budget Estimate for Implementation of VET Programme

A summary of cost estimates and the total budget required for implementing a quality VET programme through establishment of new Institutions and strengthening existing Institutions amounting to Rs. 6876.30 crore is given at Annexure -A

TOTAL FINANCIAL REQUIREMENTS FOR VOCATIONAL EDUCATION

S.No.	Particulars	Non-Recurring (Rs in crore)	Recurring (Rs in crore)	Total (Rs in crore)
1.	Cost estimate for National Council of Vocational Education and Training (NCVET)	0.10	2.60	2.70
2.	Cost estimate for establishment of flexible delivery system in VET, development of Competency based Curricula and teaching-learning materials and promotion of Career Guidance and Counselling.	--	5.0	5.0
3.	Cost estimate for Researches in Pedagogy of Training	-	1.0	1.0
4.	Cost estimate for establishing Labour Market Information System (LMIS)	-	1.3	1.3
5.	Cost estimate for establishment of National Vocational Qualification (NVQ) System	-	200.0	200.0
6.	Cost estimate for training of target groups in Informal sector	-	100.0	100.0
7.	Cost estimate for Establishment of International Skill Training Hub	30.0	70.0	100.0
8.	Cost estimate for promotion of Open and Distance learning	50.0	150.0	200.0
9.	Cost estimate for promotion of Public-Private Partnership in VET (1 lakh per year @ Rs 5000/- per trainee)	--	250.0	250.00
10.	Cost estimate for establishment of Flexible mode of delivery	--	50.0	50.0
11.	Cost estimate for National Board of Vocational Education and Training (NBVET)	0.20	7.40	7.60
12.	Cost estimate for Expansion of PSS Central Institute of Vocational Education (PSSCIVE)	0.30	17.9	18.25
13.	Cost estimate for State Institute of Vocational Education and Training (SIVET)	113.05 (3.23X35)	22.4 (0.64 X 35)	135.45 (3.87 X 35)
14.	Cost estimate for 600 District Institutes of VET (DIVETs) (Cost for establishing one DIVET is Rs 3.87crores).	384 (0.64 X600)	1938 (3.23 X 600)	2322.0 (3.87 X 600)
15.	Cost estimate for strengthening of existing Vocational Education and Training Institutes	450.0	2340.0	2790.0
16.	Cost estimate for Training of Teachers/Trainers	--	50.0	50.0

17.	Cost estimate for motivational schemes i) Scholarship for meritorious vocational students (Rs 100 X 10 lacs students X 24 months). ii) Free boarding & lodging to 10 lakh VET trainees (Rs 1000 X 10 lacs students X 4 semester)	--	240	240
		--	400	400
18.	Cost estimate for establishment of Vocational Management Information System (VMIS)	--	3.0	3.0
Total =				
6876.30				
Rounded off to Rupees Six thousand nine hundred crores				

Note: It is an approximate budgetary requirement for initiating the proposed activities and for establishing the required structures for planning, implementation and monitoring of VET. A more detailed cost estimate will be done later.

Summary of financial requirements during 11th Five Year Plan

(Rs. in crore)

S.No.	Items of Expenditure	Projected requirement
1.	SECONDARY EDUCATION	
1.1	Curriculum – Creation of new structures and strengthening of existing structure	15.00
1.2	Total capital expenditure on expansion of Secondary Education	3589.30
1.3	Total recurring expenditure on teachers & inspection/supervision charges	19769.70
1.4	Learning Resources – recurring and non-recurring expenditure on Science lab. and Art & Craft lab.	10547.52
1.5	Learning Resource Center	-
1.5.1	ICT @ Schools	24160.0
1.5.2	EDUSAT facilities	300.00
1.5.3	Library facilities	2359.76
2.	HIGHER SECONDARY EDUCATION	12078.00
3.	SECONDARY & HIGHER SECONDARY EDUCATION	
3.1	Incentives to the students belonging to SC/ST/OBC/Minority communities similar to Sarva Shiksha Abhiyan like free textbooks, uniforms, footwear, stationeries etc.	6098.25
3.2	Provision of bicycles for students belonging to SC/ST/OBC/Minority communities	6015.75
3.3	Boarding & lodging facilities for students belonging to SC/ST/OBC/Minority communities (for boys)	*(2075.50)
3.4	Stipend for day scholars belonging to SC/ST/OBC/Minority communities	*(8003.52)
3.5	One additional language teacher (Tribal Language)	1300.00
3.6	Transport facilities for girl students	1050.00
3.7	Residence scheme for Women teachers in rural areas	550.00
3.8	Rural allowance for Women teachers	150.00
3.9	Scheme for incentives to girls for Secondary Education	10990.0
3.10	Construction and running of Girls' Hostel	5523.70
3.11	Scheme of Inclusive Education for Disabled at Secondary Stage (IEDSS)	26040.00
3.12	State Talent Search Scheme and Chacha Nehru Scholarship for Artistic & Innovative excellence	125.00
3.13	National Science Talent Search Scheme	30.00
3.14	International Science Olympiad	10.00
3.15	QIS (As a component of Universalization of Secondary Education) excluding International Science Olympiad	90.00
3.16	Adolescent Education Programme	381.50
3.17	Open Schooling System	1750.00

3.18	Scheme for out of school children (Over arching scheme)	50.00
3.19	Student assessment and examination reforms	210.00
3.20	Guidance & Counselling	435.00
3.21	Capacity building (In-service training of teachers)	821.00
4.	SCHOOL SUB-SYSTEM	-
4.1	Kendriya Vidyalaya Sangthan (KVS)	4215.01
4.2	Navodaya Vidyalaya Samiti (NVS)	10425.80
4.3	Central Tibetan School Administration (CTSA)	44.00
5.	NATIONAL COUNCIL OF EDUCATIONAL RESEARCH & TRAINING (NCERT)	500.00
6.	JOINT INDO-MONGOLIAN SCHOOL	5.00
7.	VOCATIONAL EDUCATION	6876.30
	GRAND TOTAL	166584.61

* May be considered in the budget provisions for Ministry of Social Justice & Empowerment/ Ministry of Tribal Affairs/ Ministry of Minority Affairs.

Break up of the expenditure

S.No.	Items of Expenditure	Projected requirement
1.	SECONDARY EDUCATION	60741.28
2.	HIGHER SECONDARY EDUCATION	12078.00
3.	SECONDARY & HR. SECONDARY EDUCATION	71699.22
4.	SCHOOL SUB-SYSTEM	14684.81
5.	NATIONAL COUNCIL OF EDUCATIONAL RESEARCH & TRAINING (NCERT)	500.00
6.	JOINT INDO-MONGOLIAN SCHOOL	5.00
7.	VOCATIONAL EDUCATION	6876.30
	GRAND TOTAL	166584.61

National Institute of Open Schooling (NIOS)

**Upscaling of the Open Vocational Education Programme:
Suggested Strategies**

1. Introduction

In the view of universal elementary education (UEE) and proposed universal secondary education (USE) the number of seats for vocational education and training is estimated 3.3 billion whereas at present the capacity to train the personnel is 3.3 million.

In order to achieve this, it will be necessary to use innovative methods like e-learning, ODL virtual classroom and generally speaking much greater use of ICT. A strategy from the point of view of open Vocational Education Programme (VEP) through distance learning mode is suggested below:-

- 1.1 Labour Market Information System** will be established to collect the necessary information on the skill requirements and skilled manpower needs for different sectors of economy. This will be done in collaboration with CISCO, CII, CIDC, IFCO foundation, IMA, RCI, HCL, Microsoft, APTECH, MICO BOSCH etc. NIOS has already entered into agreements with IMA, RCI, CISCO, CIDC, IFFCO foundation.
- 1.2 Industry-Institution collaboration and similar collaboration other sectors will be established** for identification of manpower, development of sector-wise skill profiles, identification of courses, development of modular competency based curricula and learning materials, experts for providing training, workplace training /in-plant training (practical training, on-the job training and apprenticeship training), competency based assessment of trainees by the assessors, competency based joint certification, sharing of resources and placement of students.
- 1.3 Participation of the private sector and NGOs in improving facilities and resources of VET Institutions/ Centres, developing skills/ standards, training packages, and competency based curricula and instructional materials, conducting tests, and providing joint certification would be encouraged. Accreditation of private VET providers** (schools, colleges, universities, industry and community organizations) for **quality assurance and uniformity in skills development** is proposed to be taken up.
- 1.4 VET in the informal sector will be strengthened** by using available facilities and mobilizing community resources for upgradation of skills of workers. Many skilled workers, in the unorganized sector, need some certification for their competencies and skills. Such certification is needed to give them some status and respectability by way of recognition of their competencies and skills.
- 1.5 Professional training of Teachers/Trainers** is required for providing the basic skills needed by a new Teacher/Trainer, teaching the principles of learning, developing practical skills in delivering effective training. Guidelines for competency based training of teachers/trainers will be developed. Based on the guidelines, training programmes for teacher/trainers will be organized with the help of professional institutions/organizations and industries.
- 1.6 For effective monitoring** of VET programmes, a comprehensive **Vocational Management Information System (VMIS)** will be taken up to provide to decision

makers accurate, usable, and timely data and information concerning inputs, output, and impact of VET.

1.7 Career Guidance and Counselling as a critical development tool to enable children to systematically plan their movement towards their future vocations or livelihoods, and also guide the institutional leadership in curriculum planning and evaluation, will be introduced in VET Institutions.

1.8 Quality research and dissemination to increase understanding in pedagogical, technical and managerial aspects of flexible VET and learning will be promoted. A wide range of pedagogical innovative and developmental projects are proposed to be carried out to emphasize the importance of finding new ways of organizing the students' learning possibilities in VET.

1.9 In order to develop Vocational Education Infrastructure in rural areas, one of the interventions of NIOS is in the form of Rural Community Workshops (RCWs) as prototype infrastructure training -cum – production- cum - service centres. The number of RCWs is proposed to be increased from 9 in 2006-07 to 150 by the end of Eleventh Plan.

2. Infrastructure

2.1 The National Institute of Open Schooling (NIOS) offers Vocational Educational Courses in the major areas of Agriculture, Business and Commerce, Engineering and Technology, Health and Paramedical, Home Science and Hospitality Management, Computer and IT related sectors, and various other General Services Sectors through Open and Distance Learning (ODL) mode of Education.

At present NIOS offers 70 Vocational Education Courses in the above mentioned areas. During Eleventh Five Year Plan (2007-08 to 2011-12), NIOS proposes to increase the number of courses from 72 to 200. The enrolment in the Vocational Education Courses is proposed to be increased from 22000 in 2006-07 to 3 lakh in 2011-12.

2.2 NIOS takes special care of education of disadvantaged through the Accredited Institutions for Education of Disadvantaged (SAIED). Out of 60 SAIEDs, 27 SAIEDs are offering Vocational Education Courses. The number of SAIEDs for Vocational Courses is proposed to be increased from 27 in 2006-07 to 100 by the end of Eleventh Plan.

2.3 In order to cope with the challenge of providing Vocational Education Courses to a large number of youth and adults, the Open Schooling system is required to be upscaled substantially. NIOS, offering 70 Vocational Education Courses at present, will expand its programme to offer about 200 Courses by the end of XI Plan. The State Open Schools (SOSs) are also required to offer need based Open Vocational Education Courses preferably in Regional Medium.

2.4 NIOS proposes to upscale of the Open Vocational Education Programme through the following inputs.

- Research, Analysis and Need Assessment
- Instructional Material Development
- Setting up of Model Vocational Training Institute

- Consolidation of Expansion of Study Centres for Open Vocational Education and Strengthening and expansion of Special Accredited Institutions for the Disabled
- Setting up of Programme Implementation and Monitoring (PIM) Unit at NIOS Headquarters and in each Regional Centre.
- Setting up of Independent Evaluation / Examination Unit at NIOS Headquarters for Vocational Education Examinations.

3. Curriculum Framework in Open Vocational Education (CFOS)

3.1 In order to operationalise the Open Vocational Programmes effectively in India, NIOS has developed a Draft Curriculum Framework in Open Schooling (CFOS). This Framework provides a broader canvas so as to present proper context for Open Vocational Education and detailed strategies, curricular diversity conforming to various clientele groups of learners, economic diversity of the country, and all inclusive character of Open Vocational Education. Among other things it lay emphasis on :

- Competency based curriculum
- Flexibility
- Modular approach
- Multi Skills
- Multiple Entry and Multi Exit
- Multimedia / Interactive Learning
- Credit based certification
- Self Assessment of acquired competency by the Learner in continuous and comprehensive manner

The CFOS include guidelines related to (i) Resources, (ii) Evaluation and Certification, (iii) Manpower Assessment and Need Analysis, and (iv) Programme Planning and Quality Management. The CFOS will be widely circulated among stakeholders in Open Vocational Education for planning and operationalisation of the Programme effectively.

3.2. VEP of NIOS in the following areas have remained quite successful by providing training to the learners which are gainfully employed.

<u>Sector</u>	<u>Programme</u>
Engineering and Technology	Electrical Technician, Refrigeration & Air Conditioning
Computer and IT	Certificate in Computer application, Computer Hardware
Agriculture	Water Management and Poultry Farming

Vocational Education and Training at IGNOU

IGNOU has been offering the following courses in vocational education and training during the last 15 years. The courses are offered at the certificate and diploma levels varying from 6 months' duration to 2 years' duration. In addition awareness programmes in region-specific vocational areas are also conducted periodically.

Courses offered:

Certificate course in Laboratory techniques, Primary Teaching, Rural development, Teaching of English, Teaching of Primary School Mathematics, Tourism Studies, Craft and Design (Pottery), Shoe Upper Cutting, Shoe Upper Stitching, Diploma in Value added Products from fruits and vegetables, Aqua Culture, Nautical Science, Nursing Administration, Electrical and Mechanical Engineering, Civil Engineering, Early Childhood care and Education, Advanced Diploma in Water Resources Engineering, Construction Management, Tourism, Computer Integrated Manufacturing, PG Diploma in Marketing Management, Hospital & Health Management, Library Automation, Audio Programme Production etc.

About 30% of the 15 Lakh students enrolled undergo one or more of the above courses. The courses are offered in Hindi as well as in English.

In the XIth plan, the university has created an exclusive school of vocational education and training(VET) with a decentralized pattern of course delivery . The overall objective of the school is to increase the flexibility of VET within the main stream educational system. Emphasis will also be laid to establish link between the streams of vocational education, school education and higher education. Schemes for life long skill upgradation through short training programmes are envisaged. Generation of a cadre of multiskilled persons in vocational subjects is a priority. The expert Committee constituted for the School of VET has suggested new delivery models for the operation of the schools to expand the capacity involving public private partnership, decentralized delivery and computerized vocational training. The challenges in providing training for potential entrance in the unorganized and informal sector of workforce will also be addressed by the school. Courses will also be designed for providing quality trainers for the ITIs and ITCs. Over 30 Regional Centres located in different states of the country will be offering these courses and training programmes in regional languages.

Status of Polytechnics

Over the years, Polytechnic education in our country has contributed significantly for its economic development. The pass-outs of Diploma level Institutions in Engineering & Technology are playing important role in managing shop-floor operations. It is further an established fact that particularly small & medium Industry prefer to employ Diploma Holders because of their special skills in reading and interpreting drawings, estimating, costing & billing, supervisory, measurement, testing, repair and maintenance etc.

Most of the polytechnics in the country offer three year generalized diploma courses in conventional disciplines such as Civil, Electrical and Mechanical Engineering. During the last three decades many polytechnics started offering courses in other disciplines such as Electronics, Computer Science, Medical Lab technology, Hospital Engineering, Architectural Assistantship etc. In addition, many single technology institutions were also established in areas like Leather Technology, Sugar Technology, and Printing Technology etc. Many courses were also started exclusively for women in Women's Polytechnics as in Garment Technology, Beauty Culture, and Textile Design etc.

During the last decade, our country has seen a tremendous increase in the number of Engineering Colleges at Degree level throughout the country. However, unlike degree engineering colleges, the growth of polytechnics has rather grown slowly. As on date, there are about 1244 Polytechnic level Institutions and about 1500 Degree Engineering level Institutions spread throughout the country. There are still about 150 such Districts, which are not having any Diploma level Institutions as on date.

The number of diploma institutions in engineering, pharmacy, hotel management and catering technology and architecture is given in the Annexure.

The aim of the polytechnic education is to create a pool of skill based manpower to support shop floor and field operations as a middle level link between technicians and engineers. The entry-level qualifications and curriculum structures were formulated to meet this objective. Over the years, the programmes have deteriorated losing the skill components amounting to dilute versions of degree education. Most of the polytechnic institutes are facing considerable problems of survival. The organizations employing them have to train them all over the basic skills.

The curricula of polytechnics are generally seen as a diluted version of the engineering degree curricula. For a very long time there was not scientific curriculum development process employed for designing polytechnic curricula. With the establishment of Technical Teachers' Training Institutes (TTTIs) in 1967, (later renamed as National Institutes of Technical Teachers' Training and Research (NITTTRs)), a scientific methodology was introduced to find the job functions of technicians and to design curricula with the involvement of a large number of teachers and professionals from industries. Still the output of the courses does not meet the needs of the industries because the competencies developed do not match the job functions of technicians at different levels in the modern industries. Major problems being faced by the polytechnic Education system are: -

1. Non availability of technicians in new and emerging areas.
2. Obsolete equipments.
3. System unable to attract quality teachers
4. Inadequate financial resources
5. No state policy for training and retraining of faculty and staff

6. Flexibility to students and autonomy to the institutions is lacking
7. Lack of reliable technical manpower forecasting and its linkages with technician education system
8. Inadequate industry institute participation
9. Research and development culture in technician education institutions is almost non-existent
10. Static Curricula.

Efforts are urgently required to restore the glory of polytechnic education. The polytechnic education is a State subject but is even unable to remove obsolescence and modernize the laboratories and workshops of the existing Polytechnics. They, therefore, are not in apposition to establish new polytechnics. Ministry of HRD as a special drive may take necessary steps to provide one time assistance for establishing polytechnics and Upgrading/Creating infrastructure facilities in the existing polytechnics. The following recommendations are suggested to improve the polytechnic education system: -

- To open new polytechnics so that every district in the country has at least one polytechnic
- To upgrade the infrastructure facilities in the existing polytechnics to attract more no. of students
- To create infrastructure facilities in the emerging areas in order to give a boost to manufacturing sector
- Training of teachers in the polytechnics to upgrade their teaching skills due to the changes in the technology
- The curriculum of diploma courses need to be revised to keep pace with the industry
- Need for making teaching positions in technician education attractive enough to attract talent.
- Provide flexibility to students and academic, financial and administrative autonomy to the polytechnics.
- Polytechnics should involve industrial and professional bodies in developing linkages with industries in their vicinity.
- In present days of fast changing world, the polytechnics need to adopt dynamic approach to curriculum design and implementation.

It is understood that under the National Common Minimum Programme (NCMP) of the UPA Government, Central Government provides for equality of opportunity, particularly in education and employment for SCs, STs, OBCs & religious minorities. Polytechnic Education is an important component of Technical Education and keeping in view of the above, the Ministry of HRD has identified some districts in the Country based on the following criteria: -

- i) Educationally backward minority concentration areas;
- ii) Schedule V areas;
- iii) Schedule VI areas

- iv) SC female literacy less than 10% areas (districts)
- v) Integrated Tribal Development Project Area Districts

Though, Polytechnic Education is a State subject but the Central intervention in these districts is necessary because of the commitment under the NCMP. The Ministry should provide financial assistance for establishment of polytechnics level institution in these special identified districts, where there is no polytechnic at present. The Ministry should also upgrade the infrastructure facilities in the existing polytechnic in these districts.

Scheme of Community Polytechnics

The Scheme of Community Polytechnics was started during the year 1978-79 as a Direct Central Assistance Scheme of the Govt. of India (Ministry of Human Resource Development) with a view to ensuring for the rural society a fair share of benefits from the investments in Technical Education System. The scheme envisaged the Community Polytechnics to act as focal points for Science and Technology applications in rural areas and generate self and wage employment opportunities through short term non-formal training in competency and need based courses in various trades or multiple skills.

2. A Community Polytechnic is not a separate institution. It is a wing of an existing AICTE approved polytechnic, entrusted to undertake rural/community development activities in its proximity through the application of science and technology, making use of infrastructure available in polytechnics. Under the existing norms of the scheme, a one time Non-recurring Grants-in-aid of Rs 7.25 lakh and annual Recurring Grants-in-aid upto a maximum of Rs 7.00 lakh is released to the selected AICTE approved Diploma Level Institutions.

3. The target groups under the scheme are unemployed youth, women, SCs/STs, Minorities, School dropouts and other disadvantaged sections of the community. The main objective of the scheme is to train the target group in need based skills/trades to make them self/wage employable and in turn enhance their social and economic status.

4. As on date, 669 Diploma Level Institutions are implementing the Scheme of Community Polytechnics. The region-wise distribution of Community Polytechnics is given below:

Northern Region	:	187
Eastern Region	:	97
Western Region	:	145
Southern Region	:	240
Total	:	669

The number of institutions state-wise is given in Annexure I

5. The main activities of Community Polytechnics are: -

a) To provide manpower training in need based, non-formal skills/trades to unemployed youth, women, SCs/STs, minorities, school dropouts and other disadvantaged section of the community to enable them to obtain gainful self/wage employment;

b) To develop and implement innovative and economical ideas for rapid adoption of the latest technology by the community in and around the Community Polytechnic (Technology Transfer);

c) To provide technical/support services to the rural community;

d) To disseminate information and create awareness regarding latest technology and its applications among the community;

e) To undertake survey for ascertaining the felt needs of the community with regard to manpower training and adoption of affordable technology by the community.

6. A Community Polytechnic works through its Extension Centers established in the villages and *one* Main Center in the premises of the polytechnic. Each Extension Center

covers 10-12 villages in its surroundings. Each Community Polytechnic trains about 500 trainees on an average, in different need based non-formal skills/trades. There is no age and qualification bar for the trainees under the scheme. The skill development under Manpower Training is imparted through short-term training courses of 03-06 months duration. However, no course fees are charged from the trainees.

7. The coverage of the Scheme has been extended to 364 Districts in the Country. Out of this 156 Community Polytechnics have been established in the 79 (out of the 91 identified) Educationally Backward Minority Concentration Districts in the Country. During the 9th Plan period about 11 lakh persons were trained in various job oriented non-formal skills/trades. In the 1st four years of the 10th plan {i.e.2002-03, 2003-04, 2004-05, 2005-06}, 2.94 lakh, 3.31 lakh, 3.42 lakh & 3.38 lakh (Total-13.06lakh) persons respectively availed of the training programmes under the Scheme. On an average some 36% of the trainees have obtained self/wage employment. The beneficiaries under manpower training include 15% SCs, 06% STs and 16% minorities. Overall the women beneficiaries are about 52.10%.

8. The scheme was reviewed twice by National level Committees in 1987 and 1996. Both the Committees opined that the Scheme is cost effective in imparting qualitative and need based training to the deprived sections of the society in employable, job oriented skills and recommended further expansion and continuation of the scheme. There has been no expansion during 10th plan period as far as number of polytechnics and number of extension centers is concerned.

Annexure I

Coverage of the Scheme of Community Polytechnics

S.No	Name of State	No. of Districts covered by CPs	No. of CPs Established/Functioning
1	Chandigarh	01	02
2	NCT of Delhi	07	14
3	Haryana	12	18
4	Himachal Pradesh	06	06
5	Jammu & Kashmir	04	11
6	Punjab	13	27
7	Rajasthan	15	21
8	Uttar Pradesh	52	72
9	Uttaranchal	10	16
10	A&N Islands	01	01
11	Bihar	10	13
12	Jharkhand	07	12
13	Orissa	09	14
14	West Bengal	18	38
15	Arunachal Pradesh	01	01
16	Assam	07	9
17	Manipur	02	03
18	Meghalaya	01	01
19	Mizoram	02	02
20	Nagaland	02	02
21	Sikkim	00	00
22	Tripura	01	01
23	Goa	02	05
24	Gujarat	18	24
25	Madhya Pradesh	33	43
26	Maharashtra	30	63
27	Chhattisgarh	09	10

28	Dadar & Nagar Haveli	00	00
29	Daman & Diu	00	00
30	Andhra Pradesh	23	65
31	Karnataka	28	75
32	Kerala	14	39
33	Tamil Nadu	25	60
34	Lakshwadeep	00	00
35	Pondicherry	01	01
	Total	364	669

SCHEME OF APPRENTICESHIP TRAINING

INTRODUCTION:

The importance of industrialization was emphasized by the Government of India in order to provide job opportunities for the vast majority of the people and to achieve economic growth. The various skills needed for the industries were identified. In order to meet the requirements of the industries, the Government of India decided to utilize the facilities available in the industries for training technicians thus the **Apprentices Act, 1961** was enacted in the Parliament during December 1961, to provide practical training to pass-outs of Industrial Training Institutes to enhance their technical competency. Central Apprenticeship Council (CAC) was created to advise the Government to formulate policies and procedures.

In pursuance of the recommendations of the Scientific Manpower Committee, the **Apprenticeship Training Scheme** for engineering graduates and diploma holders in engineering was introduced during post-independence era by the then Ministry of Education, Government of India, under a scheme which was known as **Practical Training Stipendiary Scheme (PTS Scheme)**. In this Scheme, a limited number of graduates and diploma holders in engineering / technology were placed in the industries for practical training on a monthly stipend. The PTS Scheme was purely on voluntary basis and the stipend paid to the apprentices were fully borne by the Government of India and the scheme was administered directly by Ministry of Education.

In order to provide on the job training to fresh engineering graduates and diploma holders in engineering in an organized and effective manner, four Regional **Boards of Apprenticeship Training (BOAT) / Board of Practical Training (BOPT)** were set up by the Ministry of Education and Culture, Government of India, as autonomous organizations in the year 1969. The Regional offices of the Boards are located at **Kanpur, Chennai, Mumbai and Kolkata**. After having set up the Regional Boards, the PTS Scheme was transferred to four Regional Boards, entrusting the direct responsibility and autonomy in the administration of the scheme.

➤ APPRENTICES ACT, 1961 (AMENDMENTS)

The **Apprentices Act, 1961**, was amended to bring the training of graduates and diploma holders in **engineering / technology** under its purview in 1973. The **Boards of Apprenticeship / Practical Training** were notified as authorities under the Act to implement the scheme in their respective Region and was brought into operation from the middle of **1975**. **The Chief Executive Officer of the Board is Director of Training**, who is assisted by Deputy Directors of Training and Assistant Directors of Training. They are designated as Regional Central Apprenticeship Adviser, Deputy Regional Central Apprenticeship Advisers and Assistant Regional Central Apprenticeship Advisers respectively.

Under the Provisions of the Act, it is a statutory obligation on the part of industries / establishments to engage a prescribed number of apprentices in their organizations every year on regular basis. **The Regional Central Apprenticeship**

Adviser notifies the number of Apprentices to be engaged by these establishments based on the **training facilities and technical manpower deployed** in the industry / establishment in various disciplines. **So far, 102 subject fields of engineering / technology** have been notified as designated subject fields for providing Apprenticeship Training to **graduates and diploma holders in engineering / technology**. Further, the students studying engineering / technology at graduate / diploma sandwich pattern are also provided industrial training on stipendiary basis under the purview of the **Apprentices Act**.

➤ **INDUCTION OF (10+2) VOCATIONAL PASS-OUTS UNDER THE SCHEME:**

In 1986, the Apprentices Act was further amended to bring **Higher Secondary (10+2) vocational certificate holders** under the purview of the scheme. The new category of apprentices are known as Technician (Vocational) apprentices. In addition to graduate & technician apprenticeship training, the training of **Technician (Vocational) apprentices** was also entrusted to **Regional Boards of Apprenticeship / Practical Training** under Department of Higher Education, Ministry of Human Resource Development, Government of India, **94 Subject fields** have been notified under this scheme where, in this category, apprentices are being trained.

➤ **MONITORING OF THE IMPLEMENTATION OF THE ACT:**

- Directorate General of Employment & Training (DGET), Ministry of Labour is responsible for the implementation of the Act in respect of Trade Apprentices in the Central Government Undertakings & Departments. This is done through six Regional Directorates of Apprenticeship Training located at Kolkata, Mumbai, Chennai, Hyderabad, Kanpur and 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 Higher Education, Ministry of Human Resource Development is responsible for implementation of the Act in respect of Graduate, Technicians and Technician (Vocational) Apprentices. This is done through four Boards of Apprenticeship / Practical Training, located at Kanpur, Kolkata, Mumbai and Chennai.

➤ **CENTRAL APPRENTICESHIP COUNCIL (CAC):**

- It is an apex Statutory Body. It advises the Government on laying down of policies and prescribing norms & standards in respect of Apprenticeship Training Scheme.
- It is tri-partite by constitution with members from Government both Central and State/ UTs, employers.

➤ **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 are covered under the Act.
- About 20,800 Establishments engage Apprentices.

➤ **STIPEND:**

- The period of Apprenticeship Training under the Act is one year.
- Trade apprentices are paid stipend and the expenditure on stipend is borne by the employers.
- Graduate, Technician and Technician (Vocational) apprentices are also paid stipend. The expenditure on stipend for the above-said categories is shared equally between the employers and the Central Government (Ministry of HRD). The Department of Higher Education, Ministry of HRD reimburses 50% of the stipendiary amount to the employers/training establishments through the

respective Regional Boards of Apprenticeship/Practical Training located at Kanpur, Kolkata, Mumbai and Chennai.

➤ **THE EXISTING RATES OF MONTHLY STIPEND TO GRADUATE, TECHNICIAN AND TECHNICIAN (VOCATIONAL) APPRENTICES:**

The existing monthly stipend rates as recommended by the Central Apprenticeship Council, and notified by Government of India vide Gazette Notification No: GSR 375(E) dated 18th May, 2001 are effective from 18th May 2001, which are as follows:

Sl. No	Candidate's minimum educational qualification required for being engaged as an apprentice	Category of Apprentice	Monthly Stipend
1.	Engineering Graduate	Graduate Apprentice	Rs.1970/-
2.	Sandwich Course Students of Engineering College	Graduate Apprentice (Sandwich)	Rs.1400/-
3.	Diploma Holders in Engineering	Technician Apprentice	Rs.1400/-
4.	Sandwich Course Students of Diploma Institution	Technician Apprentice (Sandwich)	Rs.1140/-
5.	(10+2) Vocational Certificate Holder	Technician (Vocational) Apprentice	Rs.1090/-

- Under the Apprenticeship Training Scheme during 9th Five Year Plan 1,92,000 apprentices (Graduate, Technician and Technician (Vocational)) were trained against the target of 1,80,000 apprentices. The target fixed for 10th Five Year Plan is to train 3,00,000 apprentices and the target achieved upto 2006-07 is 2,50,000 apprentices. The target proposed for 11th Five Year Plan is to train 3,50,000 apprentices.

**VOCATIONAL TRAINING ACTIVITIES UNDER
SMALL INDUSTRIES DEVELOPMENT ORGANIZATION (SIDO)
MINISTRY OF SSI, GOVERNMENT OF INDIA**

INTRODUCTION

Small Industries Development Organisation (SIDO) under the Ministry of Small Scale Industries (SSI), Government of India has a network of 30 Small Industries Service Institutes (SISIs), 28 Branch Small Industries Service Institutes (Br. SISIs), 4 Regional Testing Centres (RTCs), 7 Field Testing Stations (FTSs), 18 Autonomous bodies which include 10 Tool Rooms (TRs), 6 Product-cum-Process Development Centres (PPDCs) and 2 Central Footwear Training Institutes (CFTIs), spread all over the country.

2. SIDO provides a wide spectrum of services to the small industries sector. These include
 - (1) Advising the Government in policy formulation for the promotion and development of small scale industries.
 - (2) Developing human resources of SSI entrepreneurs/workers through training and skill upgradation.
 - (3) Providing techno-economic and managerial consultancy, common facilities and extension services to SSI units.
 - (4) Providing facilities for technology upgradation, modernisation, quality improvement and infrastructure of/for SSI
 - (5) Providing economic information services.
 - (6) Evolving and coordinating policies and programmes for development of SSI as ancillaries to large and medium industries.

SIDO INSTITUTIONS PROVIDING VOCATIONAL TRAINING

TOOL ROOMS

3. Ten Tool Room and Training Centres located at Aurangabad, Ahmedabad, Bhubaneswar, Guwahati, Hyderabad, Indore, Jamshedpur, Jalandhar, Kolkata and Ludhiana have been established with the objective of providing services to the Indian industries by way of precision tooling and well trained craftsmen in tool and die making. The vocational training courses offered by these tool rooms are given below. During the Xth five year plan these tool rooms have trained about 42000 trainees.

➤ Long Term Courses

- Diploma in Tool & Die Making
- Certificate Course in Machining
- Post Diploma in Tool Design and CAD/CAM
- Diploma in Mechatronics
- Post Graduate Courses in Tool Design/CAD/CAM, etc.

➤ Short Term Courses

Hi-end short term courses of varying durations are offered in the fields of:

- CNC Programming & Machining
- EDM/Wire cut
- Advance Heat Treatment Technology
- Rapid Prototyping & Reverse Engineering
- Auto CAD

- Mechatronics
- CAD/CAM
- Unigraphics
- I-Deas
- CATIA
- Solid Works
- Master CAM
- DelCAM
- Pro-E

➤ **Tailor –made Courses**

The Tool Rooms also offer tailor-made courses, as per the need of the industries.

CENTRAL FOOTWEAR TRAINING INSTITUTES(CFTIs)

4. The Central Footwear Training Institutes located at Agra & Chennai, have been set up with state-of-the-art machinery to impart training in the modern methods of footwear manufacturing. The primary objective of the institutes is human resources development in the field of footwear sector.

5. The vocational training being offered by these institutes are:-

➤ **Long Term Courses**

- Diploma Course in Footwear Design & Production Technology
- Post Diploma in Footwear Technologies
- One-year Footwear Design & Product Development Course
- One-year Advanced Footwear Technology Course

➤ **Short Term Courses**

- Certificate Course in Computer Aided Shoe Designing
- Design and Pattern Cutting
- Footwear Machine Maintenance
- Shoe Upper Clicking/Closing
- Industry - need - based Courses.

PRODUCT AND PROCESS DEVELOPMENT CENTRES (PPDCs)

6. There are six PPDCs functioning at Kannauj (Fragrance & Flavour Industry), Firozabad (Glass Industry), Meerut (Sports goods industry), Agra (Foundry Industry), Ramnagar (Electronics industry) and Mumbai (Electrical Measuring Instruments Industry). These PPDCs serve the industry through:

- Research and development in areas of dense industry cluster.
- Product design and innovation
- Product and process improvement and development of improved packaging techniques.
- Common facility centres
- Manpower development/training.

7. Vocational training programme offered by these PPDCs are in the field of:

- (i) Glass cutting and polishing
- (ii) Screen printing and hand painting on glass.
- (iii) Various disciplines of essential oil and perfumery industry
- (iv) CAD/CAM
- (v) Auto CAD/I-DEAS/Pro-E
- (vi) Machining

- (vii) Draughtsman
- (viii) Moulder (Foundry)
- (ix) Forging
- (x) Heat treatment
- (xi) Manufacturing technology for various sports goods.
- (xii) PCB Design and manufacturing
- (xiii) Microprocessor application & programming
- (xiv) PLC programming.
- (xv) Repair and maintenance of electronic equipments.
- (xvi) Computer hardware repairs and maintenance.
- (xvii) Electronic assembly
- (xviii) Diploma in applied electronics
- (xix) Post Diploma in Tool Engineering
- (xx) Post Diploma in PCB Technologies

SMALL INDUSTRY SERVICE INSTITUTES

8. The Small Industry Service Institutes (SISIs) located at State capitals and some other major towns conduct skill development training courses of six month duration in various machine shop operations. They also conduct product-cum-process oriented entrepreneurship development programmes, specialised management development programmes and various awareness programmes on industry related topics such as WTO, TQM, Energy conservation, pollution control, etc.

SALIENT FEATURES OF VOCATIONAL TRAINING PROGRAMMES OF SIDO TOOL ROOMS AND OTHER AUTONOMOUS BODIES

- ✓ The training programmes are application oriented with emphasis on hands on training.
- ✓ Exposure is given to the latest state-of-the art machinery.
- ✓ 100% placement of trainees.
- ✓ Curriculum is designed with the right mix of theory and practical.
- ✓ Tailor made courses are designed to suit industry need.
- ✓ Long range of skill upgradation programmes for ITI, Diploma and BE level candidates.
- ✓ Special capsules are designed for vacation training of Engineering students.
- ✓ Special package for school drop outs.
- ✓ Training to foreign participants in the area of Tool Engineering.
- ✓ Specially designed trainers training programme.

SIDO SERVICES FOR WEAKER SECTIONS OF SOCIETY

- ❖ Reservation guidelines for SC/ST/OBC/PH are followed in the long-term Diploma Certificate Courses. Some State Governments sponsor these candidates.
- ❖ Special job oriented training programmes for school drop-outs are being conducted.
- ❖ Free coaching sessions for weaker sections to prepare them for competitive examination for Diploma courses are being organised.
- ❖ SIDO Institutions can design & conduct part-time courses for employed persons from the weaker sections for their skill upgradation.
- ❖ Special training programmes for weaker sections are being conducted. Details of one such type of programme being conducted by IDTR Jamshedpur is enclosed.

INTERNATIONAL TRAINING PROGRAMMES BY SIDO TOOL ROOMS

SIDO Tool Rooms conduct various International Training Programmes under different bi-lateral programmes such as:

- TCS Colombo Plan
- Special Common Wealth African Assistance (SCAAP)
- Indian Technical and Economic Co- operation (ITEC)
- Aid to Srilanka.
- Technical co-operation programme between CSIR, South Africa & IGTR-
Aurangabad
- Training Programme on Plastic Mould Design at Bangladesh
- Proposed training programmes at Singapore & China
Vocational trg-SCST ((R.K. RAI))

Annexure XVIII-a

New Proposals for XI Plan

Ministry of Small Scale Industries

STATUS of SSIs

Year	Number of SSI units (lakh)			Employment lakh person engaged	Production Value (Rs. in crore)	
	Registered units	Unregistered units	Total units		Constant prices	Current prices
2002-03	15.91 (6.9)	93.58 (3.6)	109.49 (4.07)	260.21 (4.4)	210636 (7.68)	311993 (10.53)
2003-04	16.97 (6.7)	96.98 (3.6)	113.95 (4.07)	271.42 (4.3)	228730 (8.59)	357733 (14.66)
2004-05	17.53 (3.3)	101.05 (4.2)	118.59 (4.07)	282.57 (4.1)	251511 (9.96)	418263 (16.92)
2005-06	18.71 (6.7)	104.71 (3.6)	123.42 (4.07)	294.91 (4.4)	277668 (10.4)	476201 (13.85)

*(Growth Rate over the previous year in Parenthesis)

TRENDS IN GROWTH SSI & INDUSTRIAL SECTOR

Year	SSI Sector (Annual growth %)	Industrial Sector (Annual growth % includes SSI)
IX Plan		
1997-98	8.4	6.7
1998-99	7.7	4.1
1999-00	8.2	6.7
2000-01	8.2	5.0
2001-02	6.1	2.0
X Plan		
2002-03	7.7	5.7
2003-04	8.6	7.0
2004-05	10.0	8.4
2005-06	10.4	8.2

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Proposed Financials Ministry of SSI (Rs. in crore)

Sl. No.	Name of Scheme/Programme	X Plan		XI Plan	
		BE	RE	BE 2007-08	XI Plan
1.	MoSSI (Break-up)				
a.	SIDO	1669.26	1623.44	490.00	4252.00
b.	NSIC	198.95	193.95	20.00	125.00
c.	MoSSI (Proper)	86.13	67.07	20.00	546.00
d.	New Schemes	---	---	---	7172.00
	MoSSI	1954.34	1884.46	530.00	11735.00

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X PLAN BUDGET UTILISATION

(Rs. in crore)

ITEM	X PLAN		
	BE	RE	EXP.
A. SIDO	1669.26	1623.34	1596.25 (98%)
B. MoSSI (proper including NCEUS)	198.95	193.95	184.40 (95%)
C. NSIC	86.13	67.07	60.60 (90%)
Grand Total (A+B+C)	1954.34	1884.36	1841.25 (98%)

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Major Programmes of SIDO's XI Plan

X Plan:

	<u>Rs. in crore</u>
i. Approved Plan Outlay(Planning Commission)	Rs.1969
ii. Actual Allocation/Budget (Made by Finance)	Rs.1669
iii. Expenditure of (ii) above	Rs.1596 (98%)

XI Plan:

<u>Proposed Outlay</u>	<u>Rs.11039</u>
i. Normal SIDO Schemes	Rs. 1904
ii. Promotional Package Related Schemes	Rs. 1585
iii. NMCP related schemes	Rs. 863
iv. New Schemes	Rs. 6687
<u>2007-08 Annual Plan (BE)</u>	<u>Rs. 490</u>

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SIDO: Proposal Financials

(Rs. in crore)

S.No.	Scheme Group Head	BE 2007-08	XI PLAN (2007-12)	Funds likely to be utilised for SCs/STs	
				Amount	%age
I	Qualitify & Technology Support Institutions & Programmes	160.00	1860.00	744.00	40
II	Promotional Services Institutes & Programmes	30.00	390.00	156.00	40
III	a) MSME Cluster Development Programme	63.00	620.00	434.00	70
	b) MSME Growth Poles (NCEUS)	5.00	140.00	98.00	70
IV	Credit Support Programmes	208.00	1172.00	1172.00	100
V	MDA Programmes	4.00	74.00	29.60	40
VI	Upgradation of Data Base	20.00	96.00	9.60	10
VII	New Schemes		6687	4224.00	63
	Total	490.00	11039.00	6768.00	62

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XI PLAN NEW SCHEMES

S.No.	Name of Scheme	Funds required (Rs. in crores)	Funds likely to be utilised for SCs/STs	
			Amount	%age
A.	SIDO SCHEMES			
1.	District Skill Development Centres	4200	2520	60
2.	District Computer Literacy Programme	1140	1026	90
3.	Low Cost Clusters for Unemployed Youth	525	315	60
4.	Setting up/ Opening of New SISIs / Br. SISI	332	166	50
5.	Trade Fair Authority for Micro, Small, Khadi & Village Industries	194	77.60	40
6.	TV Channel for MSME Sector	11	5.50	50
7.	New Tool Rooms in Kanpur, Chennai & Agra	285	114.00	40
	Sub-total	6687	4224.10	63
B.	MoSSI SCHEMES			
1.	National Entrepreneurship Development Programme	285	57.00	20
2.	MSE-INSPIRE	100	20.00	20
	Sub-Total	385	77.00	20
	Grand-Total	7072	4416.60	62

8

District Skill Development Centres (DSDCs)

- ◆ **Proposal to set up DSDCs at ITIs in 600 districts**
- ◆ **Objectives :**
 - (a) Technical Skill Development Programmes on the lines of SIDO Tool Rooms
 - (b) Other need based programmes
- ◆ **Deliverables :** 1200 trainees per annum per centre
- ◆ **Financial Implications :**
 - I. Capital Cost* : Rs. 3,000 crore
 - II. Recurring Cost : Rs. 240 crore p.a.
 - III. Manpower Requirements : 6000 posts
- ◆ **Organizational Structure :** To be set up as autonomous bodies with Director, SISIs at New Delhi, Kolkata, Mumbai & Chennai as CEOs
- ◆ *This is the cost of machinery & equipment only. The premises would be taken from it is on rent.*

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District Computer Literacy Programme

Objective:

- 1) To impart 3 months course on computer education to SC/ST/Minorities/Un-employed youth at very low/no cost.
- 2) To give stipend to Below Poverty Line (BPL)/Out station candidates

Deliverables

Total No. of Candidates per Centre 400 per year

Total No. of Candidates in 600 Centres 2,40,000 nos. per year

Financial implication: -

- Total Fund required for computer/Training aids/overheads for 600 centres : Rs.150 crore
- Stipend to be paid to SC/ST/PH/Minorities (BPL/Out stations candidates) :190 @ Rs.500/- per candidate per programme.
- Total fund requirement towards stipend for 600 centres :Rs.6.00 crore.
- Faculty / Manpower requirement :
- (on contract basis): Rs. 12.00 lakh per year per center
- Total fund required for 600 centres : Rs.72.00 crore



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- **No. of Centres to be opened :600 (Districts)**
- **Total Fund Requirement (2007-08):228 crore**
- **XIth plan Budget requirement (2007-12):**
- **Rs.1140 crore.**
- **No. of persons to be trained in XIth Plan:**
- **12 lakh persons.**
- **The scheme may be titled as “District Computer Library Centre”. To avoid expenditure on Land & Building, the training programmes will be conducted in the premises of “District Skill Development Centres” under the administrative control of Director, SISI under their jurisdiction of the Ministry**

11

Low Cost Cluster for Unemployed Youth

- **Proposal to set up 350 clusters in backward districts/predominant Muslim population districts**
- **Objectives:**
 - Set up clusters for micro enterprises of unemployed youth on available land
 - Creation of basic infrastructure like water, power, roads etc. and any other need based infrastructure
 - Create Common Facility Centres for improved production
- **Deliverables :** 350 low cost clusters to be set up in Backward/Select (SC/ST/minority) Districts to accommodate 30-40 micro and small enterprises in each cluster.
- **Financial Implications:**

I. G.O.I contribution	Rs.525 crore (75% of total cost)
II. State Govts./UTs Contribution	Rs.105 crore (15% of total cost)
III.Implementing Agencies	Rs. 70 crore (10% of total cost)
Total	Rs. 700 crore

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Setting-up of new SISIs / Br. SISIs

➤ **Components:**

Opening of 19 SISIs and 43 Br. SISIs for promotion and development of SSIs in rural /backward areas.

➤ **Deliverables:**

Assistance to unemployed youth & prospective /existing entrepreneurs through programmes like EDPs, MDPs, SDPs, Motivational Campaigns etc and skill development programmes to set up micro enterprises.

Preparation of District Industrial Survey Reports & Project Reports.

Common Facility services, including Intensive Technical Assistance to SSIs.



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➤ **Manpower requirements:**

Director / Dy. Director / Asstt. Director – 364 Nos.

OS / UDC/ LDC/ Steno/Worker – 821 Nos.

Helpers /Drivers / Watchman, etc. – 426 Nos.

Total = 1611 Nos.

➤ **Budget requirements:**

➤ **Non-recurring**

for 19 SISIs & 42 Br. SISIs -

(i) Land & construction of building
@ Rs. 300 Lakh per Institute 61 X 300 = Rs. 18300 Lakh

(ii) Purchase of machinery
@ Rs. 200 Lakh per Institute 61 X 200 = Rs. 12200 Lakh

(iii) Office Expenses & Misc. – 61X10 = Rs. 610 Lakh

➤ **Recurring**

for 19 SISIs & 42 Br.SISIs -

@ Rs. 28.5 lac per Institute/Per Annum. = Rs. 2050 Lakh

Total = Rs. 33160 Lakh

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Trade Fair Authority for Micro, Small, Khadi & Village Industries

Objective of the Scheme:

- Ensure Joint & Impressive Participation of SIDO, KVIC, NSIC & Coir Board in Domestic/International Trade Fairs/Exhibitions
- To facilitate of Participation by Micro, Small, Khadi & Village Industries in Domestic/International Trade Fairs/Exhibitions
- Provide marketing opportunities to Micro, Small, Khadi & Village Industries

Components:

- Establishment of Trade Fair Authority
- Construction of Permanent Exhibition Ground/Halls in National Capital and 28 State Capital for Domestic Fairs
- Joint Participation of all SSI&ARI organisations in 20 International and 45 National/ Regional Trade Fairs/Exhibitions per annum



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Budget Requirements :

Rs. in crore

Non Recurring:

- | | | | |
|--|---|--------|----------|
| • Construction of Exhibition Hall in 29 Cities | | | |
| @ Rs. 20.00 crore for New Delhi | : | 20.00 | |
| @ Rs. 5.00 crore for 28 State Capitals | : | 140.00 | |
| • Furniture, Fixture, Office Components Etc. | : | 2.00 | : 162.00 |

Recurring (For Five Years):

- | | | | |
|---|---|--------|--|
| 1. Participation in Domestic/International Trade Fairs/Exhibition | | | |
| @ of Rs. 5.00 crore per Year | : | 25.00 | |
| 2. Man Power & Provision of Technical/Marketing Services | : | 5.00 | |
| @ Rs. 1.00 crore per Year | : | 1.75 | |
| 3. Other Recurring Expenditure(Office Expenditure, Transportation etc.) | : | 0.25 | |
| 4. Maintenance of Exhibition Hall | : | 194.00 | |
| TOTAL | : | | |

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TV CHANNEL FOR MSMEs SECTOR

OBJECTIVE:

- Disseminating information regarding SSI/ARI schemes and facilities.
- Imparting entrepreneurial & skill training to unemployment youth over electronic media.
- Connecting micro enterprises with state-level, national-level and international-level developments, that may be of use to them.
- Assisting micro enterprises in marketing their products to reach out to remote areas.
- Informing the large urban consumer base of the products available from village and micro enterprises.



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BUDGET (Estimates)	<u>Rs. in crore</u>
<u>RECURRING (per annum)</u>	
➤ Software's Production	30.00
➤ Establishment Cost	3.00
➤ Operational Cost	3.00
➤ Consumable & Other office expansions	5.00
Total	41.00
<u>NON-RECURRING</u>	
➤ Production and Transmission Equipment,	
➤ Postproduction Equipment	
➤ Archiving facilities	
➤ Up Linking Equipment	
➤ Field Production facilities	
➤ Accommodation & Air Conditioning	65.00
Total	106.00
<u>MANPOWER (Nos.)</u>	
➤ ENGINEERES & TECHNICIANS:	45
➤ PROGRAMME PRODUCTION STAFF:	75
➤ ADMINISTRATION/MAGEMENT:	10
Total	130

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Tool Room & Training Centres (SIDO Tool Room Pattern) (XI Plan Scheme)

- Proposal to set up 3 SIDO Type Tool Rooms at Kanpur, Agra & Chennai
- **Objectives :**
 - (a) Technical Skill Development Programmes
 - (b) Support for Tools, Dies, Moulds, Jigs & Fixtures
- **Financial Implications :**
 - I. Capital Cost : Rs. 80 crore per Tool Room
(Rs. 240 crore for 3 Tool Rooms)
 - II. Recurring Cost : Rs. 3 crore p.a. per Tool Room
(Rs. 45 crore for 3 Tool Rooms)
 - III. Manpower Requirements : 125 posts per Tool Room
(375 posts for 3 Tool Rooms)
- **Organizational Structure :** To be set up as autonomous bodies as registered societies

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National Entrepreneurship Development Programme (NEDP)

- A new scheme, National Entrepreneurship Development Programme (NEDP), to be launched (after consolidating and merging the existing schemes), to provide entrepreneurship development training to unemployed youth to turn them into potential entrepreneurs.
- To empower the disadvantaged sections of society (SC/ ST/ Minority/ Handicapped/ Women), at least 30% of the EDP trainees would be from these categories, who would also be paid stipend @ Rs. 500/- per month during training.
- During XI plan period it is proposed to provide ED training to 500,000 first generation entrepreneurs for setting up new micro and small enterprises with a total plan outlay of Rs. 285 crore.

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MSE - INSPIRE

- It is proposed to launch a new scheme – Micro and Small Enterprises – Initiation, Support, Promotion, Integration, Revitalization and Empowerment (MSE – INSPIRE) to provide post EDP/SDP handholding support to 200,000 first generation entrepreneurs (30% from disadvantaged sections) in establishing and managing their enterprises.
- The new scheme would also provide assistance for capacity building the of various agencies/ industry associations etc. to enable them to participate in the process of enterprise development, promotion, management and performance of regulatory functions.
- The total proposed outlay for this scheme for the XI plan period is Rs.100 crore.

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SCHEMES UNDER SIDO PROMOTIONAL PACKAGE

(Rs. in crore)

S. No.	Name of Scheme	Proposal for XI Plan
1.	Augmentation of Portfolio Risk Fund/Micro Finance	143.32
2.	Estbalishment of Risk Capital Fund	100.00
3.	Credit Guarantee Trust Fund	930.75
4.	4 FPI/TPDCs (Training/Product Development Centres)	3.75
5.	Cluster Development Programme	240.00
6.	Strengthening of two existing CFTIs	2.00
7.	ISO 9000	80.00
8.	Promotion VSBK Technology in Brik Manufacturing	1.07
9.	Establish Technology Mission to Assist MSMEs	3.00
10.	20% EDPs for Weaker Sections	0.84

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Contd.

S. No.	Name of Scheme	Proposal for XI Plan
11.	Assist some Mgmt/Technical Colleges, to Conduct Tailor-made Courses	3.00
12.	Assist 5 Univ./ Colleges to run 1200 Entrepreneurial Clubs	15.00
13.	Empowerment of women owned Enterprises- Participation in Twenty Five Exhibition & Marketing Facilities	6.00
14.	Collection of Statistics in Information on MSME through annual sample survey, Quinquennial census	50.00
15.	Build Capacity & Strengthen Database & Associations	6.00
Total		1484.73

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**NATIONAL MANUFACTURING COMPETITIVENESS
PROGRAMME (NMCP) SCHEMES**

S. No.	Name of Scheme	Proposal for XI Plan (Rs. in crore)
i	Application of Lean Manufacturing	300.00
ii	Design Clinic Scheme	41.00
iii	Promotion of ICT in Manufacturing sector	100.00
iv	Setting up Mini-Tool Rooms on PPP Mode	135.00
v	Technology & Quality Management support for SMEs	93.50
vi	Entrepreneurial & Management development of SMEs	66.50
vii	Encourage Quality Management Standards and Quality Technology Tools	50.00
viii	National Campaign for investment in Intellectual Property	50.00
ix	SMEs & Technology Up- gradation Activities	26.50
x	Marketing Support / Assistance to SMEs (Bar Coding)	1.16
Total		863.66

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SIDO: Annual Plan 2007-08 & XI Plan 2007-12

(Rs. in crore)

S. No.	Schemes/Programmes and Activities covered	BE 2007-08	XI Plan (2007-12)
A. SIDO			
I. Quality & Technology Support Institutions & Programme			
1	Tool Rooms & Tech. Institutions	49.23	300
2	Credit Link Capital Subsidy Scheme	85.00	730.00
3	ISO 9000/14001 Reimbursement	10.00	80.00
4	ISO 9000/14001 Awareness		
		Energy Conservation Programme	0.02
5	NMCP (Lean Mfg., MTR, ICT, Tech&Qty. Management Supt., Design Clinic, Enabling Mfg. Sector Compt. thru Qlty Mgt, Mktg Asst/SMEs)	15.00	746.00
6	Package (VSBK & Technology Mission)	0.75	3.97
Sub Total		160.00	1860.00

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SIDO: Annual Plan 2007-08 & XI Plan 2007-12

(Rs. in crore)

S. No.	Schemes/Programmes and Activities covered	BE 2007-08	XI Plan (2007-2012)
II Promotional Services Institutes & Programmes			
1	SIDO Officers' Training Programme	0.50	3.00
2	SISIs (includes provision for Workshops/ Trg.)	5.00	42.00
3	RTCs/FTSs/Testing Centres by Industry Associations	4.00	60.00
4	MDP/EDP/Skill Development	6.42	126.00
5	National Award (EDP & QP)	1.60	21.00
6	Sub-contract Exchange for Ancillary Development	1.15	7.00
	Vendor Development Programme for Ancillarisation		

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SIDO: Annual Plan 2007-08 & XI Plan 2007-12

(Rs. in crore)

S. No.	Schemes/Programmes and Activities covered	BE 2007-08	XI Plan (2007-2012)
7	Scheme for Conduct of Tailor made courses for new entrepreneurs through select business Schools, Technical Institutes, etc. (Package)	0.65	9.00
8	Scheme to support 5 select universities/colleges to run 1200 entrepreneurs clubs. (Package)	1.13	22.00
9	Scheme for capacity building, strengthening of data base and advocacy by industry/enterprises associations. (Package)	1.30	25.00
10	Land & Building for Office accommodation and residential accommodation in backward areas.	2.20	23.00
11	Training-cum-product Development Centre,TPDCs. (Package)	0.80	4.00
12	Advertising & Publicity	2.25	19.00
13	SENET Project	2.00	21.00
14	Publicity & Exhibition	1.00	7.00
Sub Total		30.00	390.00

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SIDO: Annual Plan 2007-08 & XI Plan 2007-12

(Rs. in crore)

S. No.	Schemes/Programmes and Activities covered	BE 2007-08	XI Plan (2007-2012)
III	MSME Cluster Development & MSME Growth Poles Programme		
1	Cluster Development (SICDP) (General) (Including IID subsumed)	63.00	620.00
2.	MSME Growth poles of NCEUS (Special)	5.00	140.00
Sub Total:		68.00	760.00
IV	Credit Support Programme		
1	Credit Guarantee Scheme (General)	190.00	931.00
2	Augmentation of PRF/RCF Micro Finance Programme-General (Package)	17.00	234.00
Sub Total:		208.00	1172.00
V	Marketing Development Assistance Programme		
1	Export Promotion & MDA Scheme	1.40	23.00
2	National Campaign for Investment in Intellectual Property (NMCP)	2.50	50.00
3	Marketing Support/Assistance to SMEs, (NMCP)	0.10	1.00
Sub Total:		4.00	74.00

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SIDO: Annual Plan 2007-08 & XI Plan 2007-12

(Rs. in crore)

S. No.	Schemes/Programmes and Activities covered	BE 2007-08	XI Plan (2007-2012)
VI	Upgradation of Data Base		
1	Collection of Statistics	5.50	41.00
2	Collection of Statistics (Census, Annual Surveys, Sample Surveys, Studies etc.) (Package)	0.00	15.00
3	Quinquennial Census.(Package)	14.50	40.00
Sub Total:		20.00	96.00
New Schemes			6687.00
Total (SIDO)		490.00	11039.00

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NSIC: Annual Plan 2007-08 & XI Plan 2007-12
(Rs. in crore)

S.No.	Schemes/Programmes and Activities covered	Annual Plan 2007-08	XI Plan 2007-12
B.	National Small Industries Corporation (NSIC)		
I	Investment (Share Capital)	0.00	0.00
II	Other Grants		
a	Performance & Credit Rating of Small Scale	10.00	53.00
b	Technology Business Incubators	0.00	5.00
c	Small Enterprises Establishment Programme	0.00	20.00
III	Marketing Assistance Scheme	10.00	72.00
	Sub Total (NSIC)	20.00	150.00

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MoSSI: Annual Plan 2007-08 & XI Plan 2007-12
(Rs. in crore)

S.No.	Schemes/Programmes and Activities covered	Annual Plan 2007-08	XI Plan 2007-12
C.	Other Schemes of MoSSI		
	Ongoing Schemes	12.50	161.00
I	Surveys, Studies & Policy Research	0.50	5.00
II	Training Institutions	5.00	140.00
III	International Cooperation	2.00	11.00
IV	National Commission for Enterprises in the Unorganised Sector (NCEUS)	5.00	5.00
	New Schemes in XI Plan	7.50	385.00
V	National Entrepreneurship Development Programme (NEDP) [New Scheme]	0.00	285.00
VI	Micro and Small Enterprises - Initiation, Support, Promotion, Integration, Revitalisation and Empowerment (MSE-INSPIRE) [New Scheme]	7.50	100.00
	Sub-total - Other Schemes of MoSSI	20.00	546.00
	Total (B+C)	40.00	696.00
	Grand Total	530.00	11735.00

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SIDO XI PLAN SCHEMES:

- ❖ Regrouping done under 6 Major Heads.
- ❖ Details of the Schemes/Programmes implemented by the Ministry of SSI at present being weeded out/subsumed.

Sr. No	Name of the Existing Scheme/ Programme	X Plan Expend. (Rs in crore)	Name of the Scheme in which BEST ELEMENTS only are to be subsumed
1	Infrastructural Development of SSI in rural areas.(IID)	79.76	Micro and Small Enterprise Cluster Development Programme (after renaming the SICDP).
2	"Mini Tool Rooms & Training Centres " (in the State sector) component of the Scheme for Tool Rooms.	22.40	Proposal of Mini Tool Rooms in the PPP mode under the National Manufacturing Competitiveness Programme.
Name of the Existing Schemes being WEDED out			
3	Sub-contracting Exchange for Ancillary Development (except the Vendor Development Programme).		
4	"Upgradation of SIDO Workshops into Mini Tool Rooms" Component of the scheme for Promotion of Small Scale Industries.		
5	"Testing Centres by Industries" component of the scheme "Testing Centres".		
6	"Energy Conservation Programme " component of the scheme for Technology Upgradation.		

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Brief Report on Baroda Swarojgar Vikas Sansthan

GENESIS

It is an established fact that proper training coupled with hand holding of under developed people specially weaker section and women empowers them to be master of their own destiny. With proper follow up and guidance they can be motivated to act on their own for their socio-economic emancipation. No scheme of financing and providing subsidy shall be successful unless the mind set of beneficiaries is prepared for managing change in their lives and culture. It is with this in view, Bank of Baroda has set up "Baroda Swarojgar Vikas Sansthan" , an institutional model of training the youth and goading them to self employment. For the institutional frame work of promoting self employment and rural development, Baroda Swarojgar Vikas Sansthan(BSVS) is registered under Societies Registration act of 1860 and under Bombay Public Trust Act, 1950 in December, 2003. Sansthan is solely promoted by Bank of Baroda and has registered office in the premises of Bank of Baroda Staff College, Ahmedabad.

MISSION AND OBJECTIVE OF THE BSVS

The Mission of the Sansthan will be channelising youth power in wealth creation through entrepreneurship Development and empowering rural population to share the economic progress equitably.

The Objectives of the Institute will be as under:-

- To train youth and impart to them the knowledge and skills required for taking up self-employment ventures.
- To train youth to develop the aptitude for working in rural areas, in rural development projects etc.
- To assist trained youth in self-employment and prepare them for obtaining credit facilities from banks and from other financial institutions and to assist them in setting up their ventures successfully.
- To open training centres anywhere in the coutry for the aforesaid purpose whenever it is found necessary.
- To conduct various training programmes (independently or in collaboration with other organizations connected with rural technology and rural development).
- To provide expert guidance and assistance to the institutions/organizations/individuals whenever required.
- To provide counseling and consultancy, guidance and render all possible help to the youth in the field of self-employment and rural development.
- To take up research and development activities in the area of self-employment and rural development.

To carry on training and other activities, BSVS has opened five training centres in India namely at Jaipur, Lucknow, Gandhinagar, Surat and Theur(Pune), Godhara, Ajmer, Amethi upto December 2006. Criterion for identification of centres lies where Bank of Baroda has large rural/semi-urban network. A roadmap for 5 years has been drawn for opening of more number of BSVS units.

TRAINING METHODOLOGY

Sansthan plans to conduct training in all three areas i.e. Industry, Service and Buisness to create first generation entrepreneurs. Sansthan also conducts training programmes on general EDPs for PMRY and has plans to expand training activities in other Government Sponsored Programmes. BSVS considers the potential and demand of training in the area of operation before launching a training programme. Selection of candidates is done by conducting Entrepreneurship Awareness Programme and short interviewing. All these training programmes are short duration intensive courses ranging from 6 days to 30 days. The trainings at BSVS are **fully residential and completely free of cost**. However, no stipend is paid to participants. Approach for training is holistic i.e. strengthening scientifically and systematically in Knowledge, Skill and Attitude. While scheduling time table, there is no holiday/s provision. We inculcate habits in the participants like early getting up, cleaning their residential premises, doing prayer in the morning, writing daily their experience of previous day learning. Classes are divided into 4 sessions. One session each day is dedicated to Attitude area where behavioral and motivational inputs are given. Rest 3 sessions of the day are for technical inputs and practicals. Participants practice till late evening under guidance and supervision of Master trainer. Revised curricula on PMRY EDP as approved last year by Ministry of ARI is taken as basis for designing course and giving inputs for entrepreneurial development. Adult learning methodology is adopted whereby we look at each participant's active participation and involvement.

FOLLOW UPS

Sansthan gives ESCORT services for a minimum period of 2 years after training. Follow up with the trainees is done through correspondence after training to ensure sense of belongingness and confidence building. Their names are sent to the bank branches situated in their area of operation for financial linkages if required. Sansthan also contacts them by way of arranging follow up meetings and also individually visiting their place. In case of failure of the candidate to get self-employment, reasons are analysed and remedial measures initiated wherever possible.

PERFORMANCE OF BSVS(SEVEN UNITS) - SEPTEMBER,2006

SN	AREA	UPTO SEPTEMBER 2006
1	NO. OF PRGs CONDUCTED	218
2	NO. OF TRAINEES	4,929
3	SETTLED IN JOB /SELF EMPLOYMENT	2,085
4	BANK FINANCE (LINKAGE)	682
5	LOAN AMOUNT (IN LACS)	344

PERFORMANCE OF JAIPUR CENTRE

SN	AREA	MARCH 2006	Feb.-2007
1	NO. OF PRGs CONDUCTED	33	52
2	NO. OF TRAINEES	875	1,347
3	SCHEDULED CASTE & SCHEDULED TRIBE	245	345
4	OTHER BACKWARD CLASSES	323	435
5	GENERAL CATEGORY	307	567
6	NUMBER OF WOMEN TRAINEES	128	329
5	SETTLED IN JOB /SELF EMPLOYMENT	495	756
6	TRAINEES LINKED WITH BANK FINANCE	409	561

Besides vocational skill based programmes in 10 activities, sansthan conducted Entrepreneurship Development Programmes under PMRY programmes for Jaipur, Tonk, Sawai Madhopur and Dausa district applicants. Sansthan also conducted 12 programmes exclusively for women. BSVS also conducted 11 customised programmes for Bank of Baroda sanctioned PMRY applicants.

Feedback from many sources like District Industries Centres, Branch Managers, Parents of trainees and trainee himself has been quite encouraging in terms of his/her Knowledge and Skill growth and also attitudinal changes. Attitudinal changes has contributed to improved recoveries and also utilisation of resources more effectively for business development. Based on success in PMRY EDP, we intend to add two more target groups i.e. SGSY, SHGs for trainings in third year of operation(2006-07). Corporate office has also advised to impart trainings under these area. These efforts will double the training targets to **1400 participants**(almost double as compared to 2005-06). Initiatives have been taken based on communications received from Corporate office for Sponsored programmes. Interactions made by us with Couple of organisations in Government/Developmental sectors will result reimbursements of the programme cost(sponsorship) in minimum of 15 programmes. We received appreciation from dignitaries when they visited our Institute and/or interacted with the trainees. Credit goes to structured and quality inputs given in a holistic way to the trainees and the timely guidance and support from executives of Bank of Baroda, promoter of the Sansthan. We shall make all needed rededicated efforts in achieving challenging targets in next year.

BSVS, JAIPUR
DATED: 28.03.2007

SWARNA JAYANTI SHAHARI ROZGAR YOJANA (SJSRY)

With a view to provide gainful employment to the urban unemployed or underemployed through encouraging the setting up of self-employment ventures or provision of wage employment, a new urban poverty alleviation programme, namely, Swarna Jayanti Shahari Rojgar Yojana (SJSRY) was launched on 01.12.1997 after subsuming the earlier three Urban Poverty Alleviation Schemes, namely Urban Basic Services for the Poor (UBSP), Nehru Rojgar Yojana (NRY) and Prime Ministers Integrated Urban Poverty Eradication Programme (PMI UPEP).

SJSRY Scheme is being implemented through State/UT Governments and it is funded on a 75:25 basis between the Centre and the States.

Swarna Jayanti Shahari Rojgar Yojana (SJSRY) consists of two major components, namely-

- (i) The Urban Self Employment Programme (USEP)
- (ii) The Urban Wage Employment Programme (UWEP)

THE URBAN SELF EMPLOYMENT PROGRAMME (USEP):

This Component of SJSRY has three distinct parts:

- (i) Assistance to individual urban poor beneficiaries for setting up gainful self-employment ventures.
- (ii) Assistance to groups of urban poor women for setting up gainful self-employment ventures. This sub-scheme has been titled as "The Scheme for Development of Women and Children in the Urban Areas (DWCUA)".
- (iii) Training of beneficiaries, potential beneficiaries and other persons associated with the urban employment programme for upgradation and acquisition of vocational and entrepreneurial skills.

COVERAGE

- The programme is applicable to all urban towns in India.
- The Programme is implemented on a whole town basis with special emphasis on urban poor clusters.
- This Programme targets the urban poor, as those living below the urban poverty line, as defined from time to time by the Planning Commission.
- Since the 10th Plan, *annual targets* of assisting urban poor for setting up individual/group micro-enterprises and providing skill training to the urban poor is being fixed (Central level as well as State-wise), under the Scheme, in commensurate with the Budget allocation.
- Special attention is given to **women, persons belonging to Scheduled Castes/Tribes, disabled persons** and other such categories as may be indicated by the Government from time to time.
- The percentage of **women beneficiaries** under this programme should **not be less than 30%**. All other conditions being equal, women beneficiaries belonging to women-headed household, viz., widows, divorcees, single women, or even households where women are the sole earners are ranked higher in priority.
- **SCs and STs** must be benefited **at least to the extent of the proportion of their strength in local population**.
- A provision of **3%** should be **reserved for the disabled**.

- Under the Prime Minister's New 15-Point Programme for the welfare of Minorities, **15%** of the physical and financial targets regarding assistance for micro-enterprises and skill training under SJSRY have to be earmarked for the **minority communities**.
- There is no minimum educational qualification for beneficiaries under this programme. However, to avoid an overlap with the Prime Minister's Rozgar Yojana (PMRY), *for self employment component*, this scheme is not applicable to the persons educated beyond the **IXth standard**.
- A house-to-house survey for identification of genuine beneficiaries is prescribed. Non-economic parameters are also applied to the urban poor in addition to the economic criteria for the purpose of prioritization within the BPL.

A. Setting up Micro –Enterprises (individual)

Eligibility

- *Annual family income of less than Rs. 11850/- at the 1991-92 prices.*
- *Must be residing in the town for at least three years.*
- *Should not be a defaulter to any Nationalized Bank/Cooperative Bank*

Project Details

Maximum unit cost	=	Rs. 50,000/-
Subsidy	=	15% of the project cost subject to maximum of Rs. 7500/-
Margin money to be contributed by the beneficiaries	=	5% of the project cost

B. Skill Training

Training cost per person	=	Rs. 2000/-
Training period	=	Two to Six months subject to minimum of 300 hours
Tool Kit worth	=	Rs. 600/-

C. Development of Women and Children in Urban Areas (DWCUA):

- DWCUA aims at helping groups of urban poor women in taking up self -employment ventures.
- The group may consist of at least 10 women.
- The ceiling of subsidy under the scheme is Rs. 1.25 lakh or 50% of the cost of the project whichever is less.

D. Thrift & Credit Society (T & CS)

Where the DWCUA group sets itself up as Thrift & Credit Society, in addition to its self employment ventures, it will be eligible for an additional grant of Rs. 25,000 as revolving fund at the rate of Rs. 1,000 maximum per member. The fund is meant for purposes like purchases of raw materials and marketing, infrastructure support, one time expense on child care activity, expenses upto Rs. 500 on travel cost of group members to bank, payment of insurance premium for self/spouse/child by maintaining savings for different periods by a member and any other expense allowed by the State in Group's interest. The revolving fund can be availed by a Group only after one year of its formation.

E. Infrastructure Support

Special assistance may be provided for setting up of community seva kendras which could be used for multifarious activities such as work places/marketing centres etc. for beneficiaries under this programme.

THE URBAN WAGE EMPLOYMENT PROGRAMME (UWEP):

- (i) This component seeks to provide wage employment to prospective beneficiaries living below the poverty line within the jurisdiction of urban local bodies by utilizing their labour for construction of socially and economically useful public assets.
- (ii) Under this component, there are no restrictions on educational qualifications.
- (iii) This programme is implemented only in the urban local bodies having population less than 5 lakh as per the 1991 Census.
- (iv) The material labour ratio for construction works under this component is to be maintained at 60:40.
- (v) The prevailing minimum wage rate, as notified from time to time for each area, has to be paid to beneficiaries under this component.

ASSISTANCE FOR COMMUNITY STRUCTURES (CS) :

The successful implementation of the Swarna Jayanti Shahari Rozgar Yojana (SJSRY) relies on establishing and promoting community organisations and structures to provide supporting and facilitating mechanism for local development. Towards this end community organisations like Neighbourhood Groups (NHGs), Neighbourhood Committees (NHCs) and Community Development Societies (CDSs) will be set up in the target areas. Financial assistance will be provided to these community structures for effective implementation of the programme and also for their social activities of community empowerment.

INFORMATION, EDUCATION AND COMMUNICATION (IEC)

With a view to play an effective role in coordination and in organising training, monitoring, evaluation, dissemination of information etc. the component of IEC has been evolved under SJSRY. It seeks to provide a coordinated and uniform level of training across the country for training of trainers, elected representatives, functionaries of Urban Local Bodies and field functionaries like Project Officers, Community Organizers etc. through National Training Institutes and selected State Training/Field Training Institutes.

**REPORT ON HRD INITIATIVES
BY
CONSTRUCTION INDUSTRY DEVELOPMENT COUNCIL**

1. Preamble :

As the second largest economic activity, (Present annual expenditure - Rs. 320,000 crore) Construction Sector employs, around 31 million citizens for the development of its Physical Infrastructure. A major portion of this workforce (Almost 83%) possesses varying degrees of professional skills, being bereft of any structured formal training and also due to absence of a credible skill certification system. No training facilities, absence of standard skill benchmarks, and little or no institutional / regulatory support has resulted in this indifferent condition.

The net resultant is low productivity, poor quality of the product, and infructuous expenditure in building the assets in the Nation. For the sustained growth of economy, need of the hour is to build good quality physical infrastructure, which could only be achieved through a competent and skilled work force.

Construction Industry Development Council, was established by the Planning Commission, Govt. of India and the Construction Industry in the year 1996, to facilitate streamlining the functioning of Construction Industry and has, since inception, initiated working on the subject issue. Whereas, the task is onerous and huge, (To train, test & certify the skills of the workers spanning all over the Nation and numbering over 26 million), the models, processes, systems, and the pilot projects initiated by CIDC have shown very positive and encouraging results.

2. Present Scenario and Demands

Referring to the Chapter on Construction, 11th National Plan following scenario emerges.

Whereas the numbers of employed personnel are growing steadily, it is noteworthy to mention that there has been a substantial decline in the value added employment which is evident from following table.

Occupation	Numbers (in 000s) (1995)	%	Numbers (in 000s) (2005)	%
Engineers	687	4.71	822	2.65
Technicians & Foreman etc.	359	2.46	573	1.85
Clerical	646	4.40	738	2.38
Skilled Workers	2,241	15.34	3,267	10.57
Unskilled Workers	10,670	73.08	25,600	82.45
Total	14,600	100.00	31,000	100.00

Source { 1995 Census - NICMAR
2005 Census - CIDC } - Contract Labour in the Construction Industry in India - K.N. Vaid

Further, it is estimated that, during the course of 11th Plan, substantial work on several sub-sectors Housing, Railways, Power Generation, etc. would be executed.

In fact identifying only some of the major initiatives and estimating the envisaged investments therein, give us an idea of target work load which would need to be executed to meet the planned National Growth.

		(Rs. Crores)
i) Roads, Rail, Civil Aviation, Marine Transport, Power Generation, Water Supply & Irrigation etc.		14,50,00
ii)	Private investment in Roads	: 34,000
iii)	Express way development (Modernisation / Upgrading of Highways)	: 220,000
iv)	Railways (Public)	: 180,000
v)	Railways (Private)	: 120,000
vi)	Civil Aviation	: 40,000
vii)	Ports (Private)	: 50,000
viii)	Freight Corridor	22,000
ix)	Power Generation	: 420,000
x)	JNNURM	: 60,000
xi)	Housing	: 150,000
xii)	Others	: 160,000
(Excerpts from the speech of Prime Minister of India)		

This, however, is only partial list and does not account for other sectoral work specially from Private Sector (Industry and others)

Needless to mention, this work load, if to be executed during 11th Plan period, would need delivery potentials of Construction Industry to rise by 33 % at least and therefore the requirements of skilled Human resources.

A gross estimate of the requirements of resources is given below :

	Manpower	:	92 million man years
	- Engineers		3.72 million man years :
	- Technicians		4.32 million man years :
	- Support Staff		3.65 million man years
	- Skilled Workers		23.35 million man years
	- Unskilled/ Semi-skilled workers		56.96 million man years

These resources would be required over next 6 years.

3. Present Initiatives being taken

The objective, to meet the projected demands, can only be achieved through synergy of various agencies both within the Government and outside.

As an autonomous, quasi organization, having wide range participation, CIDC has been able to act de-facto as the "nodal organization" facilitating creation and operation of a workable network of all stake holders; which are

- a) Government (State / Central) : Providing Infrastructure and Physical regulatory support.

- b) Institutes / Universities : Providing Academic & Pedagogy related support including Certification & Testing support.
- c) Industry : Providing inputs for designing training modules, employing and training the learners.

At present, apart from the Union Government, four State Governments (Rajasthan, Bihar, Haryana & M. P.), one National University (Indira Gandhi National Open University), Four State Universities, and almost 79 major Construction Companies, apart from three Industry Associations are working together with CIDC to nurture this programme, which is primarily self financing. Association with National Institute of Open Studies and the DGET, Ministry of Labour, Govt. of India, are on anvil, to enable this initiative to expand further.

So far, 50,000, Construction Workers from over 47 trades have been trained, tested & certified for their skills, using 29 major nodes spread through out the four states mentioned above.

4. Training Methodology, Infrastructure

Keeping in view, the migratory nature of Construction Workers, the training modules have been designed on Open Learning & Distant mode of education Pedagogy.

The training modules have been designed, seeking active participation & involvement of Industry Constituents, and also in the testing & certification, process.

The four state Governments, have supported this initiative by providing the Physical Infrastructure (The ITI's situated in their States - 29 Nos.)

5. Issues & their resolution to Spur the development of Human Resources

- a) **Financial Support** — At present these programmes are self financing in nature and can only be expanded at a limited pace. A centrally sponsored scheme to enable provision of fund based support to meet the expenditure for capital equipment, Training of Trainers, & publicising and dissemination of information, would enable to step up geometrically, the availability of skilled personnel.
- b) **Tax Structure** — Incentives, such a applicable under Section 35AC of IT Act should be amplified to enable Industry to consider investing in such ventures.
- c) **Identification of a Nodal Execution Agency** — **It would further the cause immensely, if a nodal execution Agency be identified for expanding and propagating this initiative.**

CIDC being actively involved in this field, could be considered as the nodal agency and all concerned Government departments be advised to render support to them.

While on the subject, it would also be a very useful to seek mandatory engagent of certified skilled personnel on all works contracts being executed by PSUs and Government agencies, to enhance the demand of such personnel.

**NOTE ON STRATEGY TO MEET THE FINANCIAL REQUIREMENTS TO
DEVELOP THE HUMAN RESOURCES**

1. Preamble

As per the current estimates, the numbers of semi skilled personnel is approximately 13 million (considering only 50% strength) and the balance are totally unskilled. Also, due to attrition, an additional requirement of approximately 0.5 million / p.a. is added.

Keeping in view, the Industry need of emergent nature, the minimum number of personnel to be trained, tested & certified is approximately 1 million per year (More would be welcome!).

At the present day price levels, this would entail an annual expenditure (on training alone) of Rs. 1200 crore. (@ Rs. 1200 / learner / Trade).

It is proposed that, following should be the sharing pattern for initial 4 years.

		FY I	FY II	FY III	FY IV
a)	Government -	40%	30%	20%	10%
b)	Industry -	50%	40%	30%	30%
c)	Learner -	10%	30%	40%	60%

It is anticipated that with the growing demands and higher wages the learner would be able to bear larger share of expenditure. The hand holding support by the Government and employer could certainly continue in subsequent year.

2. Sources of funding

- (I) Proceeds of cess for Construction Workers Welfare
- (II) Provident Fund proceeds of the share of Construction Workers
- (III) Other Plan Schemes

MEMORANDUM OF UNDERSTANDING

This memorandum of understanding is entered into between Construction Industry Development Council having their registered office at Hemkunt Chambers, 89, Nehru Place, hereinafter called the First Party (which includes its authorized assignees and successors) and Directorate General of Employment & Training, Ministry of Labour & Employment, Government of India and having their office at Shram Shakti Bhavan, Rafi Marg, New Delhi, hereinafter called second party (which includes its authorized assignees and successors).

Whereas, the first party is an organization, set up by the Planning Commission, Government of India and the Indian Construction Industry with an objective to streamline the functioning of Indian Construction Industry, and is the Apex representative organization having active participation of several constituents of Indian Construction Industry including the Second Party, and has evolved several products, and facilitate inter-alia setting up of several institutions, to enable Indian Construction Industry acquire the status as a vibrant global entity.

And, the second party, is a Government Department of the Ministry of Labour & Employment, Government of India, as a Prime Department to inter-alia meet the training and employment requirements of the nation, with a focus on the vocational training, and has, in order to fulfill its main mandate, enabled facilitating Construction Industry through introduction of, Human Resource Development, Good Work Practices and several other activities.

Recognizing the vital role of Infrastructure development in the National Economic Development & creation of employment opportunities, and keeping in view the common activities, both parties have decided to cooperate to synergize the work being done by them, and have, therefore, decided to enter into this memorandum of understanding.

The vital elements of this Cooperation are detailed as under:

1. Both the parties recognize the need of synergy to accomplish their respective mandated objectives.
2. Both the parties agree to work jointly, directly and / or through their authorized assignees / successors.
 - a. To evolve and develop the policy framework for implementation, draw out a blue print for action, mainly encompassing but not limited to construction and infrastructure works.
 - b. To promote networking & create synergy among various professional organizations, and to forge such alliances, and, understanding with them to enable accomplishing the overall objectives as stated above.
 - c. Conceptualize & create products, implement services, arising there of to promote adoption of good practices by various stakeholders in the Construction Industry.

- d. Develop Human Resource in the Construction Industry & facilitate evolution of Institutions to further these objectives, both within the country & outside.
- e. And to take any such action, which may be required to be taken to further the mandated objectives of both the parties.
 - Work jointly to profile, impart, & certify the skills of construction professionals at workers, supervisory & pre-graduation level.
 - To facilitate execution & accomplishment of enabling activities, such as formulation of curricula, syllabus, examination & testing process, jointly & with active participative involvement of the industry.
 - To upgrade & modify the enabling extending execution activities.
 - To expand to cover the nation & other geographical areas to propagate such initiatives.
 - To avail the enabling inputs for execution of this mandate jointly.
3. Both the parties agree that in order to accomplish the objectives of this MoU they would set up necessary Task Forces, Working Groups, Committees & Joint Ventures based on the exigent requirements for which Separate Agreement will have to be entered into.
4. It is also agreed between both the parties that a standing empowered Steering Group would be constituted to operationalize this Memorandum of Understanding, who shall be authorized to take necessary actions to fulfill the objectives of this cooperation.
5. The constitution of the Standing Empowered Steering Group would be as follows:

1.	Chairman	-	DG, DGE&T
2.	Representation from Construction Industry	-	2 Members
3.	Representation from DGE&T / Industry Institutions	-	2 Members
4.	Person of Excellence in the field of Construction	-	1 Member
5.	Convenor (Projects), CIDC	-	Member Secretary
6. The parties also agree to provide the resources based support to enable smooth functioning of this Standing Steering Group.
7. Notwithstanding anything stated in this Memorandum of Understanding elsewhere, this Understanding could be expanded to encompass exigent requisites by mutual consent.

In witness, we have set our hands to this MoU, this _____ day of _____ 2004.

(P. R. Swarup)
Director General, CIDC

(Sharda Prasad)
JS, DGE&T

First Party

Second Party

Witness

Witness

China at a glance
Economic Factors &
Skill Building/Vocational Education Data (below the line, details in the country report)

Land area	9.597 million sq km
Arable land	14.86%, permanent crops 1.27%, other 83.87%
Irrigated land	0.546 million sq km
Population	1314 million
Median age	32.7 years
Literacy	91%
GDP2,512 US\$ billions
GDP	10,000 US\$ billions (PPP)
GDP- per capita.....	US\$7,600
GDP by Sector..	
• Agriculture	11.9%,
• Industry	24%
• Services	40%
Labour Force	798 million
Labour force by occupation	
• Agriculture	45%
• Industry	24%
• Services	31%
Population below poverty line.....	10%
House hold income	Lowest 10%...1.8%, Highest 10%...33.1%
Inflation Rate	1.5%
Exports	US\$974 billion
Reserves	US\$ 1074 billion
Tel land line	350 million
Tel mobile	438 million
Internet users	123 million
<hr/>	
1. Labour Force as % of Population.....	60.7%
2. Number of people undergoing VET courses in the VET institutions.....	90 million
3. Percentage of work force undergoing some sort of VET course.....	11.27%
4. Number of VET Institutions in China.....	5,00,000
5. Oldest VET Institutions and VET system in the country, more than.....	50 years
6. Number of VET courses being imparted in the country, more than	3000 types*
7. Cost of imparting VET courses...Federal & State Governments, % of Total Cost.....	70%*
8. Cost of imparting VET courses...Local Community, Business, Private, % of Total Cost	30%*
9. Design and scope of VET courses decided by local community & local businesses and by local state governments based on availability of local resources and local needs of the economy.....	Yes!
10. * means estimates only	

Germany at a glance
Economic Factors &
Skill Building/Vocational Education Data (below the line, details in country report)

Land area	0.357 million sq km
Arable land	33.13%, permanent crops 0.6%, other 66.27%
Irrigated land	0.005 million sq km
Population	82.42 million
Median age	42.6 years
Literacy	99%
GDP	2,890 US\$ billions
GDP	2,585 US\$ billions (PPP)
GDP- per capita.....	US\$31,400
GDP by Sector	
• Agriculture	0.9%,
• Industry	29%
• Services	70%
Labour Force	43.66 million
Labour force by occupation	
• Agriculture	2.8%
• Industry	33.4%
• Services	63.8%
Population below poverty line – N.A.	
House hold income	Lowest 10%...3.6%,Highest 10%...25.1%
Inflation Rate	1.7%
Exports	US\$1133 billion
Reserves	US\$ 45 billion
Tel land line	55 million
Tel mobile	79 million
Internet users	51 million

1. Labour Force as % of Population.....**52.97%**
2. Number of people undergoing VET courses in the VET centres.....**2.85 million**
3. Percentage of work force undergoing some sort of VET course.....**6.53%**
4. Number of VET Centres in Germany.....**100,000**
5. Oldest VET centres and VET system in the country, more than.....**100 years**
6. Number of VET courses being imparted in the country, more than**4000 types**
7. Cost of imparting VET courses...Federal & State Governments, % of Total Cost.....**33%**
8. Cost of imparting VET courses...Local Community, Business, Private, % of Total Cost**67%**
9. Design and scope of VET courses decided by local community & local businesses and by local state governments based on availability of local resources and local needs of the economy.....**Yes!**

USA at a glance
Economic Factors &
Skill Building/Vocational Education Data (below the line, details in the country report)

Land area9.827 million sq km
 Arable land18.01%, permanent crops 0.21%, other 81.78%
 Irrigated land0.223 million sq km

Population298 million

Median age36.5 years

Literacy99%

GDP13,220 US\$ billions

GDP12,980 US\$ billions (PPP)

GDP- per capita.....US\$43,500

GDP by Sector..

- Agriculture 0.9%,
- Industry 20.4%
- Services 78.60%

Labour Force151.4 million

Labour force by occupation..

- **Agriculture 0.70%**
- **Industry 22.90%**
- **Services 76.4%**

Population below poverty line..12%

House hold incomeLowest 10%...1.8%, Highest 10%...30.5%

Inflation Rate2.5%

ExportsUS\$1024 billion

ReservesUS\$ 69 billion

Tel land line268 million

Tel mobile220 million

Internet users205 million

11. Labour Force as % of Population.....**50.67%**

12. Number of people undergoing VET courses in the Community Colleges.....**11.3 million**

13. Percentage of work force undergoing some sort of VET course.....**7.48%**

14. Number of Community Colleges in the USA.....**1600**

15. Oldest Community Colleges and VET system in the country, more than....**100 years**

16. Number of VET courses being imparted in the country, more than**4000 types**

17. Cost of imparting VET courses...Federal & State Governments, % of Total Cost.....**33%**

18. Cost of imparting VET courses...Local Community, Business, Private, % of Total Cost**67%**

19. Design and scope of VET courses decided by local community & local businesses and by local state governments based on availability of local resources and local needs of the economy.....**Yes!**

Vocational Education

Vocational Education In China (I)

A History of Vocational Education Development in China

The earliest vocational education in China may be traced back to the industrial education in the 1860's more than 130 years ago. The main content of vocational education at that period of late Qing Dynasty was to study western technology and train manpower with practical skills. The "Schooling System of 1902" laid down a set of systematic regulations for vocational education, while the "Chinese Vocational Education Society", which was established in 1917, set the precedence of joint provision of vocational education by the education sector and the industrial sector in China. However, the slow economic progress and backward industry hampered the development of vocational education in China before 1949. At that time, there were only 561 secondary technical schools with an enrollment of 77,000 students and 3 schools for training skill workers with an enrollment of 2700 students. The total enrollment in secondary vocational schools represented only 4.2% of the total students population in secondary schools.

During the 50 years since the founding of the People's Republic of China in 1949, vocational education underwent a process of adjustment, rectification, substantiation, reform, improvement and steady development. In the 1950's, to meet the needs of economic expansion, thousands of specialized secondary schools and skill worker schools were set up while in the 1960's the training of manpower badly needed in all sectors of the society was accelerated and agricultural secondary schools and other vocational schools developed rapidly. However, the normal pace of development of Chinese vocational education was seriously affected by the outbreak of the culture revolution.

Since China entered a new historical era of reform and opening to the outside world in 1978, Chinese vocational education has been injected with tremendous vitality for development. In 1980, formulated by the Ministry of Education (MOE) and the State Bureau of Labor and ratified by the State Council, the "Report on the Structural Reform of Secondary Education" pointed out that the structure of secondary education should be reformed and vocational education be developed so as to enable the senior secondary schools to meet the needs of socialistic modernization construction. In 1985, the CPC Central Committee promulgated the "Decision on the Structural Reform of Education", clearly laying down that a vocational education system with rational structure and different stages from junior level to senior level which could match the industrial sectors and link up with regular secondary education should be gradually established. Then in 1991, the State Council formulated the "Decision on Energetically Developing Vocational and Technical Education" identifying the tasks and objectives for the further development of vocational education in the light of economic and social development in the 1990's in China. The "Outline on Reform and Development of Education in China" drawn up by the CPC Central Committee and the State Council in 1993 required governments at various levels to attach great importance to vocational education, make overall plans and energetically develop vocational education. The outline aimed at mobilizing the initiatives of all departments, enterprises, institutions and all quarters of the society to provide vocational education of multiple forms and various levels. In 1996, the first "Vocational Education Law" in China was formally promulgated and implemented, providing legal protection for the development and perfection of vocational education. A year after, in the "Report of the 15th National Congress", President Jiang Zeming pointed out that the strategy of invigorating China through science, technology and education and keeping sustainable development should be implemented and vocational education and adult education of various forms should be actively developed. The "Decision on Deepening Educational Reform and Promoting Quality Education" the State Council in 1999 emphasizes that an educational system adapting to the socialistic

market economy and the internal law of education with different types of education linking up to each other should be established, and that vocational education should be energetically developed and senior secondary education including regular and vocational education should also be vigorously developed. All these policies, regulations and laws have not only created an unprecedentedly good social environment for the development of vocational education, but also show the direction for the reform and development of vocational education in the 21st century.

Vocational Education

Vocational Education In China (II)

The System of Vocational Education and Its Development

The system of vocational education consists of education in vocational schools and vocational training.

Vocational education in China is provided at three levels: junior secondary, senior secondary and tertiary.

Conducted mainly in junior vocational schools and aimed at training workers, peasants and employees in other sectors with basic professional knowledge and certain professional skills, junior vocational education refers to the vocational and technical education after primary school education and is a part of the 9-year compulsory education. The students in secondary vocational school should be primary school graduates or the youth with equivalent cultural knowledge and its schooling lasts 3 to 4 years. To meet the needs of labor forces for the development of rural economy, junior vocational schools are mainly located in rural areas where the economy is less developed. At present, there are 1,472 such schools with the enrollment of 867,000 students.

The secondary level mainly refers to the vocational education in senior high school stage. Composed of specialized secondary schools, skill workers schools and vocational high schools, and as the mainstay of vocational education in China, secondary vocational education plays a guiding role in training manpower with practical skills at primary and secondary levels of various types.

Consisting of secondary technical schools and normal schools, specialized secondary schools enroll junior high school graduates with a schooling of usually 4 years and sometimes 3 years. A few specialities are open only to senior high school graduates with the schooling lasting 2 years. The basic tasks of these schools are to train secondary-level specialized and technical talents for the forefront of production, and all the students should master the basic knowledge, theory and skills of their speciality in addition to the cultural knowledge required for higher school students.

Aiming at training secondary-level skill workers, skill worker schools enroll junior high school graduates and their schooling lasts 3 years. Quite capable of practicing and operating, their graduates will directly be engaged in production activities.

Developing on the basis of the structural reform of secondary education after China adopted the policy of reform and opening to the outside world and directly coming from the reorganization of regular high schools, vocational high school enrolls junior high school graduates and its schooling lasts 3 years. Its main task is to train secondary-level practice-oriented talents with comprehensive professional abilities and all-round qualities directly engaged in the forefront of production, service, technology and management. Accordingly, the specialities offered in vocational high schools are mainly related to the third industry.

In 1998, there were altogether 17,090 secondary vocational schools (including vocational high school specialized secondary schools and skill workers school), with the enrollment of 11,460,000 students and the recruitment of 422,900,000 students.

With the schooling lasting 2 to 3 years, tertiary vocational education mainly enroll graduates from regular high schools and secondary vocational schools. In recent years, the proportion of graduates from secondary vocational schools has been increased, establishing the link between secondary and tertiary vocational education gradually. Aiming at training secondary and high -

level specialized technical and management talents needed in the economic construction, tertiary vocational education emphasizes the training of practice-oriented and craft-oriented talents. At present, institutions providing tertiary vocational education are divided into five categories. The first is the 30 higher vocational technology colleges with the enrollment of 149,000 students, the second is the 101 short-circle practice-oriented vocational universities with local figures, the third is the 5-year higher vocational classes provided in the regular specialized secondary schools, the fourth is the tertiary vocational education provided in some regular higher education institutions and adult higher education institutions, which has been experimented in over 130 specialties among 180 institutions, the last is the reformed regular institutions offering 2 to 3-year higher education with the emphasis on training practice-oriented talents, namely high-level professional technical talents, for the forefront of production.

Vocational training of various forms has been playing a more and more important role in vocational education. At present, vocational training is mainly conducted and managed by the departments of education and labor, but enterprises are encouraged to provide vocational training for its own employees. In 1997, there were 2,800 employment training centers for the administration of departments of labor with the capacity of providing training for 3 million person-time per year and 20,000 employee training centers with the capacity of 30 million person-time per year.

Vocational Education

Vocational Education In China (III)

The Achievements of Vocational Education in China

1. The Rapid Expansion of the Scale of Vocational Education

During the 15 years between 1980 and 1995, the proportion of regular senior high school students among all the students in senior secondary education has decreased from 81% to 44%, while the proportion of secondary vocational school students has increased from 19% to 56%. From 1980 to 1997, secondary vocational education institutions produced 30.85 million graduates, fostering millions of secondary-level and primary-level technical workers, managers, skill workers and other labors with good vocational and technical education.

2. The Big Stride Made in the Construction of Vocational Education Teachers

Teachers for vocational education are mostly graduates from regular higher education institutions. Since 1989, over 160 HEIs have established departments, specialities or classes devoted to the training of vocational education teachers with the total enrollment of 21,000 students. At the same time, the government began the establishment of teacher training bases for vocational education. Nowadays, there are 14 training bases set by vocational technical colleges which are affiliated to HEIs and over 200 bases set by central departments and local governments. As a result, a training bases network has basically taken shape, meeting the needs of teacher training for vocational education of various forms and at various levels.

3. The Increase of the Quality and Level of Vocational Education

During the past 50 years, especially the 20 years after reform and opening to the outside world, much attention has been paid to the quality and level of vocation education as well as the schooling efficiency. Meanwhile its scale has been extraordinary expanded. By the end of 1998, more than 2000 key and pilot vocational schools have been established, promoting the overall development of vocational education.

4. The Primary Fruits of the Teaching Reform of Vocational Education

Learning the foreign modern vocational education thought and teaching patterns to improve the level of teaching is an important component of the reform of vocational education. For example, the "dual-track system" of Germany, the educational and training pattern based on the ability in Australia and Canada, the Employment Education Structure advocated by the World Labor Organization, the "Skill Courses for Starting Small Enterprises" initiated by the UNESCO and the "Business and Trade Simulated Company" springing up widely all over the world, all became the models for the reform of Chinese vocational education. At present, related to the industries like mechanics, chemistry industry, electric power, architecture, agriculture, railroad transportation, oil industry, public health, business and light industry, hundreds of vocational schools in Qingdao, Suzhou, Wuxi, Changzhou, Wuhu, Shenyang and Jingsha and a large number of enterprises are carrying out the pilot reform of vocational education based on foreign teaching patterns to improve the teaching level of vocation education in China.

5. Rapid Development of Vocational Education in Rural Areas

Since the 1980's, significant progress has been made in vocational education in rural areas of China with its quantity greatly enlarged and quality greatly Research on Vocational Education With the development of vocational education, research on vocational education has been enhanced and a number of vocational education research institutions have been established, organizing the full-time and part-time research teams composed jointly by administrative departments responsible for vocational education, research institutions, vocational schools and academic organizations, carrying out various forms of vocational education research at different levels. Since the 1960's, about 76 research topics have been included in the state education research plans with some of the research fruits playing an important role of reference for the government to make vocational education policies.

Part 1**Community College Fact Sheet****Number and Type of Colleges**

Public institutions - 986

Independent institutions - 171

Tribal institutions - 29

Total - 1,186

Enrollment:

11.6 million students

6.6 million credit

5 million noncredit

Enrolled full time - 40%

Enrolled part time - 60%

45% of all U.S. undergraduates

45% of first-time freshmen

59% women; 41% men

62% part time; 38% full time

(full time = 12 + credit hours)

Student Profile:

47% of black undergraduate students

55% of Hispanic

47% of Asian/Pacific Islander

57% of Native American

Average student age - 29 years

Students Receiving Financial Aid:

Any aid - 47%

Federal Grants - 23%

Federal loans - 11%

State aid - 12%

Percentage of Federal Financial Aid

Pell Grants - 35.0%

Campus-based aid - 9.8%

Stafford Loans:

subsidized - 5.4%

unsubsidized - 4.4%

Tuition and Fees:

\$2,191 average annual tuition at public community colleges

Degrees and Certificates Annually:

Associate degrees - 486,293

Two-year certificates - 235,999

Revenue Sources: (Public Colleges)

42% - state funds

18% - tuition and fees

24% - local funds

6% - federal funds

10% - other

Governance: (Public Colleges)

More than 600 boards of trustees

6,000 board members

29 states - local boards

16 states - state boards

4 states - local/state boards

Community Colleges at the Forefront

Health care: 50% of new nurses and the majority of other new health care workers are educated at community colleges.

International programs: Close to 85,000 international students attend community colleges - about 15% of all international students in the United States.

Workforce training: 95% of businesses and organizations who employ community college graduates recommend community college workforce education and training programs.

Homeland security: Close to 80% of firefighters, law enforcement officers, and EMTs are credentialed at community colleges.

Five hottest community college programs: registered nursing, law enforcement, licensed practical nursing, radiology, and computer technologies.

Earnings: The average expected lifetime earnings for a graduate with an associate degree are \$1.6 million - about \$.4 million more than a high school graduate earns.

Data are derived from the most current information available as of January 2006.

Part 2

Community College Mission

The community college's mission is the fountain from which all of its activities flow. In simplest terms, the mission of the community college is to provide education for individuals, many of whom are adults, in its service region. Most community college missions have the basic commitments to:

- serving all segments of society through an open-access admissions policy that offers equal and fair treatment to all students;
- comprehensive educational program;
- serving its community as a community-based institution of higher education;
- teaching; and
- lifelong learning.

Excerpted from The Community College Story by George B. Vaughan.

Part 3

Historical Information

Great challenges faced the United States in the early 20th century, including global economic competition. National and local leaders realized that a more skilled workforce was key to the country's continued economic strength - a need that called for a dramatic increase in college attendance - yet three-quarters of high school graduates were choosing not to further their education, in part because they were reluctant to leave home for a distant college.

During the same period, the country's rapidly growing public high schools were seeking new ways to serve their communities. It was common for them to add a teacher institute, manual learning (vocational education) division or citizenship school to the diploma program. The high school-based community college, as first developed at Central High School in Joliet, Ill. was the most successful type of addition. Meanwhile, small, private colleges such as Indiana's Vincennes University had fashioned an effective model of higher education grounded on the principles of small classes, close student-faculty relations and a program that included both academics and extracurricular activities.

From the combination of these traditions emerged the earliest community colleges, roughly balanced in number between private and public control but united in their commitment to meet local needs. The typical early community college was small, rarely enrolling more than 150 students. It nevertheless offered a program of solid academics as well as a variety of student activities. Fort Scott Junior College in Kansas, for example, not only fielded several athletic teams but also supported a student newspaper, government, thespian society and orchestra.

A distinctive feature of the institutions was their accessibility to women, attributable to the leading role the colleges played in preparing grammar school teachers. In such states as Missouri, which did not yet require K-8 teachers to have a bachelor's degree, it was common for

more than 60 percent of community college students to be women, virtually all of them preparing to be teachers.

Part 4

Insight Into Community Colleges

Community colleges have a rich history of providing educational opportunities to all Americans. There are more than 1,100 community colleges in the nation and each is unique, but the majority share the common missions of open access and equity, comprehensive program offerings, a community-based philosophy, a commitment to teaching and a commitment to lifelong learning.

Whether you are a student, researcher, faculty member, employer, member of the media or community college supporter, there is something here for you. Follow the "Who Are You" link to the left and down to find information specifically suited for you.

To gain insight into community colleges - the rich history, mission, students, staff and much more - visit these sections.

Community Colleges Past to Present

This section provides a brief overview of the history of community colleges and summarizes some of the most pressing issues facing them now.

Student Enrollment and Characteristics

Click here to find out more about the number and diversity of community college students.

The Community College Impact

This section describes the effects community colleges have had on their students and communities as measured by such indicators as degrees and certificates granted, employment data and cost-benefit analyses.

Community College Staff and Services

Click here to learn more about community college faculty and staff and some of the services they provide.

Student Costs and College Finance

This section focuses on the financial status of community colleges by looking at their expenses and their revenue sources.

A Look at the Future

Learn more about the forces that will affect community colleges in the future - population shifts, technology, competition for funds and students and others.

NOTE: As you peruse the statistical information, you may wonder why the data shown are several years old. In research, there is a significant lag time that occurs between data collection and presentation due to the sheer volume of raw information that is collected and analyzed.

Much of the research cited here is conducted by the National Center for Education Statistics in the Department of Education. NCES annually gathers information from every post-secondary institution in the country. All data presented here are the most current available.

Part 5

Community Colleges Past to Present

It is a very exciting time for community colleges as they celebrate their centennial. In 100 years time, community colleges have grown tremendously in numbers and have changed with the times. No other segment of higher education is more responsive to its community and workforce needs than the community college.

Founded in 1901, Joliet Junior College in Illinois is the oldest existing public two-year college. In the early years, the colleges focused on general liberal arts studies. During the Depression of the 1930s, community colleges began offering job-training programs as a way of

easing widespread unemployment. After World War II, the conversion of military industries to consumer goods created new, skilled jobs. This economic transformation along with the GI Bill created the drive for more higher education options. In 1948, the Truman Commission suggested the creation of a network of public, community-based colleges to serve local needs.

Community colleges became a national network in the 1960s with the opening of 457 public community colleges - more than the total in existence before that decade. Baby boomers coming of age fueled enrollment growth. The construction involved in this gigantic growth of facilities was funded by a robust economy and supported by the social activism of the time. The number of community colleges has steadily grown since the 1960s. At present, there are 1,166 community colleges in the United States. When the branch campuses of community colleges are included, the number totals about 1,600. (PDF, 11.6 KB)

Today, community colleges educate more than half the nation's undergraduates. In the 1996-97 academic year, 9.3 million people took credit courses at community colleges. Another 5 million took noncredit classes, the majority of which were workforce training courses. Since 1901, at least 100 million people have attended community colleges.

Each community college is a distinct educational institution, loosely linked to other community colleges by the shared goals of access and service. Open admissions and the tradition of charging low tuition are among the practices they have in common. But each community college has its own mission.

As such community colleges offer a great deal more than credit and noncredit classes. In 1988, with society becoming increasingly fragmented, the Commission on the Future of Community Colleges recommended that community colleges help build a sense of community by creating partnerships and making facilities available to civic groups. Additionally, community colleges have embraced the opportunity to provide remedial education: basic computation, composition and reading classes to help students meet their ultimate goals.

In the 20th century, community colleges have not only survived, they have thrived by demonstrating remarkable resiliency and becoming centers of educational opportunity open to all seekers. They pride themselves on providing educational marketplaces where student choices and community needs influence course offerings. Now we mark a century in which community colleges have helped millions of people learn and advance toward personal goals, while providing a forum to address challenges facing whole communities.

Based on material from National Profile of Community Colleges: Trends & Statistics, Phillippe & Patton, 2000.

Part 6

The GI Bill

As World War II was winding down, the nation's policy makers struggled to determine what to do with the millions of servicemen and servicewomen who would soon return to civilian life. Recalling the pre-war economic depression, the nation's leaders and citizens feared that there would not be enough jobs to absorb those returning from military service. The nation's political leaders had an answer that would delay the returning military personnel's entry into the job market, improve their skills, and reward them for serving their country: Send them to college. The United States Congress passed the Servicemen's Readjustment Act in 1944, a major milestone in federal financing of education.

Known as the GI Bill of Rights, this act broke the financial and social barriers to college attendance for millions of Americans who had served in World War II. The public junior college, along with the rest of higher education, received large boosts in enrollment as a result. The GI Bill, which provided what amounted to a scholarship for all eligible veterans, set the precedent for the student financial aid that exists today, especially the idea that students should not be

barred from college attendance for financial reasons, and that they should have choices in the colleges they attend and the programs they study.

The philosophy of the GI Bill and of later student aid programs has had, and continues to have, enormous impact on community college enrollment, in the diversity of students enrolled, and on programs and mission.

Excerpted from The Community College Story by George B. Vaughan.

Part 7

Student Enrollment and Characteristics

**** Additional Enrollment Information ****

Community college students bring a mix of diverse characteristics to their campuses including youth and age, (PDF, 11.7 KB) financial comfort and financial need, racial and ethnic variation. (PDF, 12.4 KB)

Low tuition tips the scale in favor of community colleges for many people when they are weighing higher education options. The low cost of community colleges relative to four-year or for-profit institutions (PDF, 9.27 KB) has almost universal appeal but is especially important to people with low incomes.

Most community colleges have transfer agreements with baccalaureate institutions by which the senior institutions accept community college credits toward four-year degree requirements. Many students choose to complete their freshman and sophomore years of coursework at a community college, thus significantly reducing the cost of a four-year degree.

The location of community colleges near residential areas is important to many people. Women with young children, for instance, put a premium on convenience because they frequently take classes around their and their spouses' work schedules, and babysitters' availability. It is no surprise then that 58 percent of community college students are women. (PDF, 9 KB)

Minority students also favor community colleges, making up 30 percent of community college enrollments nationally. (PDF, 12.4 KB) In urban areas, community college enrollments reflect the proportion of minorities in local populations.

Offering classes in English as a second language typifies community college academic activities that respond to community needs. Teaching English to immigrants helps them crack the written and spoken code in their new homeland and sends a powerful positive message to them: A college education in the United States is not a luxury reserved for someone else; it is a possibility for you and your children.

Remedial education courses at community colleges keep open the possibility of degree programs and highly technical vocational training for those who need to improve reading, writing and computation skills.

The multitude of community college courses and the various times they are offered allow working people to fit higher education into their schedules. More than 80 percent of students balance studies with full-time or part-time work. (PDF, 11.6 KB) Many students also have family responsibilities.

Community colleges report a new enrollment phenomenon in the growing number of students with bachelor's and other degrees who choose to come back to community college. They attend for computer classes and other instruction in order to keep up with the technology that permeates work and leisure activities. Certification programs (PDF, 12 KB) or workforce training classes continue to appeal to people who want to move up the ladder in their current jobs as well as to those who want to obtain different work that requires particular skills.

At community colleges, people can continue to learn at any point in their lives. The fast pace of technological innovations and increasing frequency of job and career changes can create the potential for people to return to community colleges again and again.

Based on material from National Profile of Community Colleges: Trends & Statistics, Phillippe & Patton, 2000.

**** Additional Enrollment Information ****

Part 8

The Community College Impact

Consumers of higher education, like other consumers, look for value. Community college students want to learn things that will have a positive effect on their lives. They want college to be nearby, with convenient class schedules and low cost. Legislators want measurement of effectiveness. Employers want workers with analytical and technical skills. Taxpayers want to make sure their money is well spent.

The breadth of programming and the variety of students' goals make it difficult to accurately quantify community college performance. Unlike four-year colleges, where attainment of a bachelor's degree is the implicit goal of students, community college students do not share a common goal beyond self-improvement.

Community colleges offer a variety of credit and noncredit programs in occupations that the Bureau of Labor Statistics predicts will be in demand early into the next decade. AACC periodically surveys colleges about hot programs (PDF, 13 KB) from which graduates are hired before or immediately after graduation and include nursing, computer technology, auto technology and law enforcement. According to a 1997 survey, hot program graduates earned an average starting salary of \$25,500, about 15 percent more than the hot program starting salaries reported in 1994. At the top of the list is dental hygiene, with an average starting salary of \$29,560 in 1997. More recent data on hot programs show that the average starting salary for dental hygiene is \$31,750.

Research shows that education pays. Students who complete associate degrees and certificates are more likely to move into higher-status management and professional positions with higher earnings. An investment of a few thousand dollars now will likely pay lifelong dividends, as students who earn associate degrees average lifetime earnings of \$250,000 more than people without degrees.

Although the statistics about the economic benefits to individuals are encouraging, the issue of what society gains from supporting higher education continues to fuel many legislative budget debates. Victor Ukpolo and Thomas F. Dernburg, working for the Tennessee Board of Regents, tackled this nagging question and came to the conclusion that higher education yields significant returns to students, to the state and to society.

Ukpolo and Dernburg reported their findings in the "Journal of Business and Economic Perspectives." Using 1993 as the base year, they wrote that for every dollar Tennessee invests in higher education, society can expect an average real return of \$9.30. The cost-benefit ratio to society for a two-year associate degree is even higher at \$10.52. Their analysis found that the state recovers its subsidy of higher education in sales taxes alone. This happens as more highly educated people earn more money and increase their spending, which yields more in sales taxes. But success at community colleges must be broadly defined to include not just those who attain associate degrees – more than 450,000 in 1996-97 – and those who earn certificates – nearly 170,000 in 1996-97 – but also the millions who take noncredit and workforce training classes. Although the definitive measure of educational quality and success evolves, community colleges allow students from all walks of life to work toward and attain the goals they have set. *Based on material from National Profile of Community Colleges: Trends & Statistics, Phillippe & Patton, 2000.*

Part 8

Community College Staff and Services

** Additional Staffing Information **

Community colleges are in the midst of a transition brought about by the numerous retirements among administrators and faculty members. Many of those retiring have worked at community colleges since the expansion of institutions during the 1960s.

Many colleges are using the opportunity to create more inclusive staffs, and increasingly women and members of minority groups are being selected to fill leadership positions.

Nationally, approximately one-third of all community college presidents hired during the 1997-98 school year were women. Women make up about 18 percent of community college chief executives overall.

Adjunct professors (PDF, 12 KB) - or part-time faculty members - have long been part of community college staffs for reasons beyond economics. People are typically hired for adjunct positions because they possess technical skills and knowledge that are beneficial to students. Their expertise and workplace experiences help keep curricula fresh.

Technology presents a challenge for some faculty members, and it presents challenges for the college in determining equitable faculty pay. Faculty salaries often are based on the amount of time instructors spend face-to-face with students. As more instruction occurs in computer labs and over the Internet, some modification of this structure is expected. With the advent of Internet courses, administrators and faculty grapple with questions about who owns courses and whether faculty members who develop courses deserve compensation when the courses are re-transmitted to other institutions and to individuals outside the community college district.

As a complement to their large variety of courses, many community colleges provide services that make them resources for area residents as well as for students. Local theater companies or visiting lecturers may be allowed to use community college auditoriums. At urban campuses particularly, colleges often allot space for services ranging from AIDS prevention to senior citizen lunches. Childcare services at many campuses make it more simple for students with children to attend classes and study.

In addition, the educational and social services available at community colleges have made them favorite launching pads for welfare reform efforts (PDF, 11.5) aimed at getting public assistance recipients working. Many colleges offer specific job training, work skills workshops, job placement and follow-up counseling for welfare recipients, along with basic skills and English as a Second Language courses.

Community colleges have excelled in providing support services to individuals with disabilities. (PDF, 11.9 KB) In addition to assessments and counseling, many community colleges provide tutors and special learning materials to disabled students. Some colleges assist disabled students with housing and transportation.

Increasingly, community colleges offer service learning programs (PDF, 8.61 KB) for students, as well as international education programs (PDF, 8.87 KB).

Through constant evolution and ever-changing technologies and student needs, community colleges' overriding goal remains to provide up-to-date, quality education and services to a varied public.

Based on material from National Profile of Community Colleges: Trends & Statistics, Phillippe & Patton, 2000.

** Additional Staffing Information **

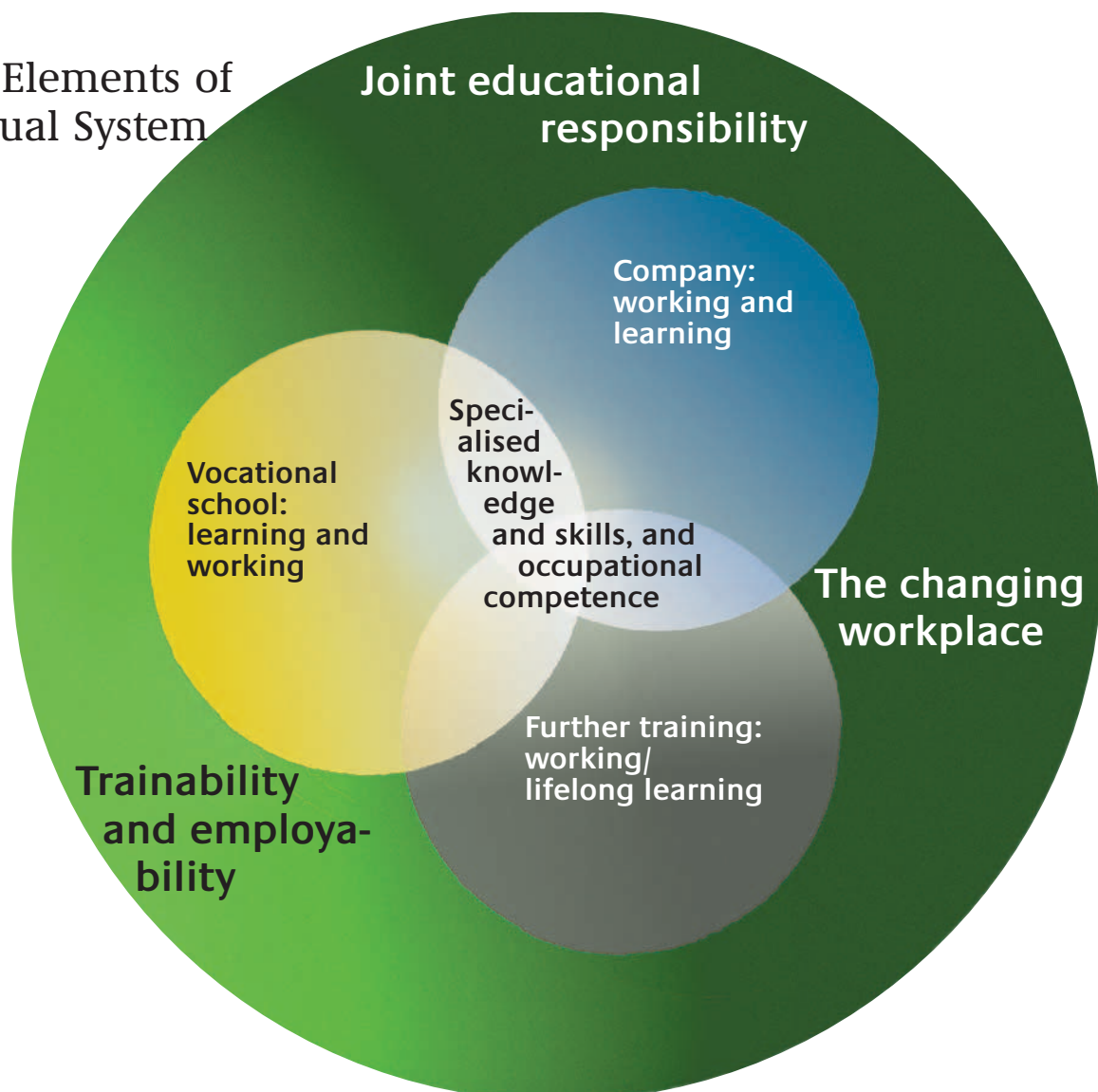


Slide presentation

Germany's Vocational Education at a glance

Basic Elements of
the Dual System

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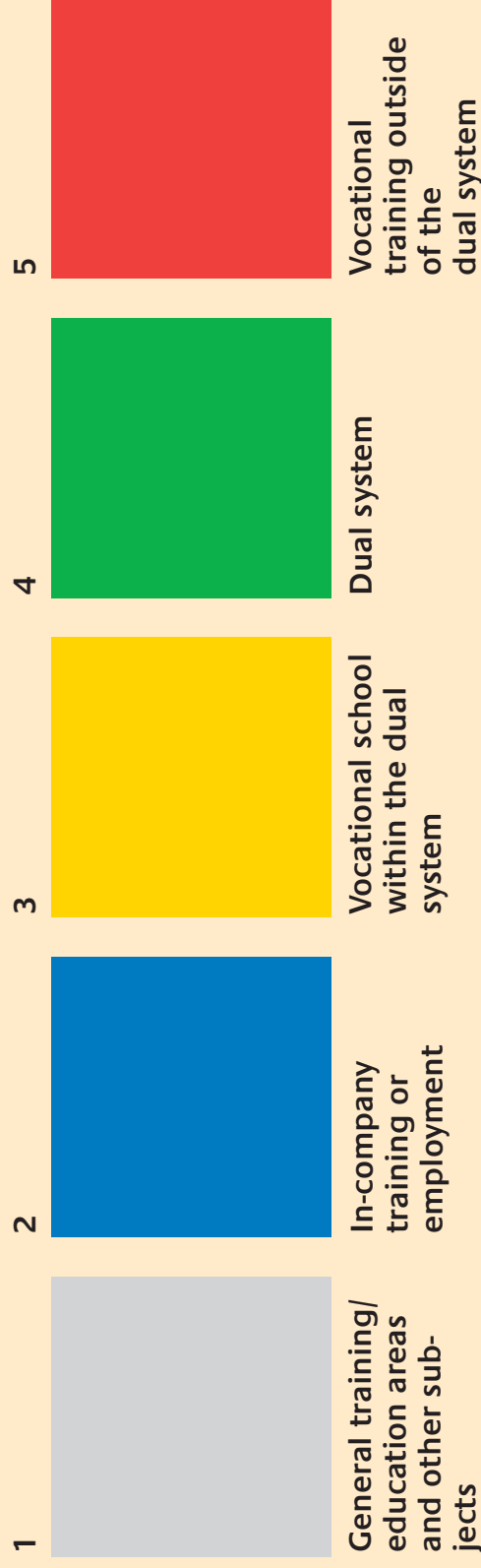
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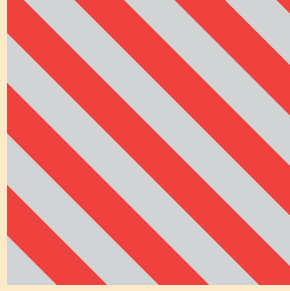
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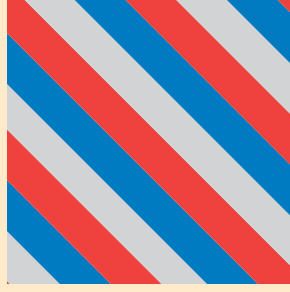
The colour-coding system used in the figures



1 + 5



1 + 2 + 5



Combinations of colours indicate combinations of components, in keeping with the same coding system

Example: Figure 1

A general word about the figures

This collection of figures is aimed at vocational-training experts and managers in other countries who would like to learn about the German vocational training system (for example, through lectures and presentations, etc.). It answers the questions that foreign experts frequently ask about Germany's vocational training system.

The CD-ROM version of the collection, which is available in both German and English, consists of a pdf file that can be read (with the Acrobat Reader) under both Windows and Macintosh operating systems.

The full-colour figures

- can be printed from the CD-ROM on to transparencies for overhead projectors
- or can be projected directly from the CD-ROM with a beamer (data/video projector).

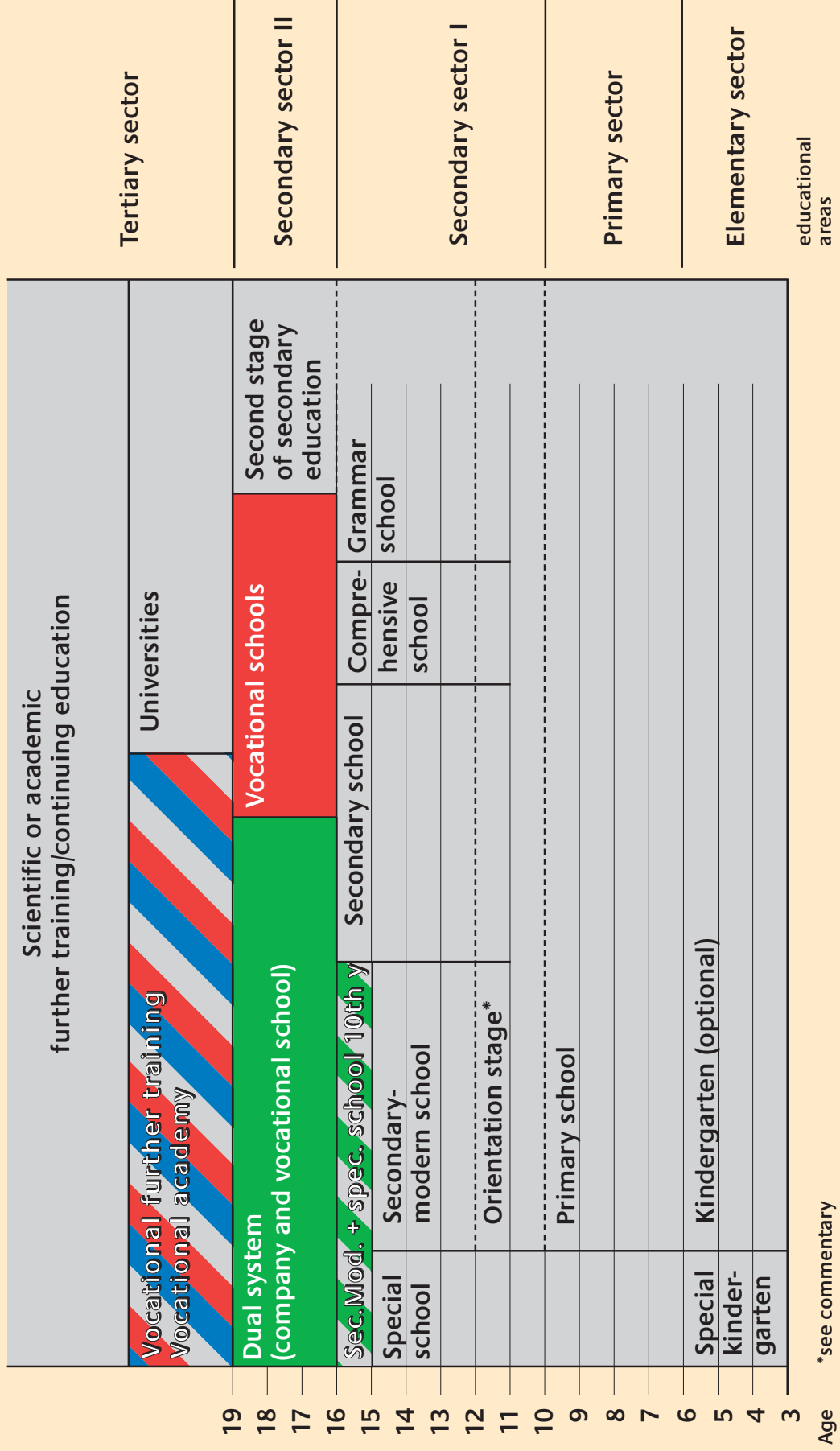
Please note that the technical quality of overhead projector transparencies can vary considerably, depending on what resolution is used in printing.

The dual system, a central and largely standardised part of the German vocational training system, is a central focus of this collection. Vocational training in full-time schools and further vocational training are discussed only peripherally.

The most important aspects of each topic have been described as clearly and simply as possible. Due to space limitations, the figures can provide only summaries and overviews. To compensate for this limitation, supporting commentary has been provided for each figure.

Wherever possible, the statistical data is in keeping with that provided in the Report on Vocational Education and Training for the Year 2002. Other references included the «Basic and Structural Data» 2000/2001 of the Federal Ministry of Education and Research (BMBF) and «The Education System in the Federal Republic of Germany 2000», published by the Standing Conference of the Ministers of Education and Cultural Affairs of the Länder in the Federal Republic of Germany (KMK). More recent statistical data is available in the annual Reports on Vocational Education and Training. On the other hand, readers do not necessarily require the most recent data in order to understand Germany's vocational training system.

The figures, including those showing the vocational training system, are colour-coded in keeping with the scheme explained in the figure on the left (which does not include the figures' margin areas, which are all the same colour).



* see commentary

The figure provides a **highly simplified overview** of the basic structure of the education/training sector in the Federal Republic of Germany, divided by training areas/types of schools.

The correlations between age groups and education areas refer, in each case, to the earliest possible entry age for the relevant area. The width of the various blocks is not necessarily proportional to the relevant numbers of pupils.

A great many different types of pathways can be pursued within this basic structure. Children enter **compulsory full-time schooling** at the age of six. This schooling period lasts nine years (in five Länder, it lasts ten years). After completing it, young people who do not attend any full-time-school are required to attend part-time (vocational) school for three years. Very simply: in Germany, young people are required to attend school from the ages of 6 to 18. Trainees in the dual system (even those older than 18) are also subject to compulsory schooling.

After the four-year primary-school period, which all pupils complete, educational pathways diverge within Germany's «divided school system», which consists of secondary-modern schools (Hauptschule), secondary schools (Realschule), grammar schools (Gymnasium) and, in nearly all Länder, comprehensive schools (Gesamtschule). The different pathways often reconverge within the dual system, which accepts graduates of special schools, secondary-modern schools, secondary schools, comprehensive schools, vocational schools and grammar schools.

The **dual system** is far and away the largest educational area within secondary sector II: two-thirds of each age group learn a recognised occupation requiring formal training. The great majority of graduates of dual-system training then work as skilled employees – and many later make use of opportunities for vocational further training. Under certain circumstances, graduates of such training can also acquire a university entrance certificate, in a year of full-time schooling, and then go on to university studies. And successful participants in vocational further training are also increasingly being admitted to university studies.

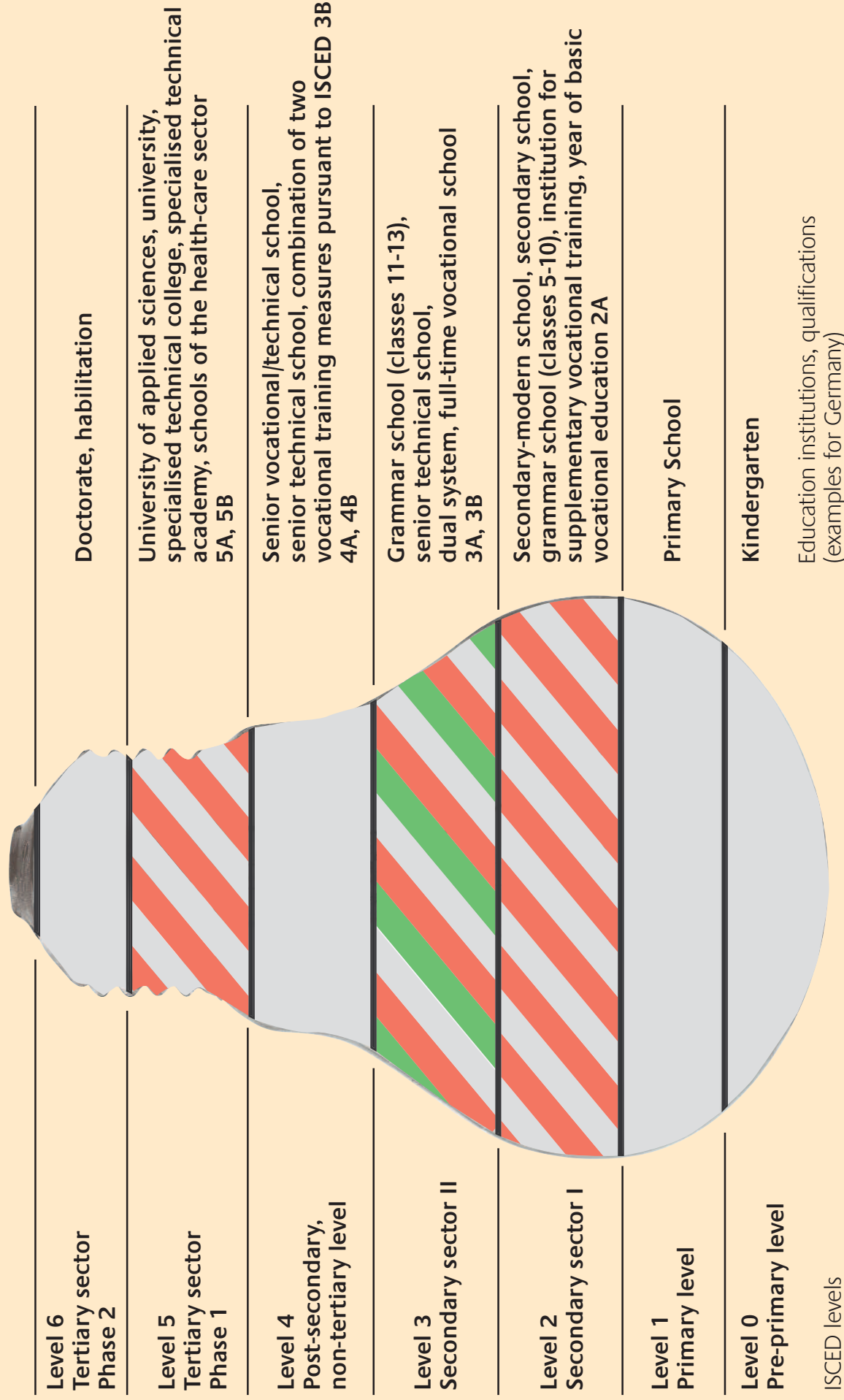
Among all vocational (full-time) schools, the **full-time vocational schools** known as «Berufsfachschulen» have the largest numbers of pupils. These schools prepare pupils for occupations or for vocational training – usually within the dual system. Under certain circumstances, attendance at a full-time vocational school can be credited as the first year of training within the dual system. Some programmes of full-time vocational schools lead to a (restricted) university entrance certificate. Such programmes last from one to three years, depending on the occupational field and the relevant aims and emphases. One out of about every six pupils at full-time vocational schools learns a recognised occupation requiring formal training, within the dual system. Federal ordinances have been enacted that now permit final school examinations for such cases to be harmonised with the relevant examinations in the dual system.

Schools within the health-care sector – for example, schools that train hospital personnel – also have large enrolments.

Senior technical schools (Fachoberschulen) and **senior vocational schools** (Berufsober-schulen) normally build on vocational training within the dual system. They teach specialised occupational skills and theory and confer university entrance certifications.

On the whole, there are many possibilities for transition between school-based and dual-system vocational training and for transition from vocational training to higher education. Some 20 % of all first-year students come to higher education after having completed training in the dual system.

*Age-group stages 5 and 6 always represent a phase of special support, observation and orientation, regardless of how these stages are organised. In some countries, an orientation or support stage has been established as a separate type of school.



The **education levels pursuant to ISCED** (International Standard Classification of Education) serve as UNESCO's standards for international comparisons of country-specific education systems. They are also used by the OECD.

The left side of the figure shows the education levels pursuant to ISCED. The right side provides examples to show how they are applied to the German education system.

The figure provides a basis for a first comparative orientation. It also shows that the ISCED scheme can yield only a very rough approximation of the German education system. This holds especially for vocational further training (outside of schools), which plays a significant role in Germany, but it also applies to any correlations between Germany's health-care-sector schools or senior technical schools and the ISCED levels.

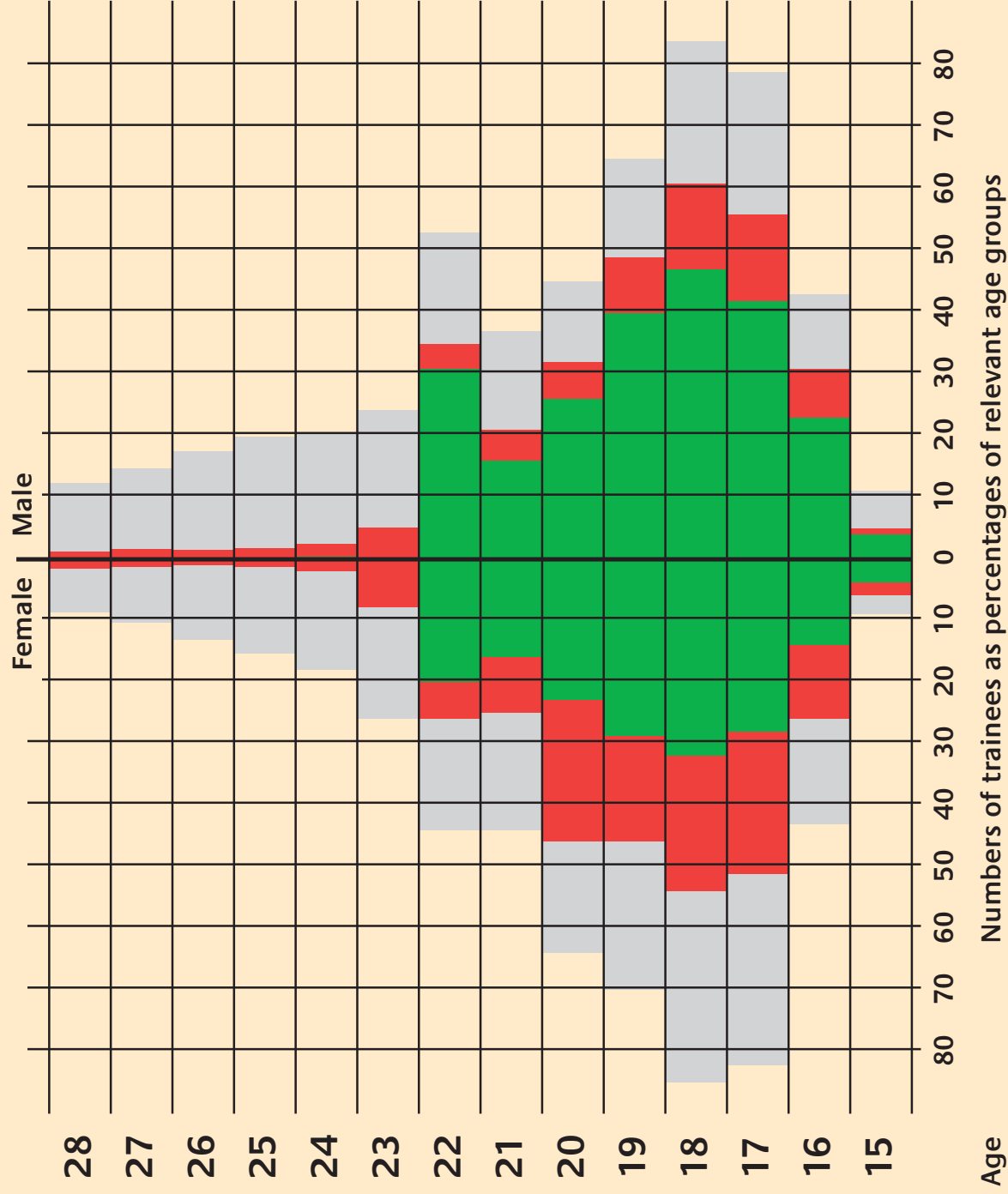
Such difficulties in correlation must also be taken into account in international statistical comparisons.

The German education system is based on «qualifications»: each educational institution that a person attends normally determines what subsequent education programmes he or she may pursue on the next higher level. This would seem to facilitate correlation. And yet the system also provides many opportunities for correcting such decisions made by educational institutions – for example, by means of intermediate or combined educational programmes. And the dual system has absolutely no legal admission prerequisites.

The ISCED system cannot fully reflect this great diversity of opportunities – including acquisition of university-level qualifications, via vocational further training outside of schools.

Demography with respect to education

Secondary sector II and tertiary sector



The figure shows numbers of trainees, as percentages of relevant age groups and classified by basic educational areas, who undertake **training in the secondary sector II and the tertiary sector**. The figure applies a simplified differentiation between the dual system, vocational full-time schools and «others», the latter of which includes especially the secondary stage of secondary education (grammar schools) and higher education institutions. The specialised technical colleges (vocational further training) have been grouped with the vocational full-time schools.

Only very few 15-year-olds are shown to be already in secondary sector II; the great majority are still in secondary sector I, which is not shown in the figure. Over 80 % of all 17-year-old and 18-year-old young men and women attend secondary sector II schools.

Among people between the ages of 19 and 21, more young women than young men, percentage-wise, are involved in education; many young men in this age group perform military or substitute civil service. In older age groups, the education-participation rate of men is higher than that of women.

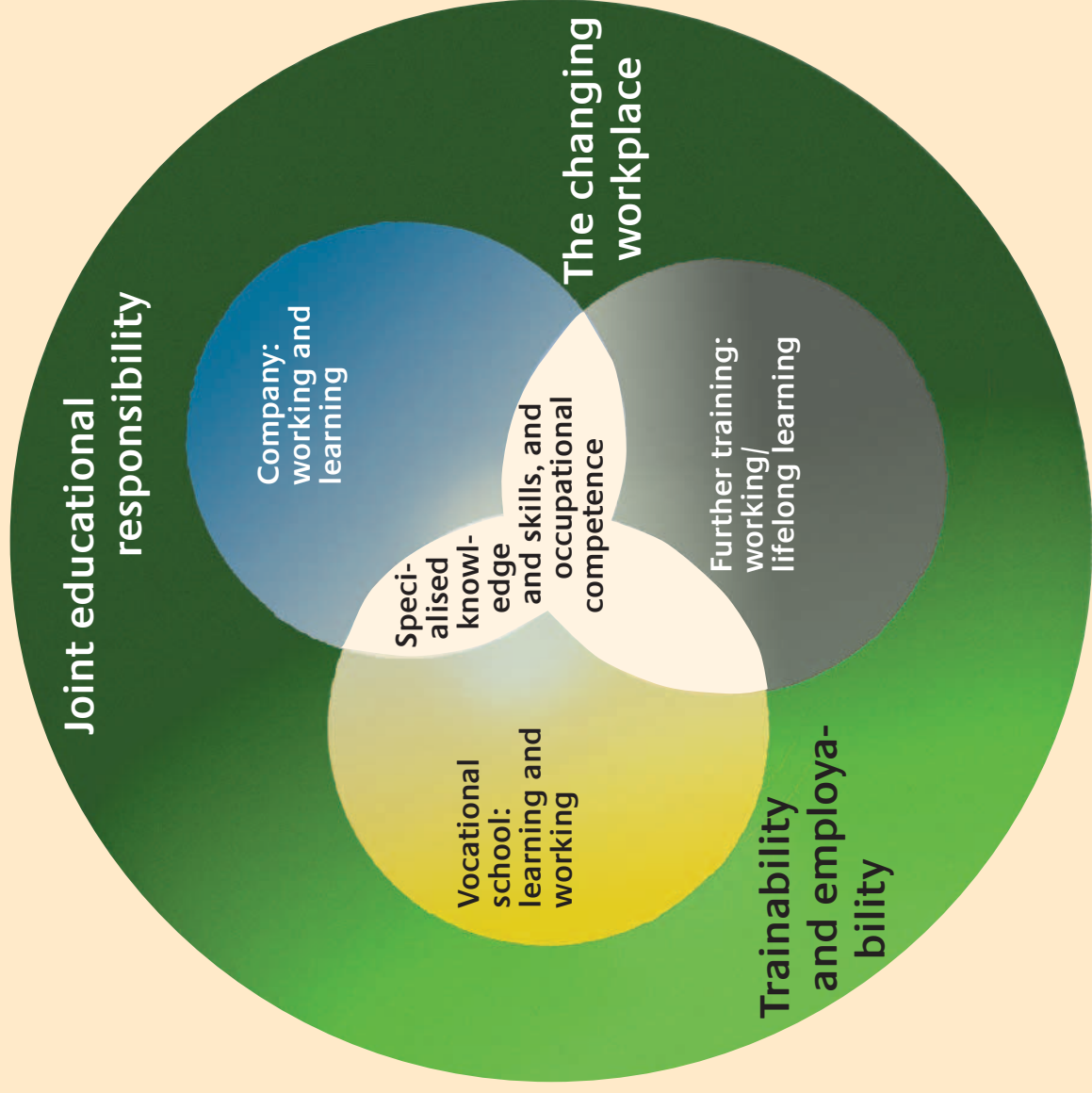
The figure highlights the significance of vocational training in secondary sector II and the dual system's importance within vocational training in Germany.

The figure also shows that more young women than men attend vocational full-time schools and that more young men than young women are trained in the dual system: the dual system's emphasis is still on the industrial and technical sector, while vocational full-time schools emphasise the services sector.

Over 70 % of all trainees in the dual system are 18 years of age and older. This is due to the great diversity of the educational pathways leading into the system: young people who complete the secondary stage of grammar school or who first attend a vocational full-time school will naturally begin their vocational training later than people who begin their training after completing secondary-modern school or secondary school. The largest percentage of trainees, with respect to the total size of the relevant age group, is found among 18-year-olds: the early beginners in this group are still undergoing their training, while many later beginners have just begun their training.

The growing percentages of full-time vocational-school pupils seen among some older age groups primarily represent people in specialised technical colleges (vocational further training).

Education statistics do not record participation, by age groups, in non-school vocational further training. As a result, such participation cannot be shown in the figure.



The dual system **does not have any formal admission prerequisites**: by law, all school-leavers, regardless of what school-leaving certificates they have, can learn any recognised occupation requiring formal training. In actual fact, however, opportunities for admission, and the actual numbers of people who enter certain occupations, depend on pre-qualification.

In the dual system, **a combination of learning and working** provides the basis for teaching vocational skills. The system seeks to teach theory and practice, and to impart **structured knowledge and active competence**, in their proper context. The different learning sites involved, the company and the vocational school, interact in keeping with their different emphases, but their tasks are not rigidly divided: school is not reserved solely for teaching theory, and in-company training involves more than simply practice.

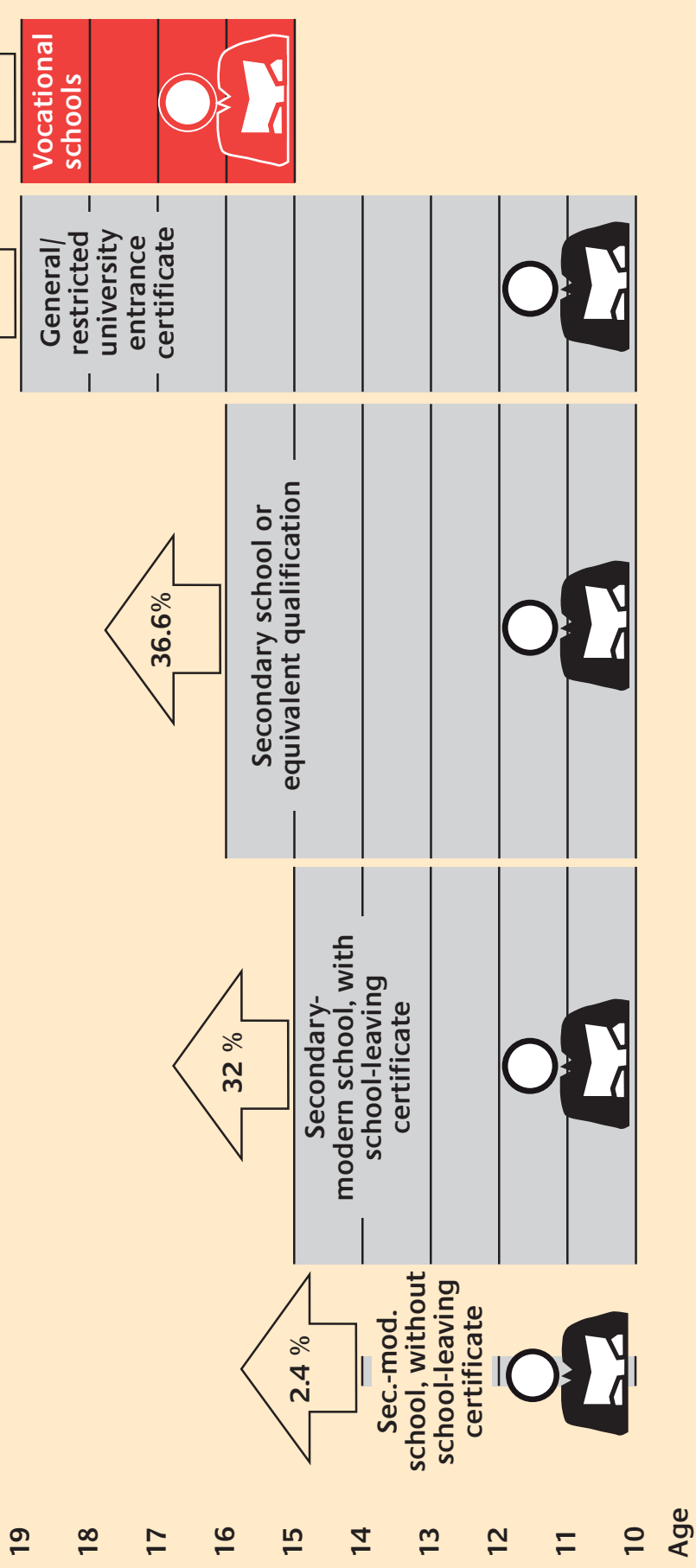
Under the dual system, **vocational schools and companies** have a **joint educational responsibility**. Trainees spend one or two days in vocational school and three or four days in their company. Vocational schools also establish specialised classes oriented to the various relevant occupations – and they do so on a supra-regional basis for less-popular occupations. The state co-ordinates its **framework regulations** for training in companies and training in vocational schools. In final examinations, trainees must show that they have acquired «the necessary skills, the necessary practical and theoretical knowledge» (from their companies) and that they have mastered «the course material, as taught in vocational schools, that is central to the vocational training in question».

Vocational training in the dual system is based on the **occupational concept**: occupations requiring formal training should be oriented to the **groups of qualifications that are typical for the relevant work processes**. Specialisation is permitted, as a complement to the basic qualifications required for each occupation in question, but it must be taught within an occupation context. Vocational training should prepare people for specific occupations, to be pursued immediately after the completion of training, but it should also prepare people for further learning. Vocational training must build **«bridges to further training»**. For this reason, two of its important components include promoting **willingness to learn** and fostering **personality development**. To work in the knowledge society, people must be able to **plan, carry out and check their work** independently. Vocational training within the dual system should be oriented to this aim. **Additional qualifications**, in addition to regular training, can support this aim and lead to further training.

The system's central aim is to promote **employability** in a changing workplace – a workplace that is shaped both by technical development and by the people who work in it.

For this reason, state-accredited occupations requiring formal training, and federal regulations on examinations for further training, are designed **in co-operation with the social partners** (employers' and employees' representatives). This applies to overarching structural issues as well as to individual legal provisions. This approach thus fully reflects the workplace's requirements and the need to foster learning and personal development.

Dual system



The figure provides an overview of the schooling that young people bring to vocational training in the dual system. About two-thirds of all trainees have a school-leaving certificate from a secondary-modern school or a secondary school, or an equivalent qualification.

The figure shows the origins of **new entrants into the dual system in 2000**, i.e. the schools from which young people came to the dual system.

The heading «secondary-modern school without school-leaving certificate» also includes graduates of special schools.

The group of new entrants from vocational schools includes graduates of the «year of basic vocational training in school» (Berufsgrundbildungsjahr - BGJ), of the «year of vocational preparation» (Berufsvorbereitungsjahr - BVJ) and of full-time vocational schools with one-year programmes.

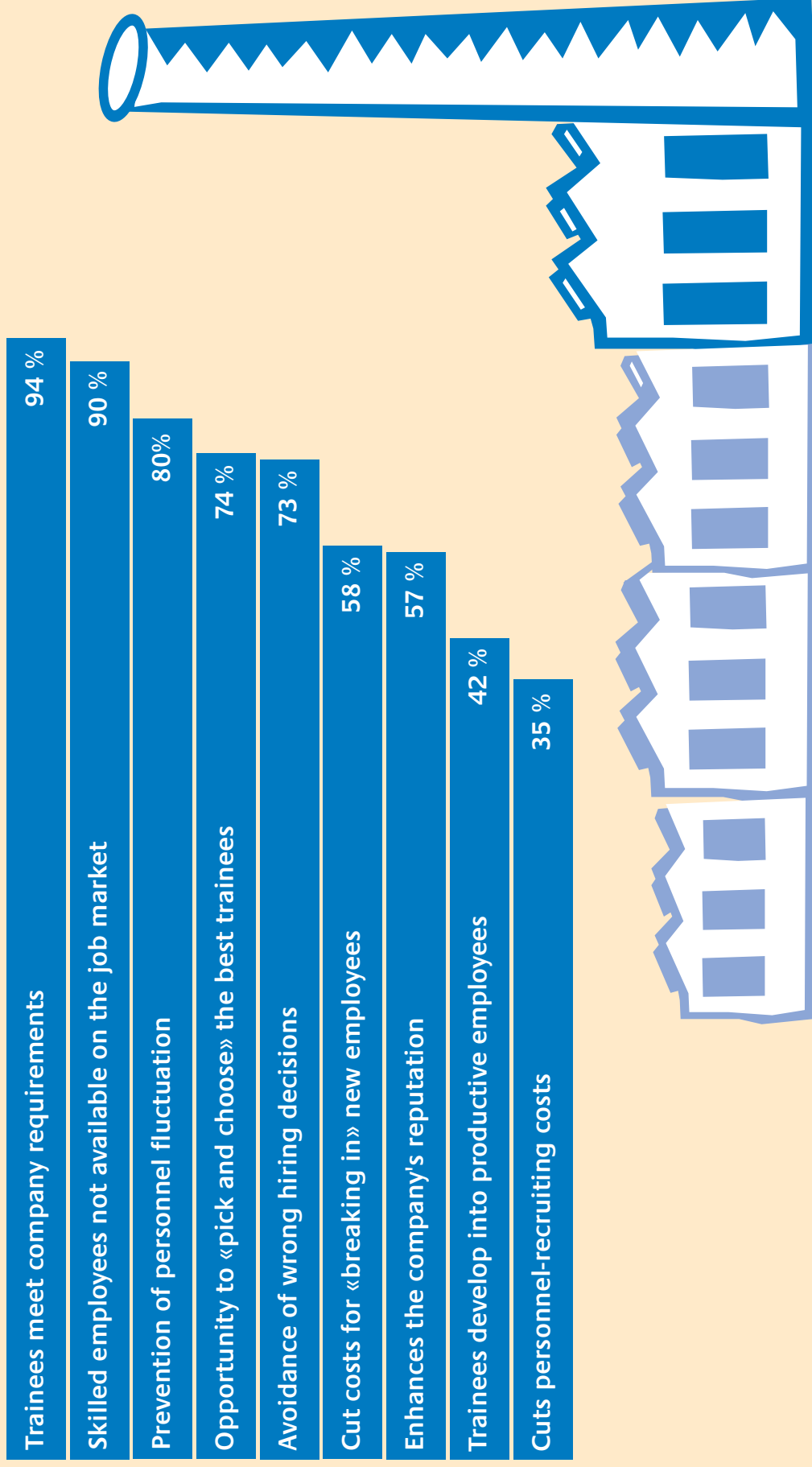
Training curricula in the dual system are tailored to young people with at least a school-leaving certificate from a secondary-modern school. To compensate for possible differences in trainees' education levels, resulting from differences in their preparatory schooling, the Vocational Training Act and Handicrafts Regulation Act (Handwerksordnung) provide for shortening or lengthening of training periods. This helps keep trainees from being overchallenged or underchallenged.

Schooling prior to training influences occupational choices. Some 50 % of all trainees in the crafts sector have a school-leaving certificate from a secondary-modern school, while large percentages of trainees with secondary-school certificates or equivalents choose civil-service occupations or liberal professions. Trainees with restricted or general university entrance certificates tend to choose training in commercial occupations and civil-service positions.

There are many reasons why the dual system is attractive to young people in Germany: vocational training, depending on its type, duration and extent, can confer social prestige, provide an early opportunity to live on one's own, open up life opportunities and enhance one's social security.

Reasons why companies offer training

6



There are a number of good reasons why companies are willing to offer training. The figure shows the relative importance, to companies, of the various benefits of providing training – it presents the most frequently mentioned **reasons for offering training**. This data is based on a study («Why training pays») published in 2000 by the Federal Institute for Vocational Training (BIBB), the Institute of German Industry (Institut der Deutschen Wirtschaft - IW) and the Institute for Employment Research (IAB).

The most frequently mentioned reason for providing training: training can develop employees directly in line with company requirements. This assessment, mentioned by 94 % of all companies offering training, goes hand-in-hand with the view that practically oriented, directly applicable qualifications can be obtained only in «real-life» situations in companies. In particular, in-company training can develop the social skills and personal characteristics that are needed for successful work within a company.

Significantly, 90 % of companies offering training maintain that they cannot find skilled employees, with the desired skills and work habits, on the job market. These companies report difficulties in meeting their personnel requirements via recruiting from the general labour pool.

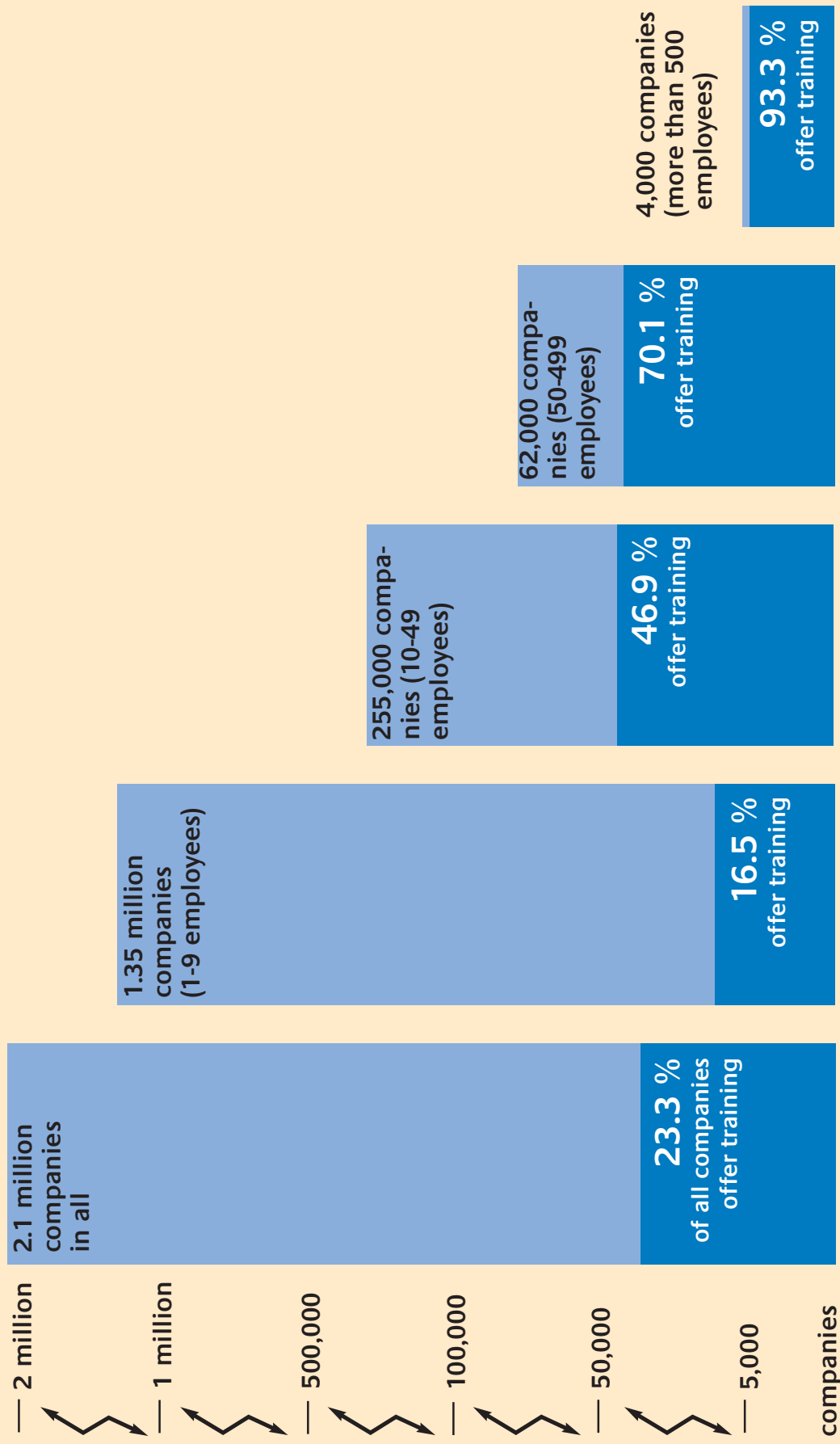
The third most important reason, mentioned by 80% of all companies, is that companies can prevent personnel fluctuation by offering training, since trainees develop ties to «their» company during their training period.

The fourth and fifth most important reasons, each mentioned by about three-fourths of all companies, are that a) by offering training companies can review trainees carefully and pick and choose the best ones for permanent positions, and b) companies that offer training are less likely to make wrong hiring decisions, which can easily occur in consideration of people from outside the company.

These reasons go hand-in-hand with the sixth most important reason – that by offering company-specific training, companies can eliminate the costs they would normally have in «breaking in» new employees from outside the company.

The seventh most important reason, that companies can enhance their reputations by offering training, has a direct impact on revenue. The «this company offers training» («Dieser Betrieb bildet aus») symbol functions as a sort of seal of quality, and it fosters consumer confidence in companies' products.

Participation in training, by company size

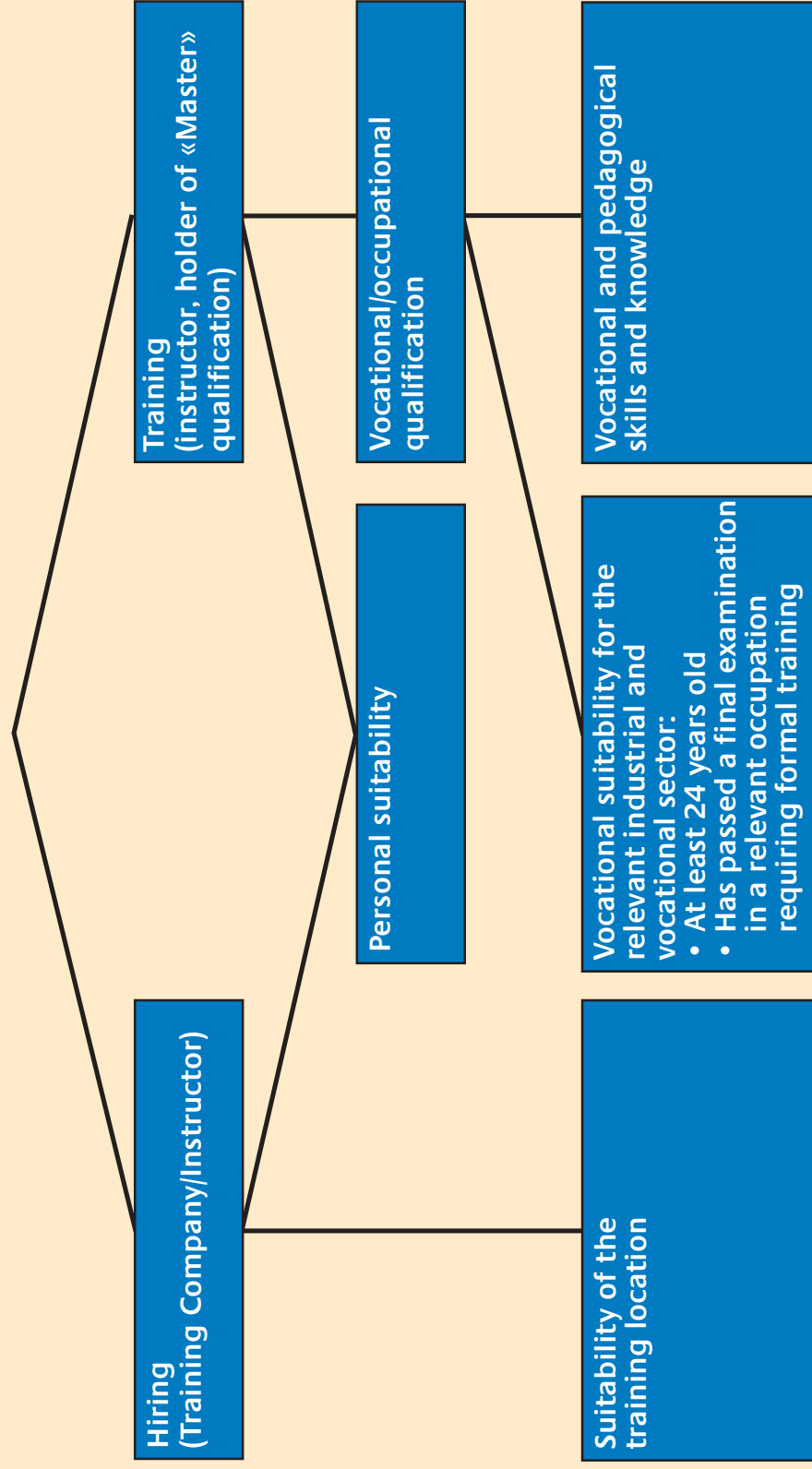
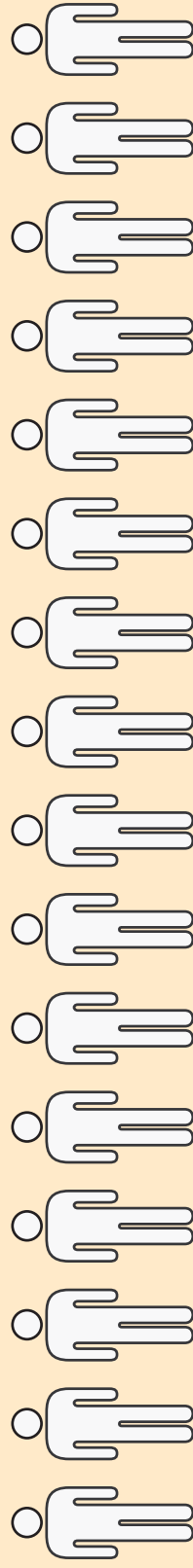


In 1999, Germany had a total of 2.1 million companies, somewhat more than half of which fulfilled the legal prerequisites for offering in-company training. As the figure shows, a total of 23.3 %, or **about one-fourth, of Germany's companies, offered training***. In addition, companies' involvement in training can be closely correlated to company size. The larger a company is, the more likely it is to offer training. This is revealed by a breakdown of training rates by company size. For example, 93.3 % of all large companies (more than 500 employees) offer vocational training. A total of 70.1 %, or about two-thirds, of companies with between 50 and 499 employees offer training.

A major opportunity to increase involvement in training is seen among companies with 10 to 49 employees. In 1999, some 46.9 %, or nearly half, of such companies offered vocational training. Among typical small companies (1 to 9 employees), only 16.5 % were involved in training. Even if this level, which represents nearly one-fifth of all relevant companies, seems low, it is significant that the largest absolute numbers of companies offering training are found in this group. In 1999, a total of 222,300 of companies in this group offered training.

A considerable number of small companies are unsuited for training – because their business is highly specialised or for other reasons – and thus cannot offer training.

* Source: Employment statistics (Beschäftigungsstatistik) of the Federal Employment Services as of 30 June 1999; newer data will next be published in 2003.



Nearly 500,000 companies in Germany offer training. Pursuant to the **Vocational Training Act**, companies must meet **certain suitability criteria**, with respect to company type and company facilities, in order to be certified for offering training.

A company that offers training must be suited for hiring trainees, i.e. concluding training agreements with them. Companies are not suited if they have repeatedly or seriously violated the Vocational Training Act or regulations and provisions issued on the basis of this act. Companies are also unsuited if they are not permitted to employ children and young people in any capacity.

In addition to having the proper personal qualifications, training instructors must have the necessary vocational and pedagogical qualifications. Instructors are normally considered occupationally (vocationally) qualified if they are at least 24 years old and have passed the final examination in a relevant occupation requiring formal training.

Alternatively, other examinations can be recognised if candidates can show suitable practical experience. Vocational and pedagogical qualifications include the ability to plan, carry out and monitor training independently, with an orientation to creative, construction action.

Each year, some 50,000 people pass instructor-aptitude examinations. Significant numbers of people also pass Master's examinations (2000: about 30,000), which also include the necessary testing for vocational and pedagogical qualifications.

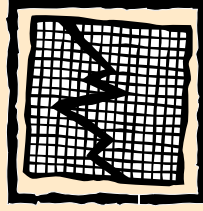
50.6 %
Industry and
commerce



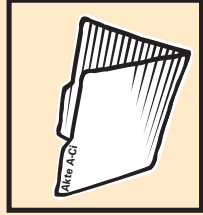
35 %
Skilled trades



8.6 %
Liberal
professions



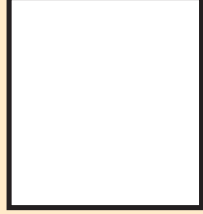
2.7 %
Civil service



2.3 %
Agriculture



0.8 %
Other



The figure shows how trainees were distributed among the various training areas in 2000. The largest numbers of young people are trained in the area of industry and commerce. This area, like that of crafts, includes trainees trained in relevant occupations in other economic areas – for example, in the liberal professions or in civil service. Over 50 % of all trainees in the civil service sector learn such relevant occupations. The figure does not show numbers of trainees in specific economic areas; it shows the **general occupational structure** in training overall.

Over one-third of all trainees train in crafts companies. Significantly, this figure includes training in both skilled trades and in other occupations such as commercial clerks.

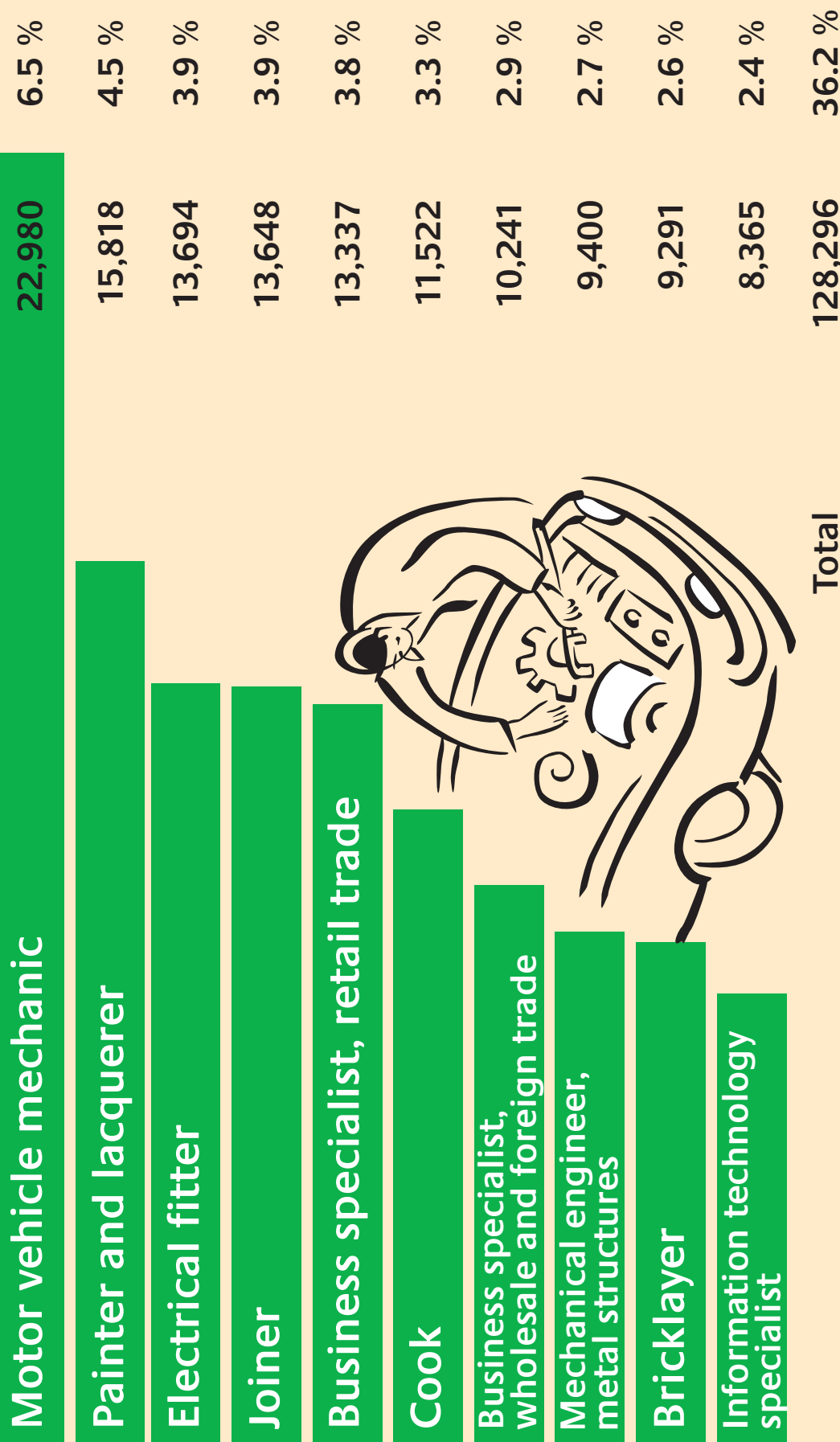
The average **duration of training**, pursuant to training regulations, is 37.7 months. The planned duration of training, depending on occupation, ranges from 2 to 3 1/2 years.

The average actual duration of training is about 35.5 months, because the regular training periods tend to be shortened, for a number of different reasons.

The ten most popular occupations requiring formal training

10

– young men New contracts overall: relevant percentages with respect to all new trainees



The ten most popular occupations requiring formal training – young men

10

Young male trainees are not distributed evenly among the 345 recognised occupations requiring formal training. A large share of all trainees is trained in just a few occupations. Note: the figures apply to trainees who began their training in 2000.*

About **one-third of all young men** learn one of the **ten occupations** listed, most of which are in industrial-technical areas and skilled trades. The occupation «information technology specialist» (Fachinformatiker), which was recently formally established, is now one of the most popular occupations for young men.

The distribution among the various occupations does not necessarily reflect the original career interests of the trainees involved; it is also the result of efforts to balance the available number of training places with the demand for training places.

Young peoples' career interests and actual career opportunities also vary by type of school-leaving certificate. The most popular occupations for graduates of secondary-modern schools (Hauptschule) are motor vehicle mechanic, business specialist in retail trade and hairdresser. The most popular occupations for graduates of secondary schools (Realschule) are business specialist in retail trade, commercial clerk and physician's assistant.

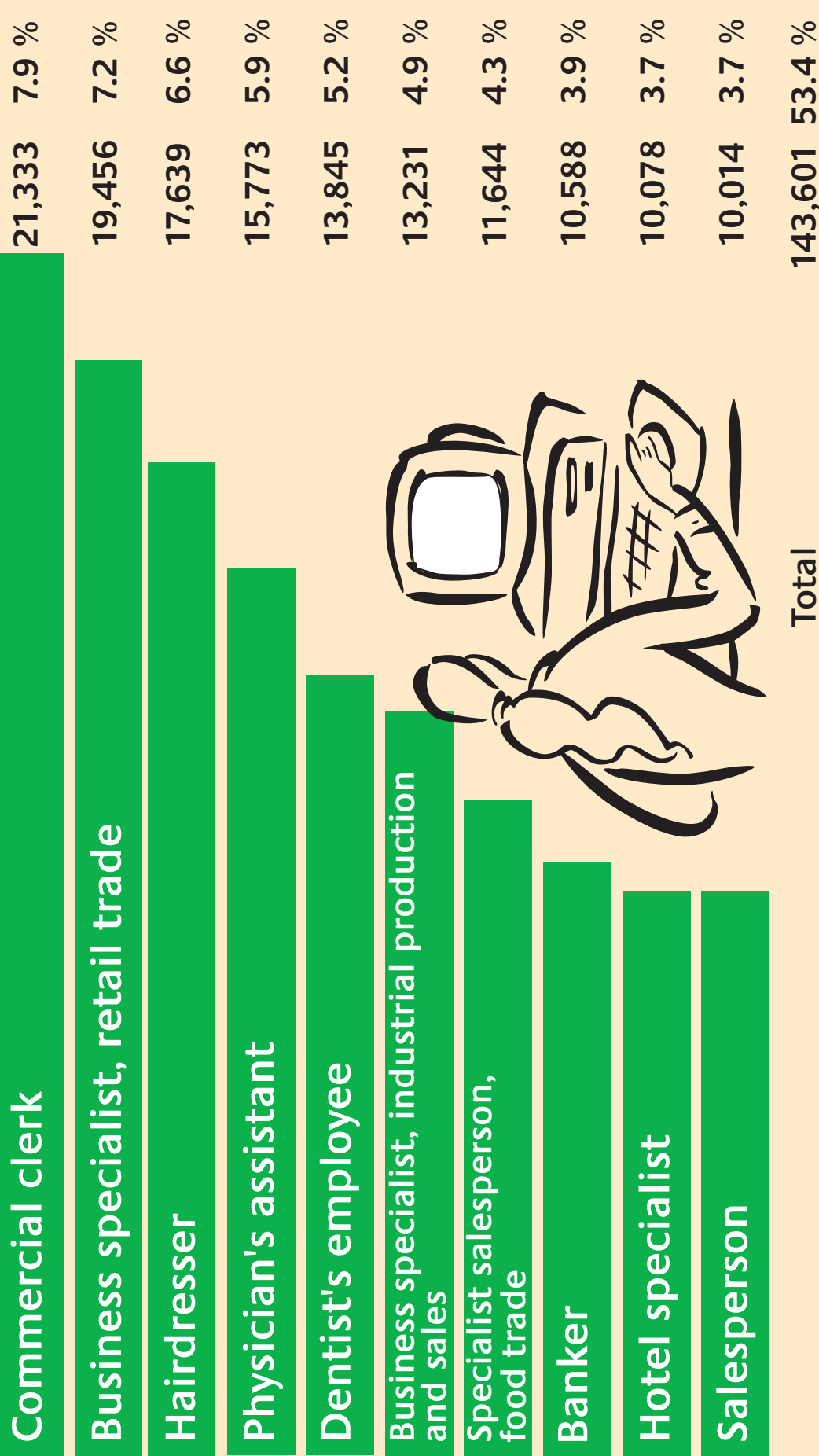
The most popular occupations (in order of popularity) for school-leavers with a university entrance certificate are banker; business specialist, industrial production and sales; and business specialist, wholesale and foreign trade.

* Source: (Survey of the Federal Statistical Office as of 31 December)



The ten most popular occupations requiring formal training 11

– young women New contracts overall: relevant percentages with respect to all new trainees



The ten most popular occupations requiring formal training – young women

11

The figures apply to female new trainees in 2000.

Some 41 % of all trainees are young women. This percentage has slowly been growing. Their distribution among the various occupations is different than that for young men, and the percentage of all female trainees in the ten most popular occupations is considerably higher than the corresponding percentage for young men. The services sector predominates. Occupations in the retail sector make up the largest group, followed by occupations in physician's and dentists' offices.

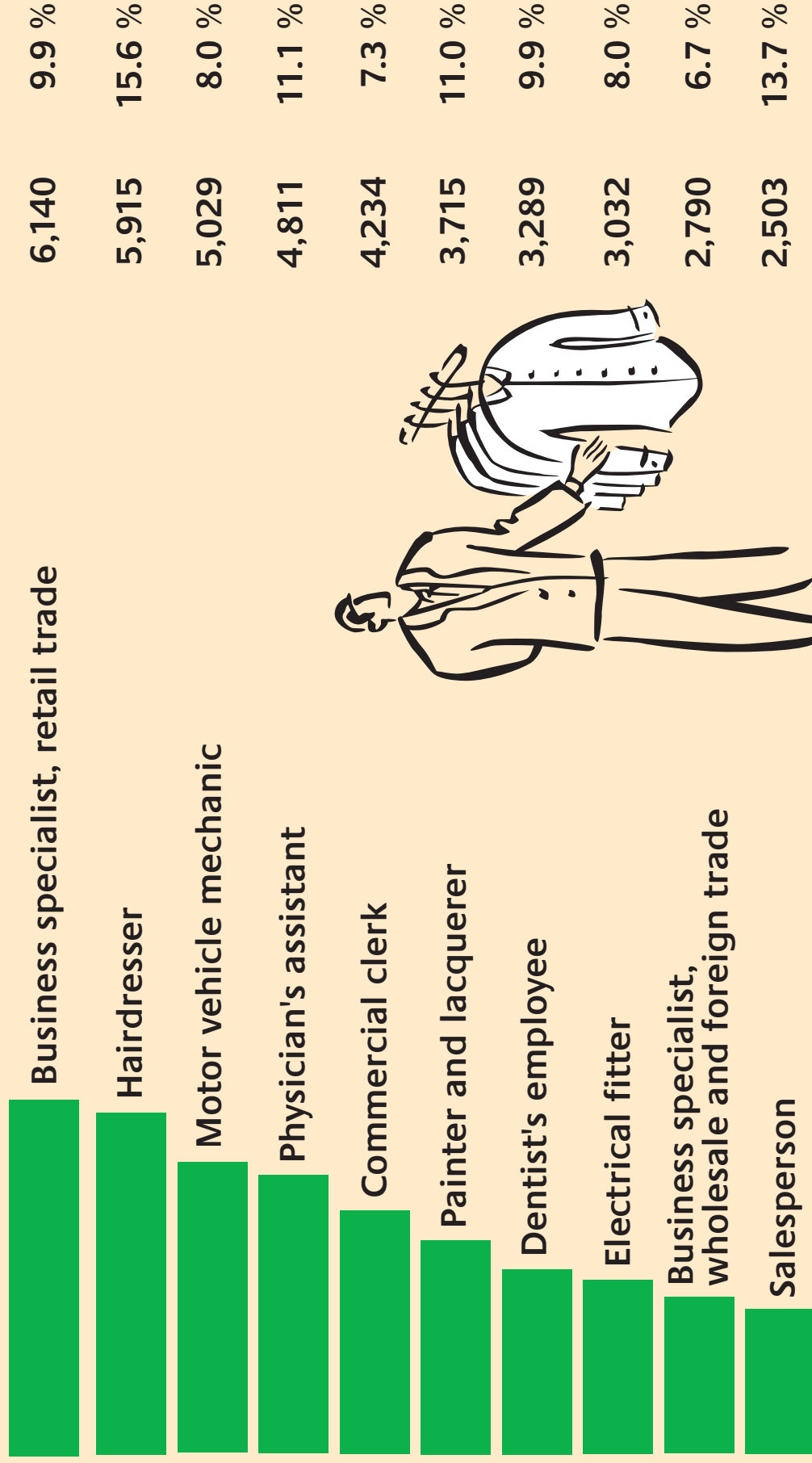
In some of the occupations that young women learn, female trainees greatly outnumber male trainees. This is the case, for example, in training for the liberal professions. On the other hand, only very small numbers of women learn certain occupations – for example, occupations in the industrial-technical sector. Such overall distributions can change markedly over time: 20 years ago, only 20 % of all typesetters were female; today, the corresponding figure is far higher than 50 % (this occupation has changed profoundly as a result of technical development, and it is now referred to as «media designer, digital and print media»).

Many initiatives have been undertaken with the aim of achieving a better balance between young men and women in occupations requiring formal training. Success in overcoming conventional ideas of occupations' suitability for young people, and in changing companies' standard trainee-recruiting patterns, has been very modest to date, however.

The ten most popular occupations requiring formal training – foreign trainees

12

New contracts overall: relevant percentages with respect to all new trainees in the various occupations¹



¹The figures were calculated for the old Länder, including Berlin, since there are very few foreign trainees in the new Länder.

The ten most popular occupations requiring formal training – foreign trainees

12

Some 7 % of all trainees are foreigners. A total of 41 % of all foreign trainees are women (the same women's percentage seen among German trainees). For years, the overall percentage of trainees who are foreign nationals has been declining. In part, this is due to changes in naturalisation policies: young people of foreign background are of course counted as Germans if they have acquired German citizenship.

The figure shows **numbers of foreign trainees, expressed as percentages of all trainees in various occupations**. The order in which the occupations are presented is based on numbers of new trainees in 2000 who were foreign nationals.

A breakdown of the total number of foreign trainees reveals that young people with Turkish citizenship make up the largest national group, accounting for 41 % of all foreign trainees. In addition to Turkey, the group of non-EU countries with large numbers of trainees in Germany includes Yugoslavia (8 %), Croatia (4 %) and Poland (2 %). Some 22 % of all foreign trainees are EU citizens; of these, nearly half are Italians.

Nearly 40 % of all young foreigners in each age group undergo training in the dual system. This percentage is considerably lower than the corresponding percentage for young Germans. In addition, participation in the dual system varies widely by nationality. The percentage of young Spaniards (both women and men) who participate in the system is similar to the corresponding percentage for Germans. Young Turkish men, at 57 % in this category, participate at a considerably higher rate than the average for young foreigners, while young Turkish women, at 37 %, have a considerably lower rate of participation than the average.

Nearly 10% of all pupils in full-time vocational schools are foreigners. While this figure is higher than the percentage of dual-system trainees who are foreigners, it does not suffice to compensate for young foreigners' low overall rate of participation in vocational qualification.

Programmes have been established to help increase young foreigners' rate of participation in training. The support provided to disadvantaged people under the code of social law (SGB III) plays a significant role in this context. The Federal Ministry of Education and Research (BMBF) has established the programme «Promoting competence – vocational qualification for target groups with special support requirements», which is aimed at developing and testing concepts for vocational qualification of such groups and at enhancing the relevant support structures. One of these target groups consists of young foreigners.

Distribution of foreign new trainees among the various occupations requiring formal training does not differ greatly from that for German trainees. Nonetheless, some occupations have comparatively large shares of foreign trainees.



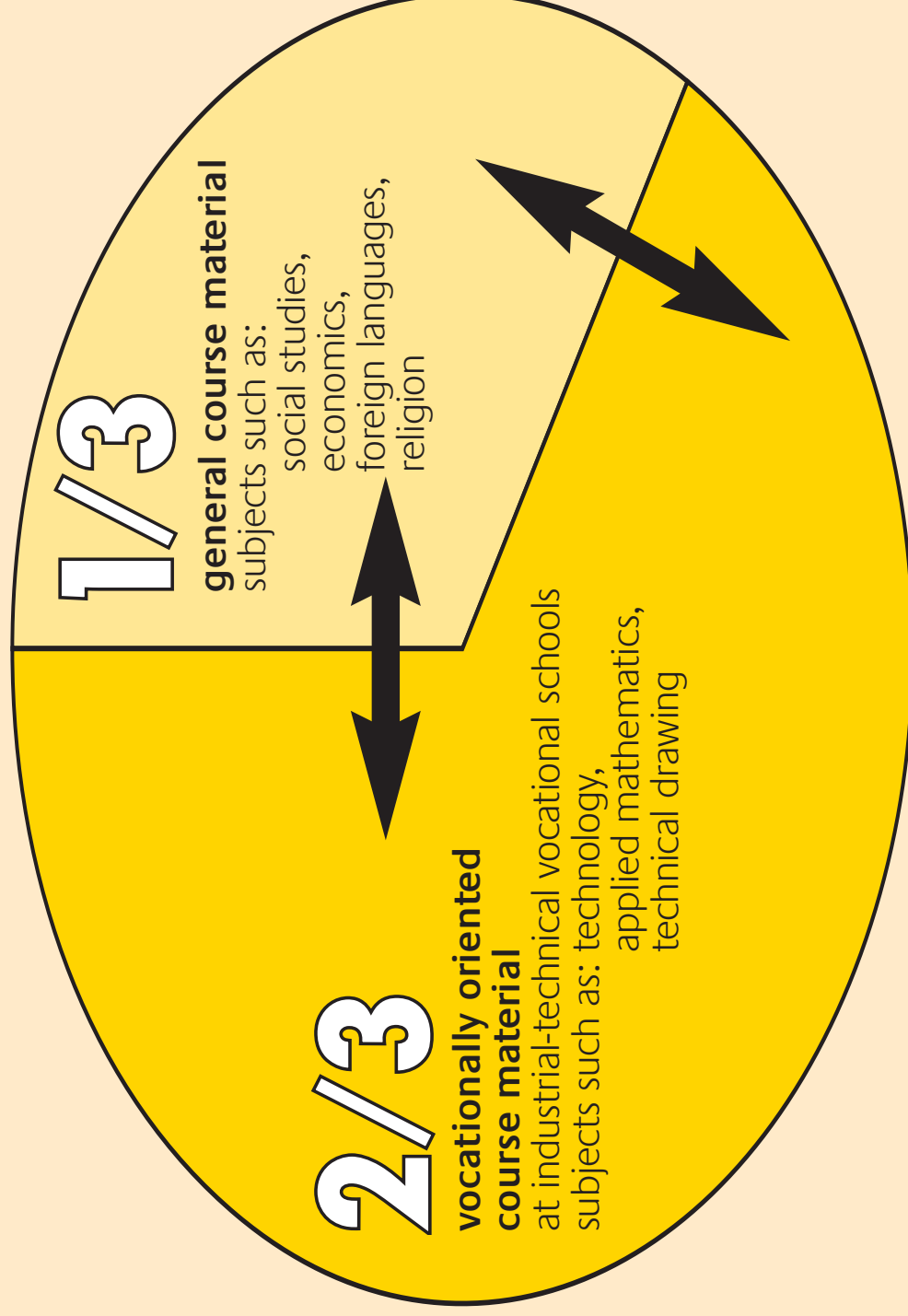
Trainees' salaries are based on agreements between the parties to **collective bargaining agreements**. All companies that offer training must pay a «suitable» training wage; the wages specified under collective bargaining agreements provide orientation for such suitability. The competent bodies review agreed training wages for suitability. In addition, training wages must grow with increasing duration of vocational training – and must be increased at least once per year.

The average training wage paid in Germany in 2001, under collective bargaining agreements, was 581 €; in the old Länder, the relevant figure was 598€, and in the new Länder it was 508 €.

Collectively bargained **training wages vary widely by occupations**. High wages have been agreed in trades central to the construction industry (such as bricklayer, carpenter, and skilled workers in road construction): in the old Länder, 789 € per month; in the new Länder, 643 € per month. Relatively high training wages have also been agreed for trainees in the printing industry (787 €) and for those training to be business specialists in the insurance sector (783 €) – and these levels apply to both the old and the new Länder. Training wages are also high for scaffolders, at 766 € in the old Länder and 641 € in the new Länder.

Relatively low training wages are paid for hairdressers (old Länder 406 € , new Länder 257 €), florists (old Länder 413 €, new Länder 312 €) and bakers (old Länder 455 €, new Länder 350 €).

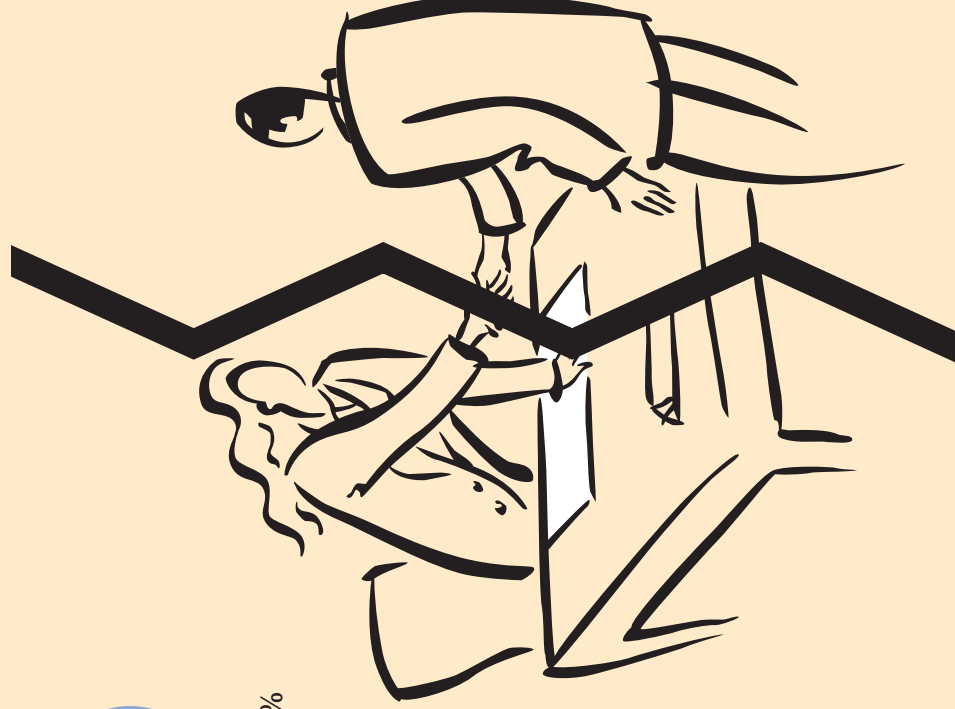
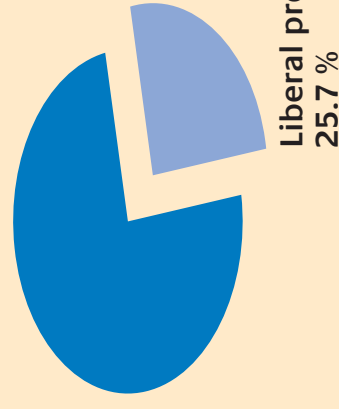
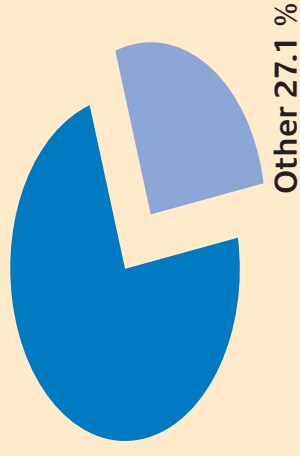
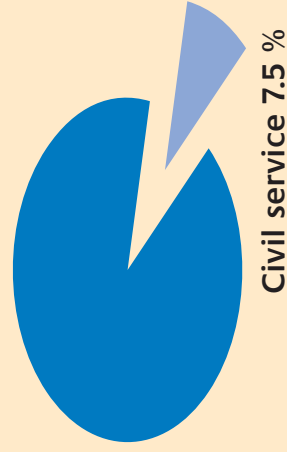
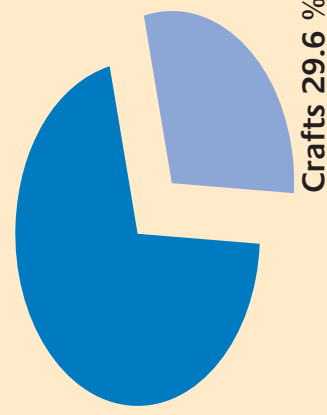
Trainees who receive especially low training wages can apply for vocational training support from the Federal Employment Services (Bundesanstalt für Arbeit). Via such assistance, trainees are guaranteed a certain minimum wage during their training.



In the dual system, **vocational schools and companies that offer training** fulfil a **joint training responsibility**. Vocational schools are autonomous training facilities that cooperate, on an equal footing, with other parties involved in vocational training. Vocational schools teach their pupils both vocational and general course material, giving special attention to the requirements for vocational training. And vocational schools also have the task of providing education that broadens vocational training or supports pupils' employability. Under provisions of relevant Länder laws, such schools may also offer vocational further training.

Under a **framework agreement on vocational schools** (Resolution of the Standing Conference of the Ministers of Education and Cultural Affairs of the Länder in the Federal Republic of Germany (KMK) of 14/15 March 1991), about two-thirds of instruction should be vocationally oriented, and one-third should provide general education or be applicable to a broad range of occupations. At least 12 hours of instruction are provided per week. The general part of the instruction is taught in accordance with the curriculum and schedules of the relevant Land. The vocational part of the instruction is based on the framework curricula of the KMK, which are harmonised with the relevant training regulations via a procedure agreed on by the Federal Government and the Länder (joint results protocol of 30 May 1972). More recent framework curricula are divided by «learning areas». Learning areas are instruction units that are derived from the main tasks within a relevant occupation. With this concept, vocational-school training is oriented to company processes and, thus, complex tasks. General instruction includes such subjects as social studies, economics, German, foreign languages, religion and sports. It is closely combined with vocational subject matter, in a number of different ways.

Training contracts terminated early



Industry and commerce 20.1 %

Nearly **one out of every four training contracts** (total: 23.7 %) is terminated early – before the planned end of the training. The termination rate for young women is somewhat higher than that for young men.

Termination rates are especially high in the crafts sector and especially low in civil service. Differences between training areas in this regard are also due to differences in company size: in smaller companies, tension between training personnel and trainees cannot easily be resolved by moving trainees within the company. In some cases, trainees find the occupation they are training for does not live up to their expectations. In other cases, trainees' performance during the trial period is not up to their companies' standards. In still other cases, trainees suffer health problems – such as allergies, for example.

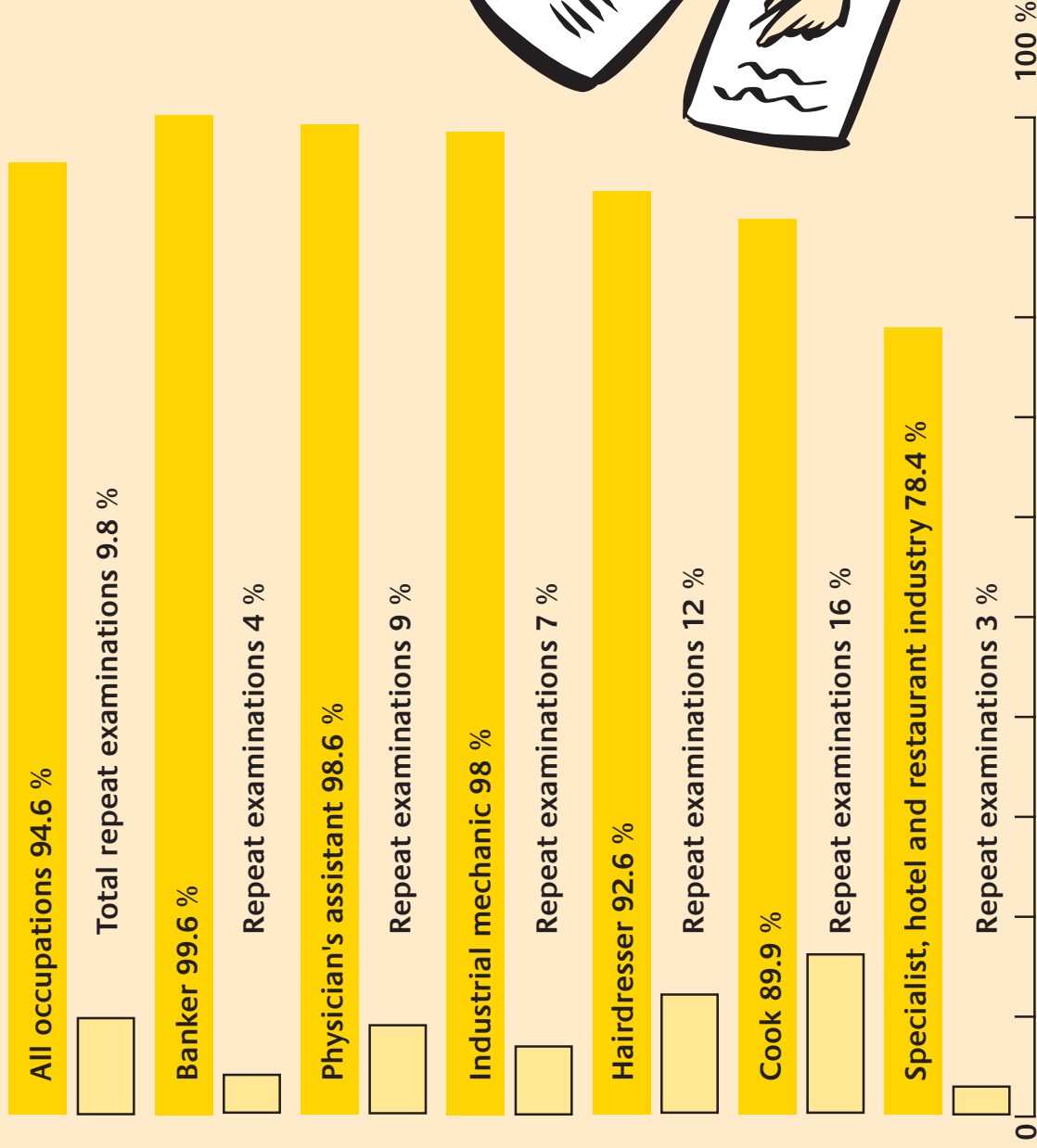
Nearly one-fourth of all terminations take place during the trial period, i.e. during the first three months of training. Another one-fourth take place during the first year of training.

Some terminations are also due to changes of ownership or legal form in the company offering the training: in such cases, a new training agreement has to be signed, even though the training itself has not changed.

And yet **contract termination cannot be equated with discontinuation of training**. Many trainees terminate their contract because they decide to switch to another company or another occupation. About half of all those whose contracts are terminated continue training in the dual system, under different conditions and terms. Such changes can be compared with changes of universities or major subject areas in higher-education studies.

The percentages of contracts that are terminated decrease as training places become scarce, and they grow as more training places become available: in the latter situation, trainees can more easily correct their choices of company or occupation.

Trainees' success rates in final examinations



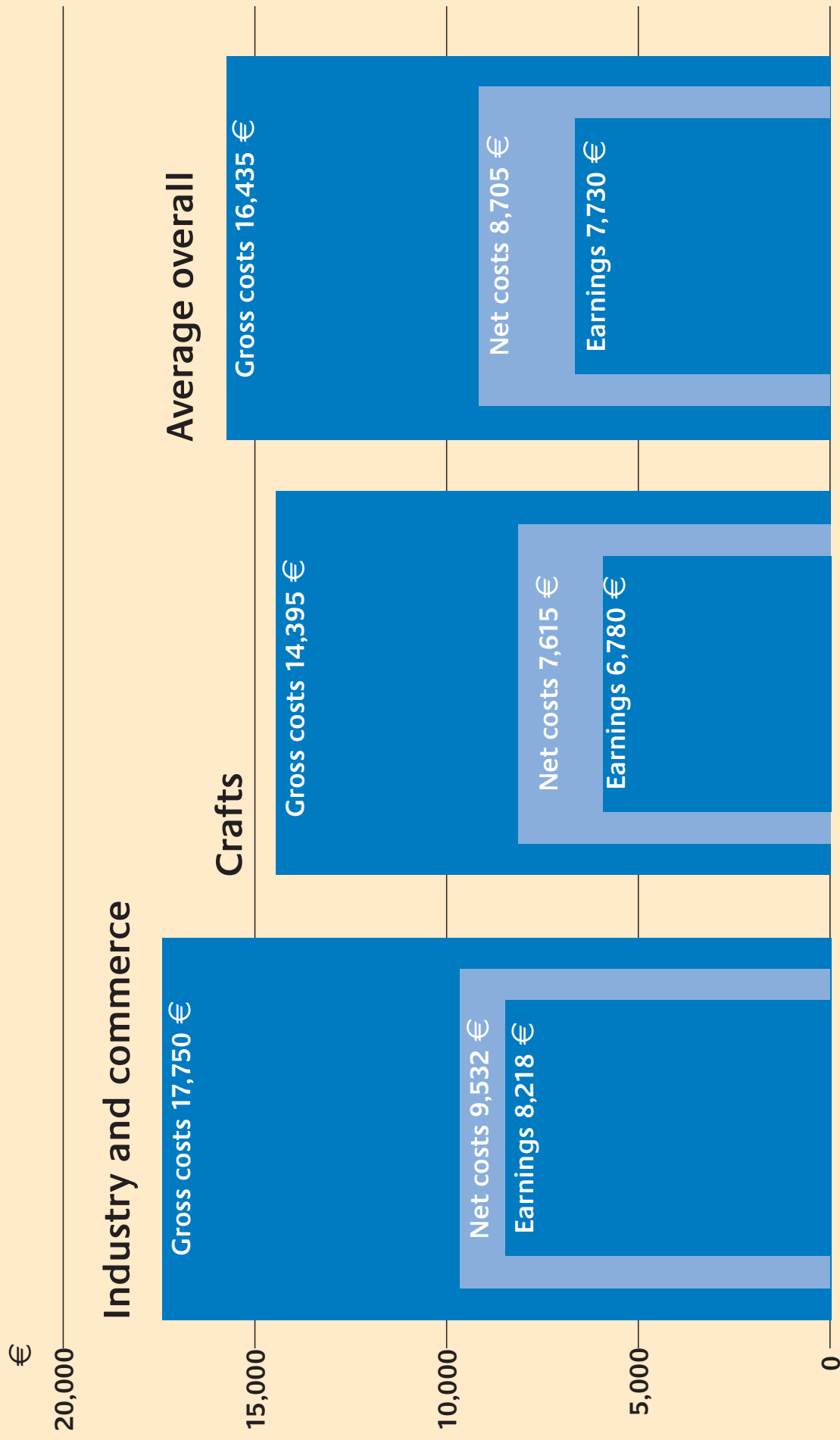
Some 95 % of all those who take **final examinations** pass these examinations, although some succeed only upon a second (or even third) attempt. A trainee who does not pass his or her examination can extend his or her training agreement until the next examination date – and for up to one year. Repeat examinations account for some 10% of all examinations, and the success rate for all examinations (including repeat examinations) is 85 %.

Success rates, and percentage levels of repeat examinations, vary from occupation to occupation. Examinations tend to be repeated more often in industrial occupations than in commercial occupations, and yet the pass rates at the end of training are somewhat lower in the former category than in the latter (93.1 % as opposed to 95.9 %).

In assessing pass rates, it must be remembered that over 10 % of all those who enter dual-system training leave the dual system before they take their final examination.

Examinations are administered by examining boards that consist of experts (for the relevant areas being tested) commissioned by employers' and employees' associations and include at least one vocational-school teacher. Teachers may not make up more than one-third of such boards.

Examinations normally consist of written and oral sections and practical demonstrations of proficiency. Their details are set forth by training regulations.



Determining the **costs of in-company vocational training** is a relatively complicated process, since certain calculated costs have to be taken into account along with expenditures caused directly by training itself (such as training wages and employers' contributions to social insurance, other sums and expenditures for external instruction). Only full-time training personnel can unambiguously be assigned to the cost side. The costs for part-time training staff, and many general costs, simply have to be estimated. The figures provided are results of studies of the Federal Institute for Vocational Training (BIBB).

In 2000 the companies' incurred annual **gross costs** for vocational training totalled some 16,500 €. The return that can be directly offset against these costs – each trainee works for his or her company – was considerably more than 7,700 €. The **net cost** to companies, for training one young person per year, thus averaged some 8,700 €.

That is the cost side. Vocational training is also an **investment**. Companies themselves understand this, as they indicate in their reasons for offering training. Investments must be assessed on the basis of their long-term, rather than short-term, returns.

Furthermore, workers trained in the company also have a better understanding of their company's operations and its production and services. Companies which do not invest in training have to bear additional costs when recruiting external specialists, who need time to settle in. Seen in this light, training certainly pays off for companies.



Expenditures for the dual system, by financial contributors in 2000/2001

21.8 Billion €

Total expenditures

14.7 Billion €

Companies' net costs 67.5 %

3.1 Billion € Part-time vocational schools

0.3 Billion € Training programmes,

support for regional vocational training centres

Federal Government and Länder 15.5 %

3.7 Billion €

Federal Employment Services 17 %



Expenditures for the dual system, by financial contributors in 2000/2001

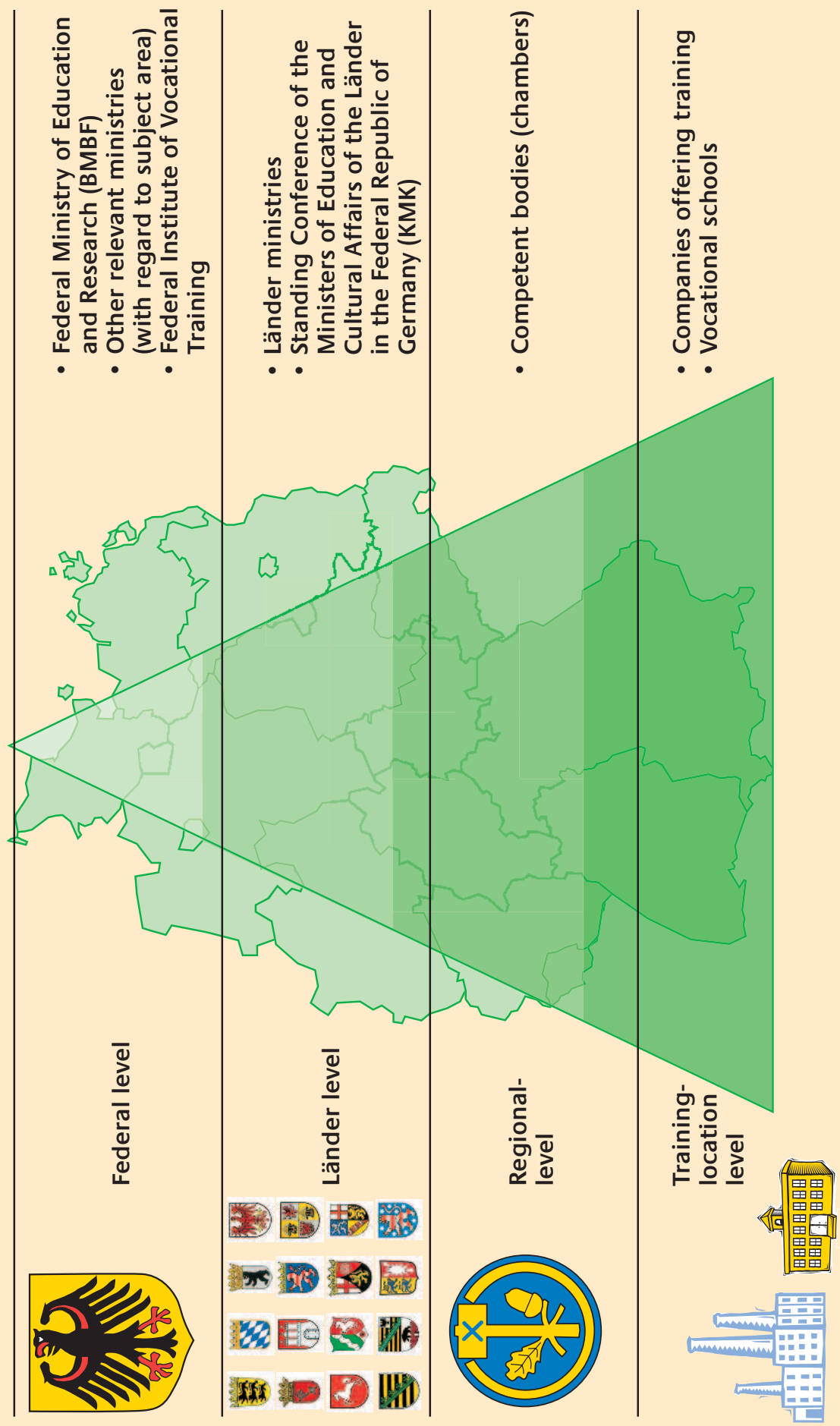
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Each year, the Federal Government, the Länder and municipalities, along with the Federal Employment Services, spend some 92 billion €, or about 4.1 % of the country's gross domestic product, on the education sector. Some 7.2 billion €, or 7.9 %, of this amount goes toward vocational training in the dual system.

As the figure shows, **total expenditures on dual-system vocational training** amounted to about 21,8 billion € in 2000. Business enterprises pay nearly two-thirds of expenditures on vocational training. Vocational schools and the Federal Employment Services each pay about one-sixth.

The Länder pay an additional some 3.3 billion € for vocational training in vocational full-time schools.

The Länder thus expend considerably more on vocational training than the Federal Government and Federal Employment Services. On the other hand, the Federal Government and the Federal Employment Services spend much more than the Länder on supporting vocational further training.



Policymakers, companies and unions in Germany all agree: Good vocational training is an investment in the future.

A vocational training system that is as complex and far-reaching as the German dual system must be able to integrate the expertise and interests of all concerned parties (employers, employees, the state), on all levels, within joint responsibility for planning, carrying out and improving the system. Solutions found through joint effort lead to voluntary commitment and integration within overall policy, and they help to avoid conflicts and friction. With such solutions, all concerned parties take joint responsibility for the results of vocational training, and the results are more easily accepted by the job market. Co-operation in the dual system is legally enshrined on all levels (Federal Government, Länder, region, training location) and it has proven to be a success.

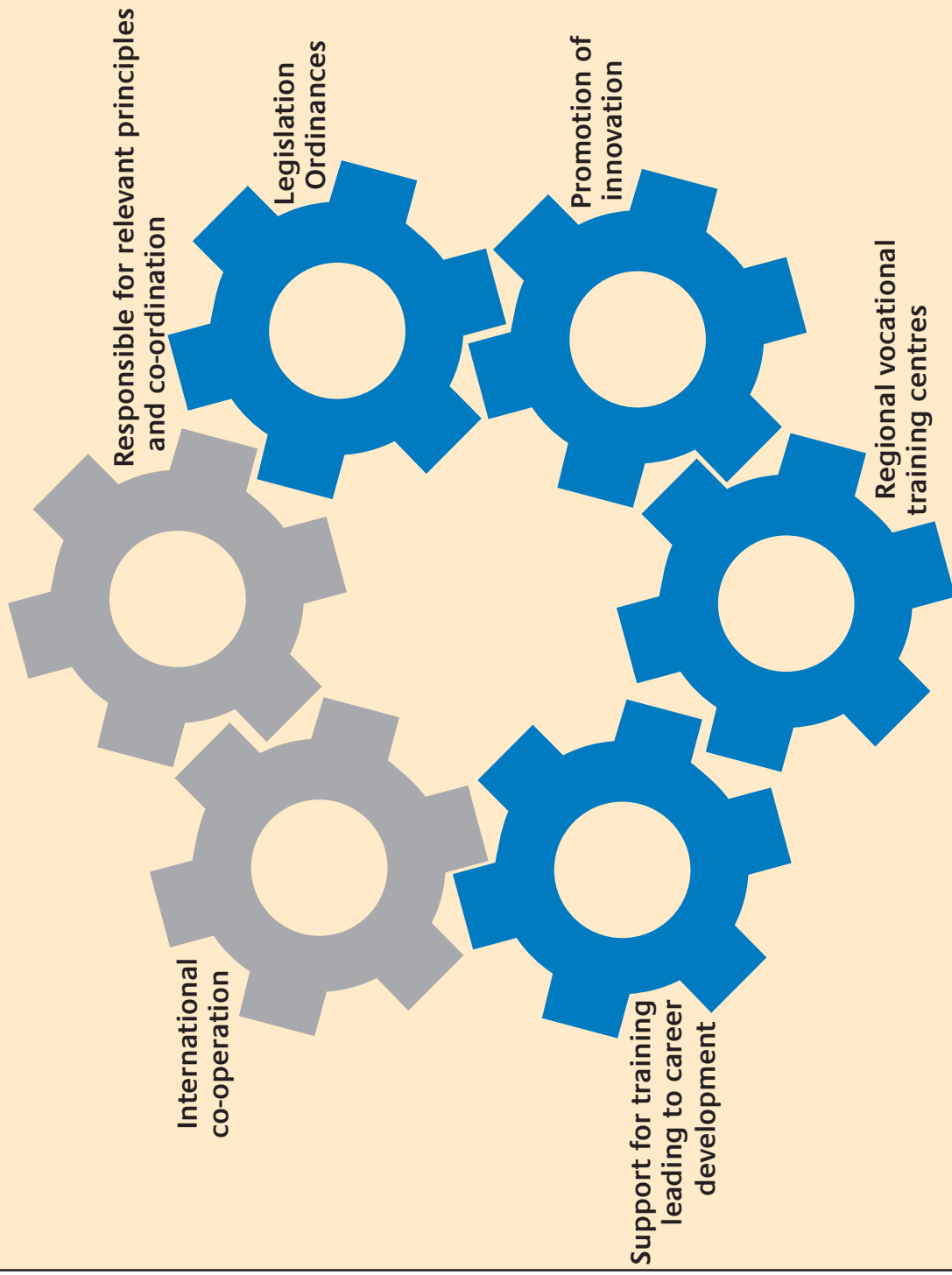
The guiding and co-ordinating ministry on the **federal level** is the Federal Ministry of Education and Research (BMBF). Other relevant federal ministries also issue ordinances and co-ordinate with the BMBF (their provisions are subject to the approval of the BMBF). In the Board of the Federal Institute for Vocational Training (BIBB), representatives of employers, the unions, the Länder and the Federal Government work together on an equal basis.

The Standing Conference of the Ministers of Education and Cultural Affairs of the Länder in the Federal Republic of Germany (KMK) is a national body of Länder ministers and senators responsible for education and training, higher education and research and cultural affairs. It was founded in 1948. Pursuant to the Basic Law, the Länder are largely responsible for education and cultural affairs. In the KMK, the Länder work to achieve the necessary measure of commonality in the areas of education, science and cultural affairs. The KMK is also an instrument for partnership and co-operation between the Länder and the Federal Government – also in the area of vocational training: the Federal Government is responsible for regulating training in companies, while the Länder are responsible for vocational training in schools.

The Länder governments, represented by their own ministries of cultural affairs, are responsible at the **Länder level** for general and vocational schools. The Länder committees for vocational training are made up of representatives of employers, employees and the relevant Länder governments. These Länder committees advise their Länder governments on vocational training issues. They are charged especially with promoting co-operation between school-based and in-company vocational training and with taking account of vocational training in overall development of schools.

On the **regional level**, the autonomous organisations within the economy, especially the chambers of industry and commerce and the crafts chambers, have important competencies. They are responsible for advising and monitoring companies offering training within their districts, as well as for reviewing the suitability of such companies and the aptitude of their training instructors. They are also charged with registering training agreements and with establishing examination boards for intermediate and final examinations in vocational training and further training. Furthermore, they issue individual regulations for their own regions, where they are empowered to do so under the Vocational Training Act and Handicrafts Regulation Act. As a rule, the Länder ministers of economics are responsible for supervising regional competent bodies for in-company vocational training.

Pursuant to the Works Council Constitution Act (Betriebsverfassungsgesetz), employees' elected representatives (works councils) in the [nearly 500,000] companies offering training (the **training-location level**) have rights of participation in planning and carrying out vocational training and in hiring instructors. Also worthy of mention are the instructors' working groups, which meet on a voluntary basis and are open to teachers at the dual system's some 1,700 vocational schools.



BMBF's Bonn location



BMBF's Berlin location

The Federal Ministry of Education and Research (BMBF) is the Federal Government's **guiding and co-ordinating ministry** for vocational training.

It is responsible for **legislation** within the area of vocational training, for **ordinances** on further training and for the Ordinance on aptitude of instructors. Training regulations are issued by the relevant ministries, in agreement with the BMBF.

The BMBF promotes **innovation in vocational training** – for example, via programmes for improving training opportunities for persons requiring special support, for developing new forms of teaching and learning, for broadening use of media in vocational training, for promoting regional co-operation in vocational training and for establishing new methods of vocational competence development during and after training. The ministry is also active in the area of early identification of new qualification requirements.

Regional vocational training centres compensate for smaller companies' lacks of training resources. To ensure that training is available nation-wide, the BMBF promotes investments in training resources. It also subsidises start-up of training facilities and development of such facilities into regional competence centres.

Support for training leading to career development (Aufstiegsfortbildungsförderung) is oriented to the principle that general and vocational training are of equal value: participants in vocational further training receive support comparable to that given to university students.

Within the framework of **support for the gifted in vocational training**, support is provided for further training of young people who have excelled in their (completed) vocational training.

European and international co-operation, especially within the EU framework, is another important area of the ministry's work.

Vocational training law

Vocational Training Act (BBlG)
Act on Regulation of Handicrafts (HwO)
Vocational Training Promotion Act (BerBiFG)

Laws



Ordinance on aptitude of instructors (AEVO)
Training regulations
Ordinances on crediting of learning at full-time vocational schools
Ordinances on crediting of learning during the
«year of basic vocational training»
Ordinances on further training

Ordinances



Agreements on vocational training
(model agreements)

Agreements



The figure shows the most important legal foundations of in-company (non-school) vocational training.

Laws

The Vocational Training Act (BBiG) contains national regulations for vocational training other than that provided by vocational schools, which function in accordance with the Länder laws on schools. The **Act on Regulation of Handicrafts** (Handicrafts Regulation Act) regulates vocational training in the crafts sector, with close orientation to the Vocational Training Act.

Young people may be trained only in recognised occupations requiring formal training (exceptions apply for the handicapped). Training regulations have been established for recognised occupations.

Regulations on further training may be issued by competent bodies or by the Federal Government, «as a basis for standardised vocational further training».

The **Vocational Training Promotion Act** (Berufsbildungsförderungsgesetz - BerBiFG) contains regulations for planning and statistics for vocational training (a vocational training report must be submitted each year) and for the work of the Federal Institute of Vocational Training (BIBB) and its organs.

Ordinances

- Training regulations provide the formal basis for orderly, standardised training in recognised occupations requiring formal training. In each case, they set forth at least the following: the name of the relevant occupation requiring formal training; the duration of training for the occupation; the skills and knowledge that relevant vocational training must impart; guidelines for organisation, by subject area and instruction duration, of teaching of skills and knowledge; and criteria for examinations. Training regulations are co-ordinated with the framework curricula for vocational schools, for which the Länder are responsible.
- Ordinances on crediting of learning at full-time vocational schools establish criteria for shortening of training periods following successful completion of full-time vocational school.
- Ordinances on crediting of learning during the «year of basic vocational training» (Berufsgrundbildungsjahr – BGJ) establish criteria for shortening of training periods following successful completion of a year of basic vocational training.
- The Ordinance on aptitude of instructors (Ausbilder-Eignungsverordnung – AEVO) contains regulations pertaining to proof of the vocational and pedagogical aptitude of instructors. Pursuant to the AEVO, every instructor (with the exception of those for liberal professions), in addition to possessing the specialised aptitude (i.e. with regard to the subject area in question) set forth by the Vocational Training Act, must also show that he or she has acquired relevant vocational and pedagogical skills.
- The BMBF issues ordinances on further training, pursuant to Art. 46 Vocational Training Act, by agreement with the relevant competent ministries. Such ordinances regulate the content and aims of such training, the relevant requirements, the procedures for relevant examinations and the prerequisites for admission.

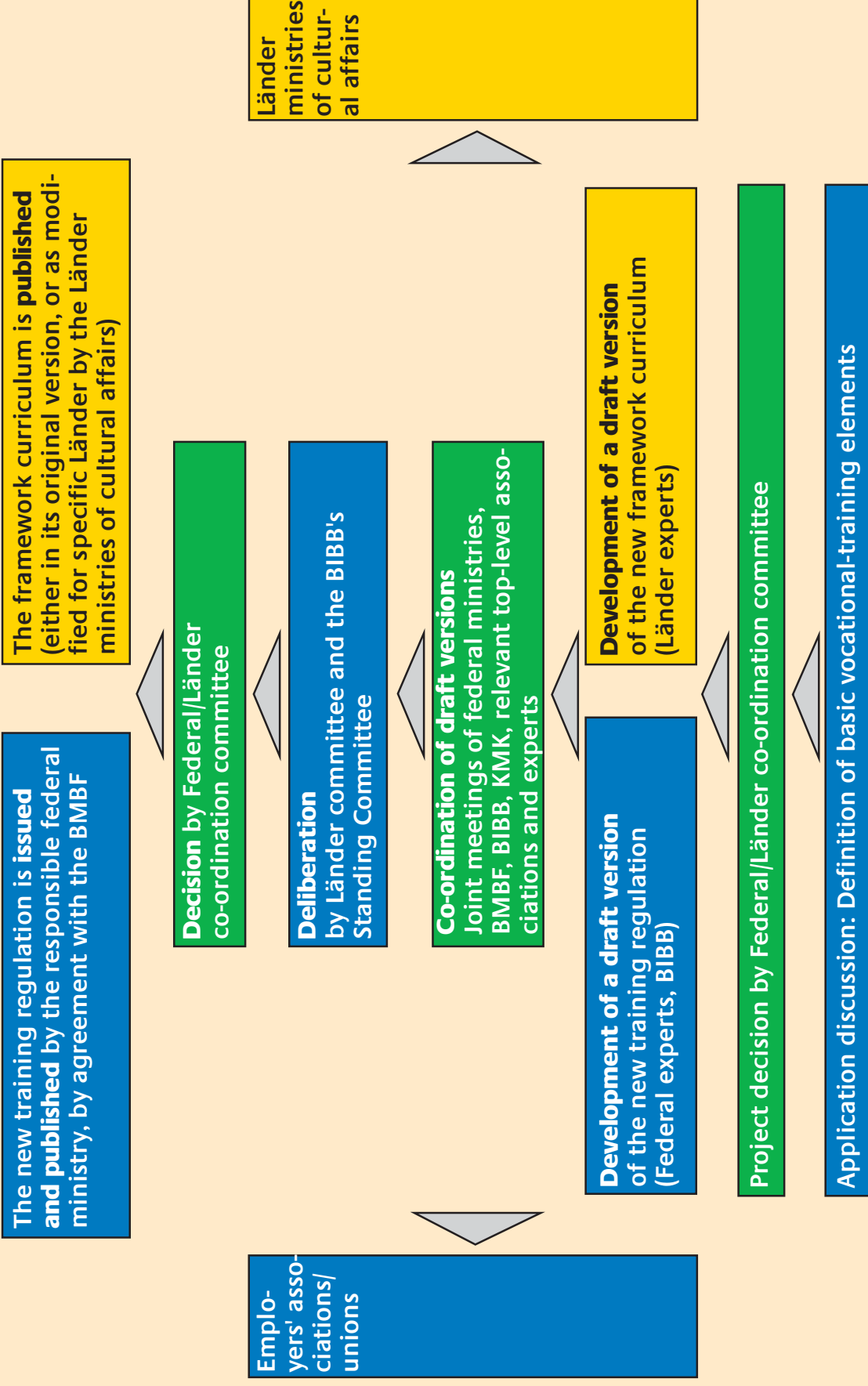
Agreements

Before a trainee's training can begin, the relevant company and the trainee must sign a written training agreement. The minimum required contents of such agreements are regulated by law. The company's and the trainee's basic rights are set forth by the Vocational Training Act. In addition, training agreements are subject to provisions of labour law.

The training agreement also sets forth the training wage, which will be in keeping with, or based on, collective bargaining agreements.

Training agreements must be submitted to the competent body and entered by that body in the «Directory of vocational training agreements» («Verzeichnis der Berufsausbildungsverhältnisse»), in cases in which the company's suitability for providing training has been demonstrated.

Co-ordination of training regulations and framework curricula



In the dual system, vocational training takes place both in companies and in vocational schools. As a result, it is necessary to **co-ordinate** the subject matter taught in these two **learning spheres**, along with the relevant scheduling.

For this reason, the training content provided by companies, in keeping with the **training regulations** for the relevant occupations, must be co-ordinated with the course content provided by vocational schools, pursuant to **framework curricula**. A special procedure has been developed for this, providing for close co-operation between the Federal Government and the Länder and giving the social partners (employers' and employees' representatives) an important role. This procedure is outlined in the figure. A one-year period is allowed for modernisation of an existing occupation, while two years are allowed for development of a new occupation.

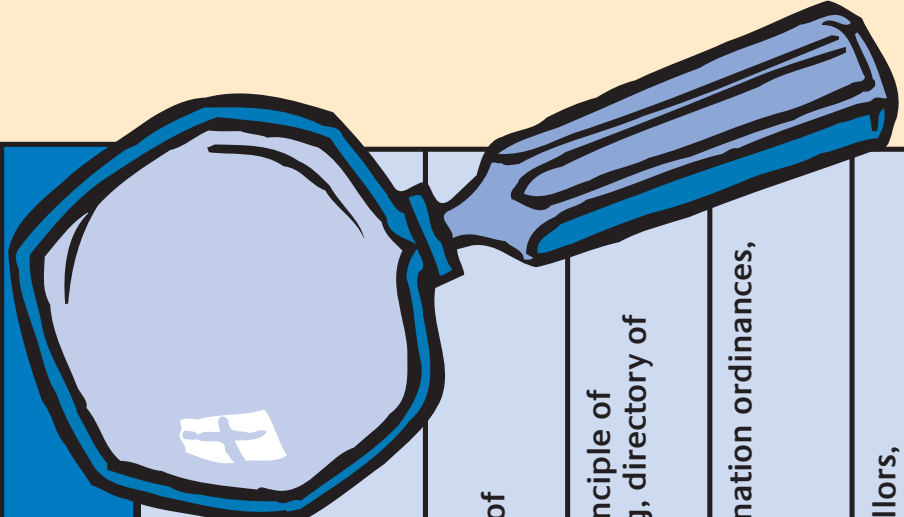
In an **application discussion**, the relevant federal ministry normally the Federal Ministry of Economics and Employment (BMBA), defines the basic criteria for the vocational training in question (including the name of the occupation, the duration and structure of the training, a rough outline of the necessary qualifications), by agreement with the Federal Ministry of Education and Research (BMBF) and with the participation of social partners' top-level and specialised organisations and of the Federal Institute of Vocational Training (BIBB). A federal/Länder co-ordination committee then decides on the (re)ordering of the relevant occupation (project decision regarding the commencement of reordering).

The relevant drafts are then prepared in separate bodies: the draft of the training regulation is prepared by federal experts, while the draft of the framework curriculum is prepared by Länder experts (framework-curriculum committee).

The **social partners** (employers' and employees' representatives) are involved in preparing and co-ordinating the draft versions, and relevant decisions are made jointly by all concerned parties. The consent of employers' and employees' associations ensures that a relevant regulation is promptly prepared and implemented. In a next step, a joint meeting is held, under the BMBF's chairmanship, and involving representatives of relevant top-level associations, federal and Länder experts and the BIBB, in order to finalise co-ordination of the content and scheduling set forth by the drafts of the new training regulation and framework curriculum.

After being deliberated by the Länder committee and the BIBB's Standing Committee, the drafts of the new training regulation and framework curriculum are approved by formal decision of the Federal/Länder co-ordination committee.

When the above process has been completed, the **training regulation is issued and published** by the responsible federal ministry, by agreement with the Federal Ministry of Education and Research (BMBF), and the framework curriculum is published.



Articles	Areas regulated	Details regulated
1-2	Definitions, scope of application	Vocational training, education, further training, retraining
3-19	Vocational training agreements	Establishment, content, commencement and end, trial period, termination, vacation
20-24	Training personnel, company providing training	Personal and vocational suitability, determination of suitability, suitability of training facility
25-33	Occupations requiring formal training, training regulations	Scope of application and exclusivity principle of training regulations, graduated training, directory of training agreements
34-43	Examinations	Examination boards, admissions, examination ordinances, intermediate and final examinations
44-45 50-59	Regulation and monitoring of vocational training	Competent authorities, training counsellors, Länder committees
46-49	Vocational further training, vocational retraining, vocational training for the handicapped	Examinations, ordinances

The figure shows several of the main areas regulated by the **Vocational Training Act**.

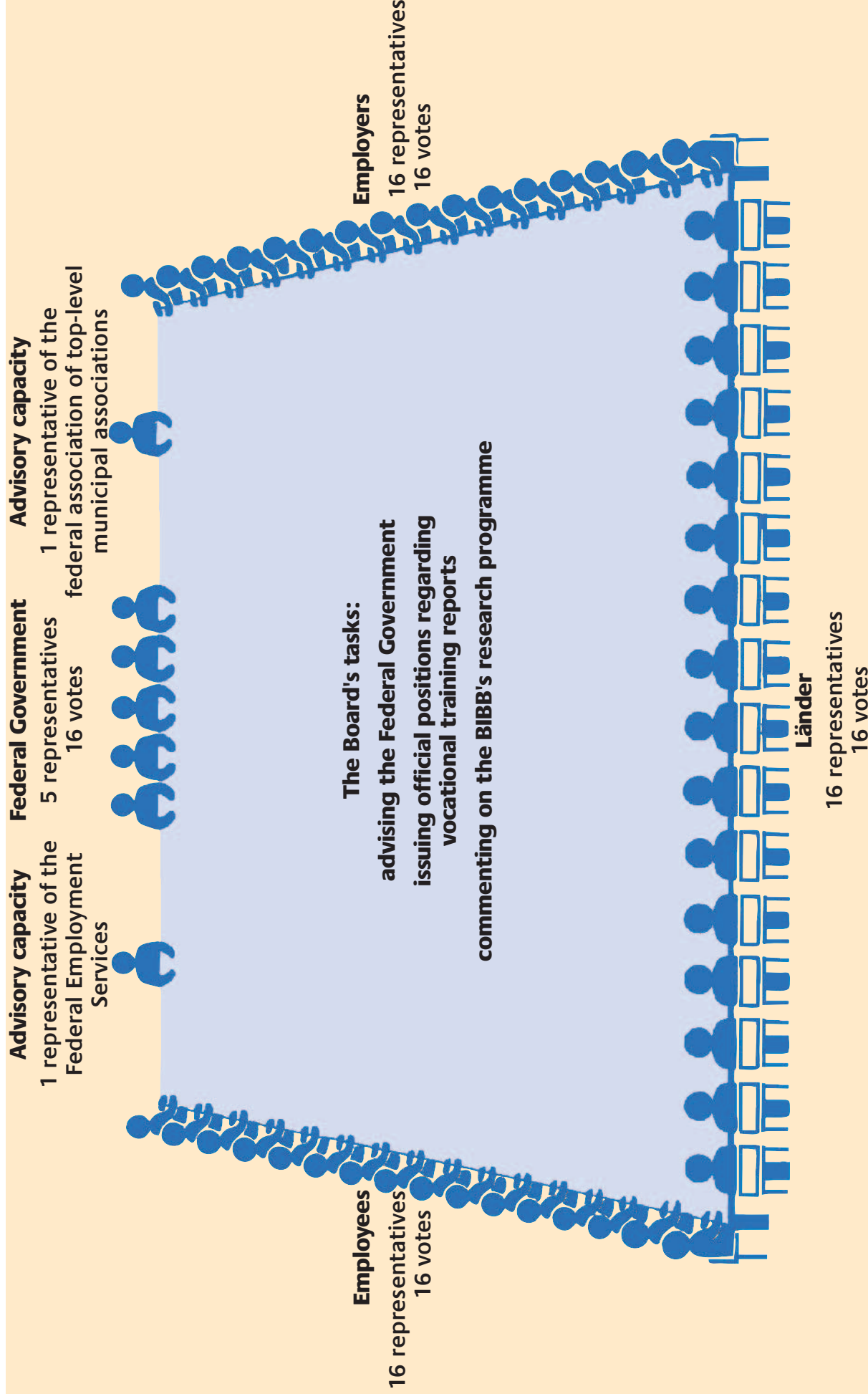
Before a trainee's training in a company can begin, the company and the trainee must conclude a written training agreement. The required contents of such agreements are set forth by law and include such aspects as the parties' basic rights and obligations, the wages to which the trainee is entitled during the training period, and the company's agreement that he or she attend vocational school. The training agreement is also subject to provisions of labour and social laws.

The training agreement must be submitted to the competent body and entered by that body in the «Directory of Training Agreements» («Verzeichnis der Ausbildungsverhältnisse»). This is contingent, however, on the company's proven suitability to provide training: the company must be of a suitable type and have suitable facilities, and its training staff must have the proper personal and vocational qualifications. The competent bodies monitor the training.

The Vocational Training Act contains framework regulations for examinations (the details as to subject matter etc. are set forth by the relevant training regulations and ordinances on further training).

The Act also contains provisions with regard to further training (further training and retraining).

In addition, the Act defines the participation rights for employers and employees, and for instructors at vocational schools, on various levels.



The **Federal Institute for Vocational Training (BIBB)** was established in 1970 on the basis of the Vocational Training Act (BBiG); its legal foundation today is the Vocational Training Promotion Act (BerBiFG), which sets forth the Institute's tasks. The research-, developmental and advisory work of the BIBB aims to identify future tasks in vocational training, promote innovation in national and international vocational training and develop new, practice-oriented proposals for vocational training and further training. A federal institution, the BIBB is financed from the BMBF's budget, and it is subject to the BMBF's legal supervision.

One of the BIBB's central organs is the **Board**, an important body with regard to Germany's vocational training. The Board, which meets regularly, comprises representatives of employers' associations, employees' associations, the Federal Government and the Länder.

In the Board framework, the concerned parties deliberate all basic issues pertaining to vocational training.

The Board's tasks include

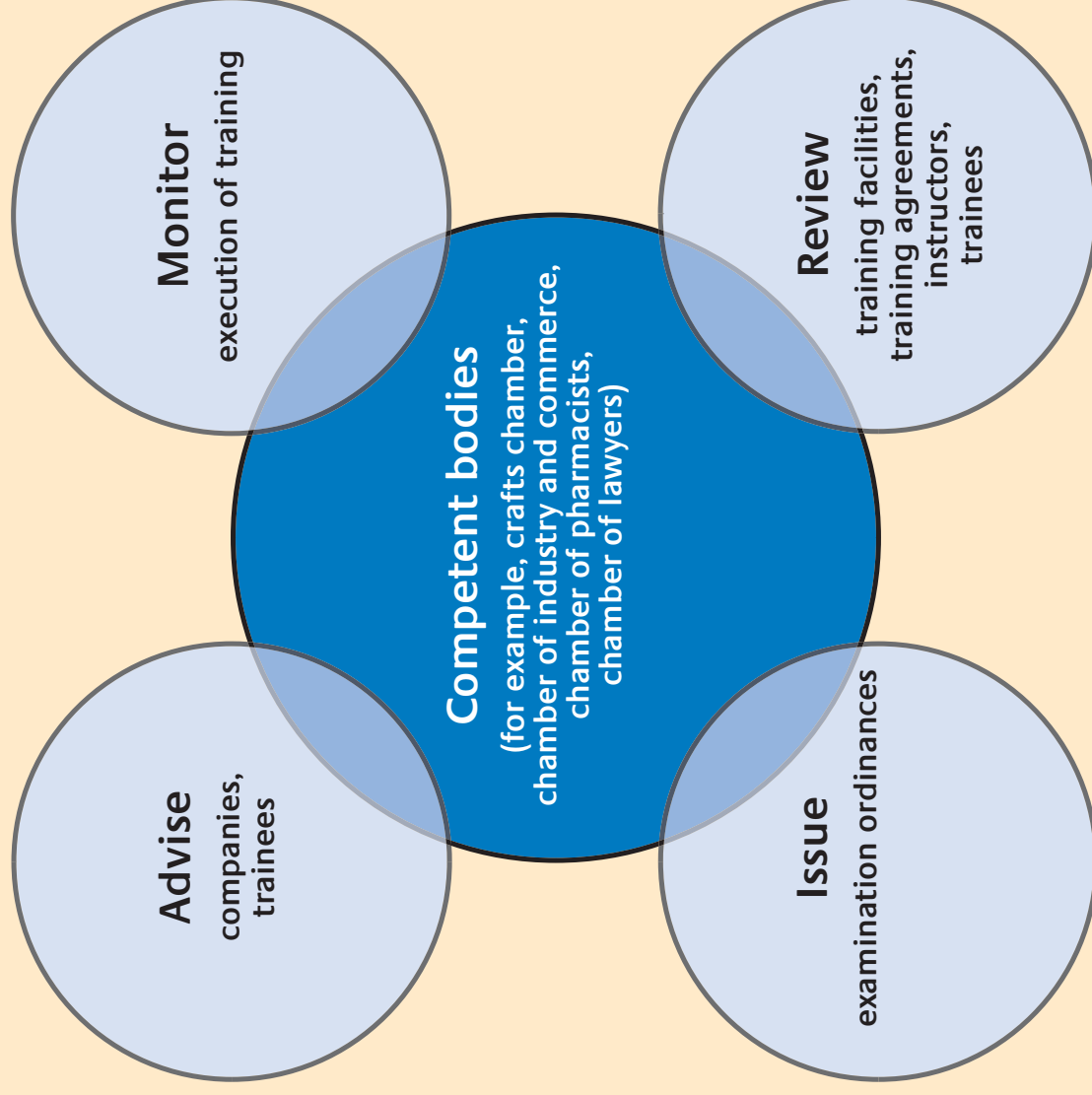
- advising the Federal Government in all basic questions pertaining to vocational training,
- issuing official positions regarding the BMBF's reports on vocational training,
- taking decisions regarding the BIBB's research programme.

The Board has established sub-committees to prepare its consultations.

The figure shows four «sides» with 16 votes on each side. This number results from the number of Länder that Germany has (16) and the fact that each Land has an official representative. The Federal Government's five representatives have a total of 16 votes that can be cast only en bloc.

In the Board, the Federal Government is represented by the Federal Ministry of Education and Research (BMBF), the Federal Ministry of Economics and Employment (BMWA) as well as the Federal Ministry of the Interior (BMI). Employers' representatives are appointed following nomination by federal-level associations of relevant chambers, employers' associations and company associations, while employees' representatives are appointed following nomination by federal unions.

Between the Board's meetings, the Board's tasks are carried out by the Standing Committee. This committee comprises representatives – two in each case – of employers, employees, the Länder and the Federal Government. The Standing Committee must be heard before vocational-training regulations are issued, and it may respond officially to drafts of training regulations prepared by the BIBB.



In each case, training in the dual system is based on a vocational training agreement between the organisation providing training (company) and the trainee (or his or her legal guardian, if the trainee is not of age). The **competent body (chamber)** reviews the training agreement for conformance with the provisions of the Vocational Training Act. If the agreement is in conformance, the chamber adds the training agreement to the directory of training agreements and the relevant training can begin.

In addition to registering training agreements, competent bodies have other **important, legally defined tasks**, as shown in the figure:

- Issuing regulations pertaining to training (for example, issuing examination ordinances);
- Advising instructors and trainees – for example, in connection with setting-up of training places, with disputes between companies and trainees and with trainees' changes of occupation;
- Reviewing the suitability of instructors and training facilities; registering, modifying and deleting training agreements; crediting trainees' acquired knowledge against trainees' training periods; administering trainees' intermediate and final examinations;
- Monitoring execution of training, via training advisors that the competent bodies appoint. Organisations providing training (companies) are required to provide the necessary information for such «monitoring», to present relevant documents and to permit inspection of training facilities.

Competent bodies are listed in the «Directory of competent bodies» («Verzeichnis der zuständigen Stellen»), which is issued annually by the BIBB. Pursuant to the Vocational Training Act and the Handicrafts Regulation Act, the group of competent bodies includes 58 crafts chambers and 82 chambers of industry and commerce. There are also competent bodies for other areas (liberal professions, civil service, agriculture, etc.), including areas outside the scope of application of the Vocational Training Act.

The competent bodies establish vocational training committees, each of which comprises six employers' representatives and six employees' representatives and (in an advisory capacity) six vocational-school instructors. Vocational training committees must be informed and heard about all important matters related to vocational training. They adopt legal provisions which are then issued by the relevant competent bodies.

Legal framework of the EU:

EC Treaty
Promotion of co-operation in education
Mobility
Recognition of qualifications

Education programmes and support:

LEONARDO DA VINCI
SOCRATES
European Social Fund (ESF)

Transparency: Europass
Occupation profiles

**Co-operation in education
and training**



The purposes of the «European Area of Education and Training» include giving all European citizens unhindered, trans-boundary mobility in training and further training and in entering occupations and making it possible for acquired qualifications to be recognised and credited as completely as possible. The European Union and its Member States co-operate within the framework of these aims; the European Union supports the Member States' policies and develops its own initiatives for achieving the aims.

The European Union upholds the principle of **free movement of persons**: any EU citizen may, in principle, live and work in any Member State. In most occupations, people may work within the EU as soon as they have acquired the necessary qualifications – and permission to work may not then be denied for reasons of training or qualification. Access to certain «regulated occupations» is defined by EU directives and formalised procedures within the Member States.

Only modest progress has been made in the area of **recognition of education qualifications** within the EU; such recognition is to be facilitated and improved.

Transparency makes a significant contribution in this area. The «Europass» documents partial qualifications («training periods») earned in the Member States. A person who has earned a nationally regulated qualification in Germany, for example, can receive a multi-lingual «**occupation profile**» that describes the person's acquired skills, typical (for the occupation) area of work and the duration of the person's training. The «**European CV**» (curriculum vitae) serves as a model for describing training and further training as well as occupational experience and skills not detailed in formal certificates.

In a multi-lingual areas such as Europe, **mobility** is truly possible only in combination with foreign-language skills. The aim of the BMBF's action concept «Promoting language learning» is to give all people (improved) skills in their own native languages and in two modern foreign languages.

The **European «LEONARDO DA VINCI» programme** is aimed at trainees, employees, students and instructors. Its purposes are to promote European co-operation in vocational training and to promote equal opportunity – for example, between men and women and between young people and older people. The programme supports innovative projects carried out through international co-operation.

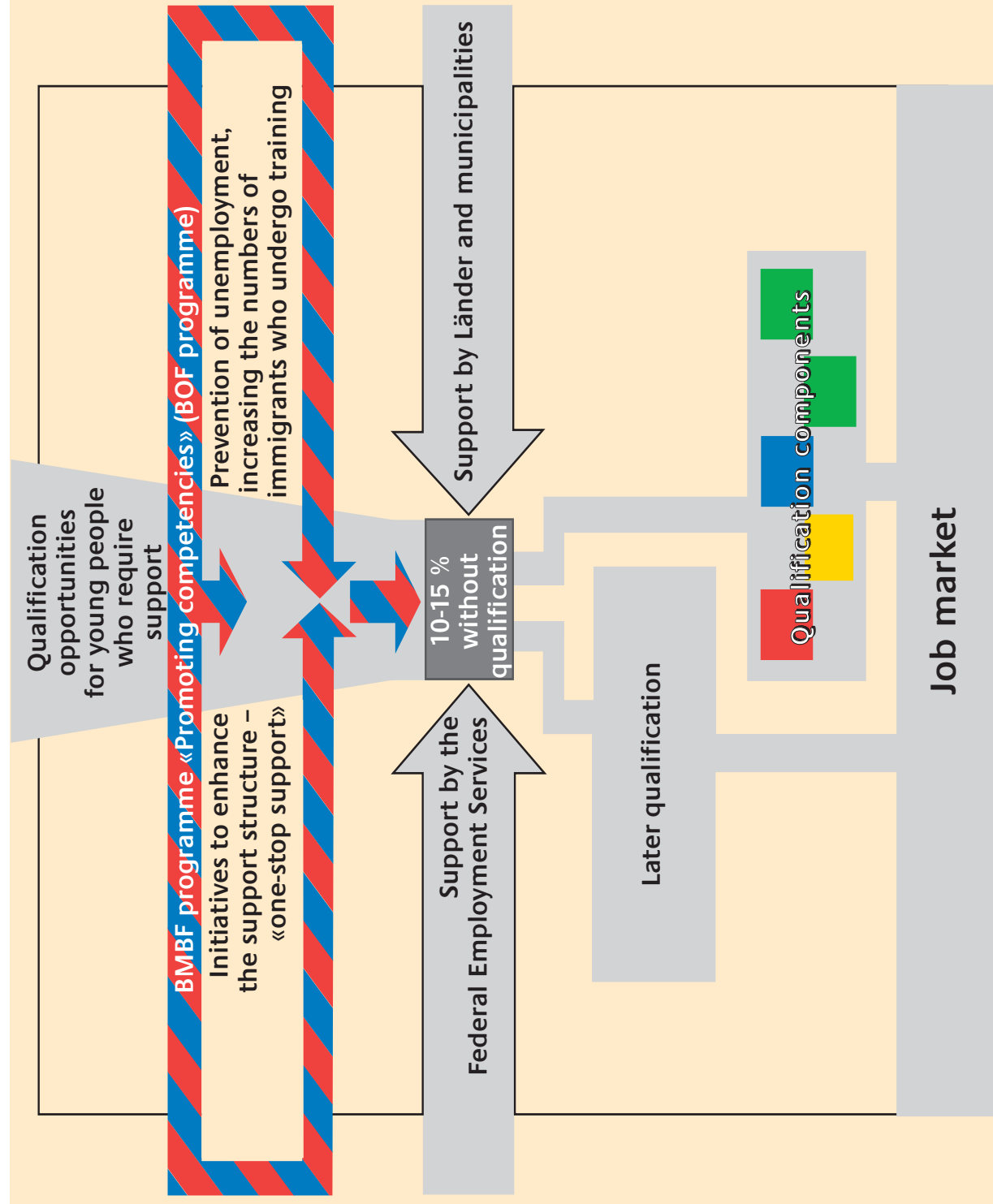
«**SOCRATES**» is aimed primarily at co-operation in the area of general education. The «**LINGUA**» (foreign-language acquisition) and «**MINERVA**» actions (new technologies in education) have impacts on vocational training.

Germany is participating in all of these programmes, via numerous projects.

The «**European Social Fund**» (ESF) promotes regional and structural development projects, of the Member States, aimed at developing human resources and integrating people within the job market, within the framework of active job-market policy. Many vocational training programmes in Germany are partially financed from the ESF.

Germany's **programmes and regulations** are largely open, internationally speaking. In the area of vocational training, for example, **obligations to attend vocational school can be temporarily waived** to enable trainees to participate in exchanges. **Training periods abroad** can be made part of training agreements. Federal support for international **exchanges in vocational training** is to be further increased. In the area of **support for the gifted in vocational training**, support is being provided for further training both within Germany and abroad. And **support for training leading to career development** can also be provided for other EU countries, in cases where requirements for the relevant examination in Germany are taken into account.

Vocational support for the disadvantaged



Between 10 % and 15% of young people in Germany fail to achieve a vocational qualification. The number of immigrants in this group is disproportionately high.

The **Federal Employment Services** provides various types of assistance aimed at helping the people in this group complete training. The spectrum covered by this assistance ranges from courses in preparation for occupations, tutoring in support of training and training outside of companies. A total of **1.5 billion €** is provided for such efforts annually. The Länder (in vocational schools and special programmes) and municipalities (in vocational assistance for youth) provide additional assistance.

The BMBF's structural improvement programme, «Promoting competencies – vocational qualification for target groups with special support requirements» is aimed at applying the principle of «training for all» to the greatest possible extent.

Since support has to begin early, the programme supports initiatives for intensifying **social work in schools** and for promoting **co-operation between schools and companies**.

Other efforts are making use of «**qualification components**» in order to encourage persons who are not used to learning to enter training gradually. Such persons are to be offered a **broader spectrum** of occupations than that previously available, and they are to be taught **basic IT and media skills**.

People who learn later are to be given new opportunities: innovative models for «later qualification» are being developed. On-the-job learning is to be documented and applied to admission to final examinations in vocational training.

Because Germany's federal system has a multitude of different state levels, all relevant activities have to be well co-ordinated and carried out through co-operation. Different support structures are to be combined into «one-stop support». While this problem is largely administrative in nature, its solution will benefit those who require support.

The aim is to reduce, permanently, the percentage of young people who fail to obtain a vocational qualification – and thus the aim is to enhance the next generation's opportunities in the job market.

Vocational training must adapt to changing requirements. Companies and vocational schools often introduce innovations and modernisations in training, within applicable regulations. From time to time, it also becomes necessary to update the regulations themselves.

Changes in production technologies create needs to adapt curricula of existing occupations requiring formal training. They can also generate needs for profound changes or even for completely new occupations.

For example, the occupations of typesetter, draftsman (reproduction graphics), technician in reproduction graphics, draftsman (advertising and media) and photo-engraving artist were combined to form the new occupation «media designer», digital and print media.

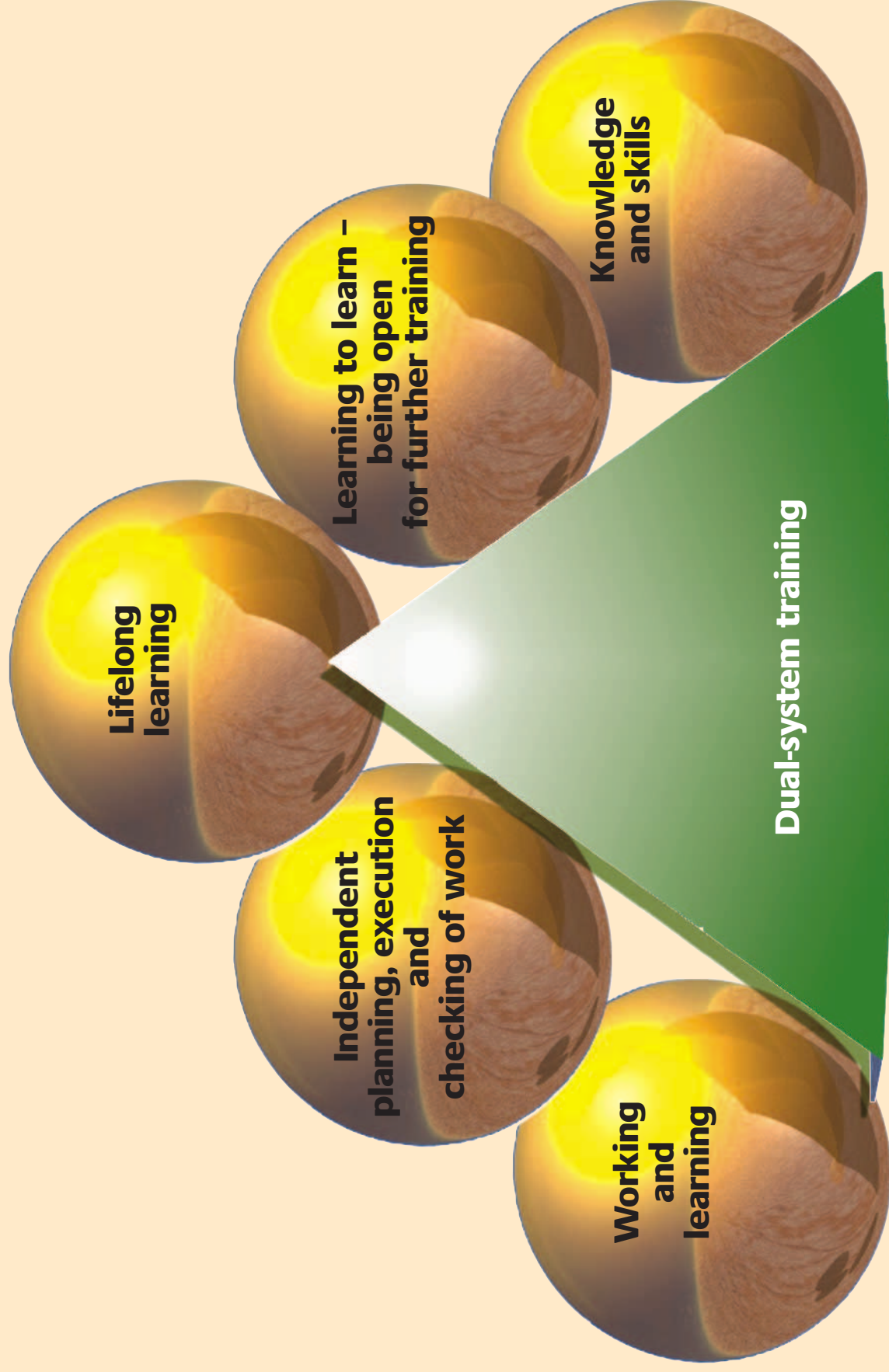
The occupations «mechatronics specialist» and «microtechnology specialist» are examples of completely new types of vocational training.

New, **more complex work processes** can make it necessary to expand training curricula – for example, to include such areas as quality management and customer service. Sometimes, occupations have to be fundamentally redefined – this is the case, for example, for metal-working occupations.

Professionalisation via vocational training was previously unfeasible in some areas of activity / sectors. This has changed in some relevant areas – for example, new occupations have been introduced in events management and for commercial specialists in the health-care sector. Other examples are provided by the IT sector, which has new occupations requiring formal training as well a new further training system.

Two important aims of vocational training include fostering **flexibility** and a willingness to continue learning. In addition to shared compulsory sections of training, which predominate, increasing numbers of specialised elective units are being offered. Where such electives are available, trainees are required to choose a certain number of electives. In each case, trainees are free to choose additional electives or to take electives upon the completion of their training. This system thus **leads directly into further training**.

The examinations regulated by the training regulations should reflect realities of the workplace and modern vocational course content. Conventional types of examinations are not always up to this task. Increasingly, such examinations are being complemented by work in company projects and other forms of «**hands-on**» examinations.



Dual-system vocational training in Germany – and (to a lesser extent) in some neighbouring countries – is based on a long tradition of training of young people, a tradition that in some areas dates from the Middle Ages. In spite of its long history, the dual system is far from obsolete – it is highly useful even in the age of globalisation. In Africa, North and South America and Asia, German companies train new employees in accordance with the dual-system's guidelines.

On the other hand, this form of vocational training can hardly be transposed to other countries, in its entirety as a «system», because countries differ too greatly in their economic structures and economic framework data.

And yet international interest in its basic structure has growing: in its **combination of working and learning**, in its links between structured knowledge and practical know-how and in its ways of encouraging self-sufficient work and further learning/training.

«Alternance» – regular alternation between school attendance and participation in company training, in secondary sector II – is finding increasing support within the EU.

In Germany, more and more «dualised courses of studies» are being introduced: studies and in-company training are being combined, and knowledge is being linked with its applications.

In vocational further training, «learning in the work process», and learning in support of job effectiveness, are becoming increasingly important. Increasingly, working and learning are seen as an inseparable unit. And work does not always have to be «gainful employment»; it can also encompass learning within a social environment (for example, in volunteer capacities).

The dual system thus also provides model concepts for «lifelong learning». It pays to consider these models closely.

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An approach to Skill Development

Note to Committee

1.0 Preamble

The number of people added to the workforce each year and the need for employment for them is apparent. It is estimated that about 12million are added to the workforce every year. Of the 12 million new joiners, the ITIs (private & public put together) are able to handle about 7 lakhs only. The rest either are fresh hands who are trained by the employer on the job or are trained at some unknown local mechanic shop. This provides a platform for the following challenges to be articulated:

1. *Large scale skill development is an imminent imperative.*
2. *With the economy growing, the challenge is not only huge but also extremely “urgent”.*

Further, according to a recent survey (Ref HBL Jan 9th 07), aggregate employment in organized manufacturing sector has fallen in absolute terms since 1997. Apparently a combination of high output growth and low employment growth has been a feature that has characterized both India and China during the years they have opened their economies to trade and investment. This trend seems to suggest that greater employment generation is not a necessary result of more growth in organized manufacturing sector – indeed it could even be associated with falling employment in future as well.

The third challenge may therefore be articulated as:

3. *Skill development needs to widen its focus and include, apart from manufacturing related skills, other non-manufacturing skills also.*

2.0 Lessons from our experience of interaction with skill development institutes

The Tata Group has had a reasonable presence in the manufacturing sector through some of its companies like Tata Steel, Tata Motors, Tata Power, Tata Chemicals. Over the years, the group companies have remained as customers to various ITIs and ITCs for their requirements of skilled manpower.

The experience of the group has been clustered around 5 lessons as mentioned below:

Lesson 1: There is a wide regional difference in quality of ITIs

Most of the Tata companies in manufacturing sectors are based in Western & Eastern region. Being a customer of the ITIs in respective regions, they have experienced wide differences in the quality of services & products offered by them. Two of the large companies, Tata Steel & Tata Motors in Jamshedpur, have not been able to use the local ITI services, whereas Tata Motors, Pune, had a very useful association with ITI, Aundh and ITI, Pimpri – Chinchwad. Perhaps the Eastern Region ITIs could benefit from the best practices of their Western Region counterparts.

Lesson 2: It is seen that ITIs are stronger feeder units for SMEs and relatively smaller sectors than what they are for large manufacturing companies

The experience of Tata companies across India is that ITIs are more suited to be feeder units for SMEs & tiny sectors rather than large enterprises. This could also be on account of the fact that large companies have in-house apprenticeship training schools which prepare candidates for NCTVT, who are later employed by them as also in the ancillaries around those companies. It would be interesting to do a benchmarking study of ITIs with the company apprenticeship schools in that region ITI quality low compared to Co. Apprentice schools

Lesson 3: It is generally experienced that the syllabus in ITIs lacks local flavor. The syllabus modification process is also very cumbersome and slow.

Large Tata companies wish to assist ITIs in their neighbourhood in starting new trades relevant to their industry and revising the syllabus for the current trades. However, they found the process quite cumbersome, slow and lacking local flavour.

Pune ITIs agreed to start auto-electronic mechanic trade on the request of auto industries in Pune, including Tata Motors. In spite of their best efforts, it took well over 2 years to get the necessary approvals.

Lesson 4: It has been experienced that the quality of leadership at an ITI (Principal of ITI) can make a lot of difference to effectiveness of ITIs

The Tata companies had a very happy experience of ITIs which are led by responsive and effective Principals. It is, therefore, important to not only position good leaders as the Head of ITIs but continuously train them in being responsive to customers.

Lesson 5: It is time that ITIs focus on companies in service sector also

There are a number of new (and old) companies in sectors such as retailing, telecom, agro-chemicals, etc. The Tata Group, too, has a presence in many of them. It has been the experience that ITIs have not so far widened their focus onto areas beyond manufacturing. The ITIs in their neighborhood would have benefited if they could offer trained manpower to them and their vendors. Perhaps this may be true at the national level. The respective state machinery should therefore open new ITIs for service sectors besides improving ITIs for the manufacturing sector.

3.0 Recommendations

If one were to focus on addressing the identified challenges, it is not enough to only merely restrict to ITIs and their improvement. (Please refer discussion point 2 of Task Force meeting dated Jan 3rd 2007). The ever widening skill gap, in terms of quality & quantity must be viewed holistically. The skill map for the country must be drawn, with special emphasis to services, self-employment & entrepreneurship (Please refer discussion point 7 in Task Force meeting of Jan 3rd 2007). A possible contour would be as produced below:

India's emerging Skill Map		
Manufacturing	Services	Entrepreneurship
<p>Organized industry</p> <ul style="list-style-type: none"> ▪ Automobile assembly line ▪ Welding mechanic ▪ Lathe machine operator ▪ CNC operator & mechanics ▪ Sheet metal & fabrication ▪ Painters 	<p>Organized service</p> <ul style="list-style-type: none"> ▪ Bell boy at a hotel ▪ Security guard ▪ Call-center employee ▪ Mall salesperson ▪ Post sale service mechanic 	<p>City</p> <ul style="list-style-type: none"> ▪ Plumber/Carpenter ▪ TV/ Radio mechanic
<p>Unorganized industry</p> <ul style="list-style-type: none"> ▪ Mason ▪ Motor driving institute ▪ Plumber /Carpenter 	<p>Unorganized service</p> <ul style="list-style-type: none"> ▪ Door-to-door salesman ▪ Stenographer /Typist 	<p>Small town</p> <ul style="list-style-type: none"> ▪ Mason ▪ Plumber/Carpenter ▪ TV/ Radio mechanic

<p style="text-align: center;">Self employment</p> <ul style="list-style-type: none"> ▪ Tailor ▪ Mason ▪ Plumber /Carpenter 	<p style="text-align: center;">Self employment</p> <ul style="list-style-type: none"> ▪ Stenographer /Typist 	<p style="text-align: center;">Rural</p> <ul style="list-style-type: none"> ▪ Mason ▪ Plumber/Carpenter
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**Please note that examples are illustrative only*

Suggestion: An autonomous state level skill development corporation must be set up at every state

It is proposed to set up at every state, a state-level autonomous public sector unit. For example, state XYZ can have a XYZ Skill Development Corporation. The following shall be the characteristics of the corporation:

Governance: It should be an autonomous body. The state level skill development should be the apex body and may be subject to the following framework:

- It will function with transparency and accountability, under norms of corporate governance.
- It will have a board of governors, to which the body will be accountable.
- It will have an internal management committee, comprising of a CEO, and respective departmental heads. The following may be the departments that the body needs to have:
 - Department in charge of formulating content, called “Department of Course”
 - Department to look after franchisee operations – fees, teacher quality & quantity.
 - Department in charge of appointment of new franchisees.

Franchisee model of operations: The corporation may use the franchisee model for Skill imparting. The franchisees shall be controlled by the corporation in terms of operational and quality standards. For example:

- The franchisees will have to bear the prescribe branding and signage.
- Fees to be charged by the institute will be determined by the skill development corporation and shall be market driven. Banks will be encouraged to come forward with loans to the students, and amount of loan and repayment terms will be decided by the employability options of students in the state or locality.

Course Content: It is proposed that the courses be of 2 kinds:

1. A fixed set of courses standard across the country and
2. A variable set of region or state of locality specific courses.

The state skill development corporation will be empowered to decide the nature of courses to be offered in the state. This implies that while tea-processing course could be offered in a state like Assam, in Madhya Pradesh, it could be leather processing.

- There would be a common set of courses offered across the country – like plumbing, carpentry, masonry, auto-mechanics, electronics repair courses (both audio & TV).
- State specific courses may be a part of a comprehensive list, that includes tailoring, car upholstery, security guards, micro irrigation & water management, etc.
- To decide on the courses, the corporation may be advised by an advisory body. The corporation may also conduct periodic surveys to identify the skill gaps in the state. (Refer point 20 of Task Force meeting of Jan 3rd 2007). The survey needs to cover all the relevant stakeholders, like:
 - Prospective employers
 - Students
 - Teachers

Accreditation: The Skill Development corporation should be made responsible certifying the skill imparting institutes in its area. This would include both ITIs and other franchisee units. Periodic evaluation of performance would be done by this apex body. Needless to mention,

quality and quantity of placements from the franchisees will be deemed as the most important form of accreditation. (Refer point 13 in Task Force meeting of Jan 3rd 2007).

Others:

- The heads of the franchisees (like Principals) will have set criteria of selection. The criteria shall include prescribed academic qualification, experience, performance reports and glimpses of leadership capabilities.
- Special emphasis shall be paid by the skill development body to encourage “Entrepreneurship”.
- In order to drive greater customer orientation of ITIs, corporate partnerships will be encouraged. (Refer point 5 & 6 of Task Force meeting of Jan 3rd 2007)

Discussion paper for meeting of Jan 29th 2007**A proposal for private-public partnership for skill development****Note to Committee****1.0 Background**

This is a follow-up note to the previous note dated Jan 15th 2007. This draft attempts to build on and elaborate on the suggestion of evolving a private-public partnership model for skill imparting framework in the country. It incorporates the view-points expressed in the Task Force meeting of Jan 15th 2007 and also serve as a discussion document for the next Task Force meeting of Jan 29th 2007.

2.0 Comments on existing forms of private sector participation in skill development process

There is evidence of private sector being involved in skill imparting, both to fulfill obligatory requirements as well as to meet their own requirements. A few of the instances are given below:

- i) Tutorial classes for various competitive examinations like IAS, IITs, IIMs, etc., deemed to be quite a profitable business.
- ii) IT training schools of variable quality across the country across large cities & small towns.
- iii) Over 1000 management training schools in the country.

All of them not only exist, but are flourishing today. It seems it is alright to make profit, provided it served society some good. The suggestion of private-public partnership also attempts to extend this concept.

Broadly, there are 2 forms of participation of the private sector in skill imparting initiatives:

- a) **Mandatory involvement:** According to the Apprentice Act, the companies utilizing skilled manpower has to impact on-the-job training to candidates. Successful completion of this one-year ATS (Apprenticeship Training Scheme) makes the candidate eligible to sit for NCTVT examination. The numbers to be trained depends on the kind of industry it is in.
- b) **Voluntary involvement:** Apart from this mandatory involvement, some corporates also provide other programs, which are generally more comprehensive in nature. In some cases, these programs combine the Crafts Training Scheme (as provided by ITIs) with the ATS programs.

3.0 Elaboration of a few instances of voluntary involvement in skill development process

The study of several such prevalent initiatives reveal that the mandatory involvements are possibly a bare minimum of what is required and are actually insufficient to meet the country's skill requirements. The instances of voluntary involvement are quite interesting and have served as points of inspiration for the proposal of private-public partnership.

The three examples given below are all instances of voluntary involvement for skill imparting.

3.1 Tata Motors setting up Apprentice Training school

- **Objective:** The objective of such an initiative is
 - To ensure availability of high quality trained manpower for their own requirement and requirements of their partners in business like Vendors and Dealers. The overflow, if any, is available to other enterprises in the neighborhood.

- Besides covering the prescribed syllabus of the various trades, the apprentices are also given inputs on advance trades like Hydraulics, Pneumatics, Electronics, CNC machines etc which makes them more current and relevant for employment for those enterprises. Usually these programs are not available in the ITI.
 - The numbers trained can also be set off against the obligation to provide ‘On the Job Training’ under the Apprenticeship Act.
 - The schools are also used for upgrading the current skill levels of the existing workforce or for multi- skilling them.
- **Selection of candidates:** The selection of trainees is done by administering an aptitude test, an interview and the medical fitness test to the candidates who have passed in that year or just the previous year in first division the following:
 - Secondary School (10th) Examination for Traditional Trades.
 - Higher Secondary School (10+2) Examination for Advance Trades.
 The merit based selection and differential qualification for traditional and advance trades helps in ensuring high quality output.
 - **Staffing:** The schools have well qualified and experienced staff, familiar with current technologies and training methods. They also equipped with well maintained infrastructure, machines and training aids.
 - **Nature of accreditation:**
 - The trainees are generally encouraged to appear for NCTVT examinations. The track record of trainees from the Tata Motors Apprentice School is very good.
 - Various skill competitions conducted by industry bodies like the CII also elicit enthusiastic participation from students. Students from the Tata Motors Apprentice School have been Gold & Silver medals in their respective years on several instances.
 - **Number of students trained each year:**
 - Tata Motors admit around 200 candidates between Pune and Jamshedpur plants every year.
 - They would probably have produced around 10,000 skilled manpower since their setting up respective schools. Being a high quality trained resource they are highly preferred for employment in Engineering and other related sectors.

3.2 IHCL experience at Aurangabad

- **Objective**

The Institute of Hotel Management (IHM), managed by the Taj group at Aurangabad, belongs to the Maulana Azad Educational Trust.

The institute started in 1993 and was delivering diploma level programmes meeting the requirements of the hotel industry’s human capital at the front line level. IHM as it was known then, awarded an industry recognised Diploma in Hotel Management & an International Hotel Management Diploma through the American Hotel & Motel Association, USA. With changing customer expectations and a great surge in demand from India’s growing portfolio of hospitality related services (it is recorded at 60% of GDP at the end of FY 2005 - 06), the nature of industry has transformed considerably over the decade that IHM-A has grown.

This industry boom has necessitated the creation of innovative and thinking hospitality professionals, requiring a change in our educational paradigm. When the

institute started with a class size of sixty students who were all successfully placed in the finest hotel chains in the country, the current strength of 400 students and the graduating class averaging nearly three job offers per person was only a distant dream.

- **Selection of candidates**

IHM offers a three-year BA (Honours) in association with the University of Huddersfield, UK. It also offers a three-year diploma in Culinary Arts and Kitchen Administration. The diploma grooms students to become Chefs with sound skills and all the managerial attributes needed to manage modern kitchens.

For both the courses they admit 10+2 pass-out after a very tough selection process.

- **Details of the involvement**

The Taj Residency hotel at Aurangabad is directly involved with the institute. The following are some specifics about the involvement:

- The Taj hotel serves as a training ground for students.
- Taj executives also provide in-puts and conduct workshops at the institute.

- **Placements**

The institute has had a record of achieving over 95% placements in the batches that have graduated. Students have found executive careers, during campus placements, with companies like Taj Hotels, resorts and Palaces, Marriott, Hyatt Regency, The Oberoi group of Hotels, GE Capital Services, and Hughes Software Systems.

3.3 ITC experience at Manipal and Gurgaon

- **Objective**

- These were also set up with the primary objective of meeting in-house requirements.

- **Nature of involvement**

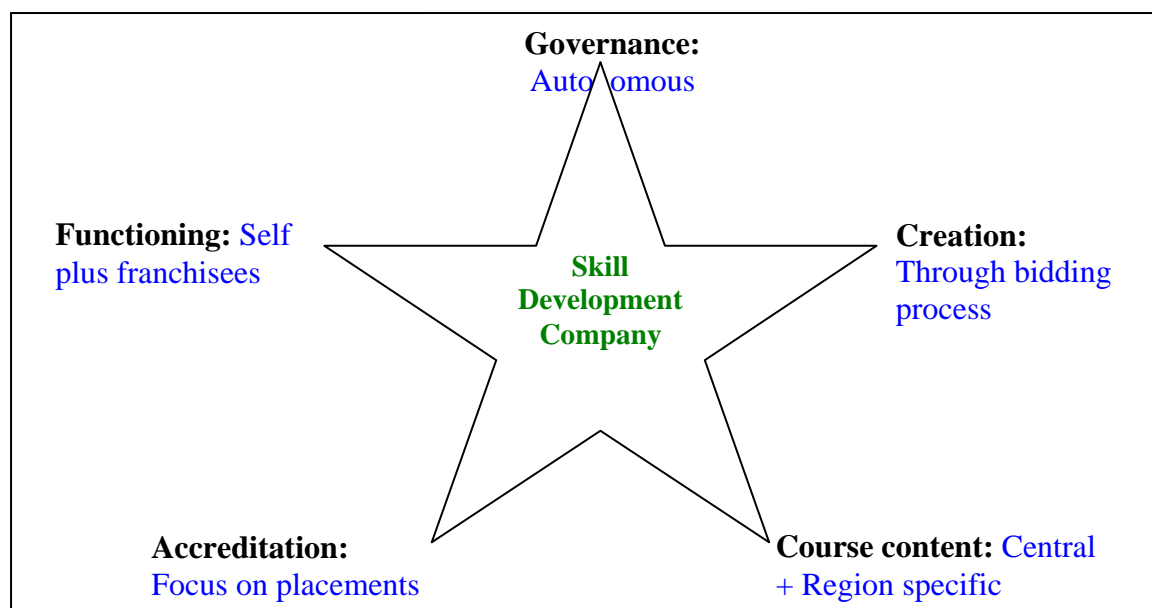
- The ITC group of Hotels manages the Welcomgroup Graduate School of Hotel Management at Manipal. It offers a bachelors degree in Hotel Management, which is a four year course. This institution, formed in 1986, was a part of the Mangalore University till 2005. It has been then shifted to the Manipal Academy of Higher Education.
- ITC also has an in-house learning centre "Welcomgroup Management Institute" at Gurgoan in New Delhi. It takes hotel management graduates from recognised universities and trains them from 12 months to 24 months.
- The students are not charged any fees but are in turn paid a fixed stipend during the training period.

- **Placements**

Apart from hotel chains, graduates also join airlines such as KLM, British Airways, and Travel agencies like Thomas Cook, Kuoni and companies in banking like Citibank and courier services Blue Dart Couriers.

4 Proposal to create an autonomous state level skill development company

The proposed partnership model is enumerated under the following heads:



4.1 Creation: Through structured bidding process

- There may be more than one such company in a particular state. Each company shall be allotted a geography which will be determined by the estimated competence of the company to handle the region and also the variability of skill requirement in the region.
- The skill development company will be created through a bidding process from amongst interested parties – perhaps 2 or 3 licenses per state.
- The company will have equity contribution from the private sector winner of the bid, as well as the government.
- The state government will issue licenses to the winning bidders, who will have to pay a license fee, for obtaining the license. The license fees obtained by the government can be reinvested by the government as equity.
- As part of public-private partnership, the company can attract government grants, that may be available.
 - The model practiced in the hospitality industry (like Indian Hotels' engagement at Institute of Hotel Management, Aurangabad or ITC's engagement at the Welcomegroup Graduate school of Hotel Management, Manipal), may be a good starting point.
 - The skill development company shall be eligible to apply for and get government grants. These grants will be linked to the company fulfilling certain performance standards. According to a recent article in Business India (Jan 28th, 2007), the government is planning a 30-40% sharing of costs of equipment for setting up new and modernizing old textile training facilities. A similar model could be conceived for other areas as well.

4.2 Functioning: Self plus through franchisees

- The skill development company will open skill development schools across its allotted geography. The company shall operate either directly or through franchisees.

- The Skill development companies in the state will compete with each other to set up profit making skill development schools. They will be required to draw up business plans to include inter-alia
 - Skill development opportunities in the area and their prioritization in terms of size and potential. Each company will have its own “Skill Map” – present and future expected.
 - Details of the curriculum for each opportunity area.
 - Benchmarking standards for performance
 - Annual budget and operating plan
- When operating through franchisees, the franchisees will be controlled by the skill development company, in terms of operational and quality standards. For example:
 - The franchisees will have to bear the prescribe branding and signage.
 - Fees to be charged by the institute will be determined by the skill development corporation and shall be market driven. Banks will be encouraged to come forward with loans to the students, and amount of loan and repayment terms will be decided by the employability options of students in the state or locality.
- The heads of the schools (like Principals) for both self operated and franchisee schools will have set and predetermined criteria of selection. The criteria shall include prescribed academic qualification, experience, performance reports and glimpses of leadership capabilities. Initiatives will be taken by the company to attract and retain good faculty.

4.3 Course Content: Central plus region specific

- It is proposed that the courses be of 2 kinds:
 3. A fixed set of courses standard across the country and
 4. A variable set of region or state of locality specific courses, for each company.
- The skill development company will be empowered to decide the nature of courses to be offered in its allotted geography. This implies that while tea-processing course could be offered in a state like Assam, in Madhya Pradesh, it could be leather processing.
 - There would be a common set of courses offered across the country – like plumbing, carpentry, masonry, auto-mechanics, electronics repair courses (both audio & TV).
 - State specific courses may be a part of a comprehensive list, that includes tailoring, car upholstery, security guards, micro irrigation & water management, etc.
 - To decide on the courses, the company may have an advisory body. The company may also conduct periodic surveys to identify the skill gaps in its area. The survey needs to cover all the relevant stakeholders, like:
 - Prospective employers
 - Students
 - Teachers

4.4 Accreditation: Focus on placements

- The Skill Development company shall ensure quality standards of the schools under the company. Needless to mention, quality and quantity of placements from the schools will be deemed as the most important form of accreditation.
- Special emphasis shall be paid by the skill development company to encourage “Entrepreneurship”. Securing placements shall be considered a key deliverable for each franchisee and the company will initiate direct and indirect measures for enhancing placement options for the students in its franchisees. An illustrative set of possible initiatives that may be undertaken by the company are:
 - Job-fairs where prospective employers will be invited to participate, through adequate advertisements and propaganda.

- Skill /Trade fair, to demonstrate the nature of prototypes prepared by the students and thereby serve as an attraction point for students.

4.5 Governance: Autonomous

It should be an autonomous body, run like a listed company. The company will need to function with transparency and accountability, under norms of corporate governance.

- The company will have an internal management committee, comprising of a CEO, and respective departmental heads. The following may be the departments that the body needs to have:
 - Department in charge of formulating content, called “Department of Course”
 - Department to look after franchisee operations – fees, teacher quality & quantity.
 - Department in charge of appointment of new franchisees.
- It should have a board of directors, with participation from every equity contributor. The directors will have the independence to function in the best interests of the company. The management of the skill development company will report to the directors.
- The company will function like a private sector company with profit motives while serving the needs of the society.

Comments of the Task Force on the National Knowledge Commission's report on Vocational Education and Training.

“1. Place Vocational Education entirely under the Ministry of Human Resource Development (MHRD): In view of the role of VET in human resource development and importance of its linkages with other streams of education, placing all aspects of VET under MHRD may be considered by the Government. Currently, VET falls under the purview of MHRD as well as the Ministry of Labour, which leads to fragmented management of the VET framework. MHRD may consider setting up a National Institute of Vocational Education Planning and Development to formulate strategy, advise the Government, and undertake research and development in areas pertaining to technology and workforce development. The functions and organizational structure of such an institute are at Annexure B

ANNEXURE B

NKC PROPOSAL FOR ESTABLISHING A NATIONAL INSTITUTE FOR VOCATIONAL EDUCATION PLANNING AND DEVELOPMENT

Functions of the Institute

- I. *Monitoring changes in technology and the economy, and formulating courses and suggesting new skills required.*
- II. *Performing a detailed manpower analysis by mapping the demand for skilled and unskilled labour in the coming decades.*
- III. *Analyzing the requirement for trainers and instructors, and devising appropriate courses for them.*
- IV. *Analyzing data on employment and vocational training, in order to provide a sharper focus to policy-making.*
- V. *Mapping, maintaining and updating in real time, a list of vocations, including those that lead to self-employment.*
- VI. *Developing measures of performance, as well as internal and external indicators of efficiency of training institutes.*
- VII. *Ensuring an incentive structure for better performance arising from analysis of the above-mentioned indicators.*
- VIII. *Developing a **national portal**, that will contain information on:*
 - a. *Availability and course descriptions of all programmes falling under the purview of various Ministries and Departments*
 - b. *Job and salary profiles of graduates*
 - c. *Information about training institutes, polytechnics, etc. across the country*
 - d. *Information about schemes for vocational education.*
- IX. *Bringing testing, accreditation and certification norms in line with global standards, to enable greater mobility of Indian workers.*
- X. *Carrying out a national re-branding exercise for VET*
- XI. *Performing a detailed cost-benefit analysis and examine where the Government should invest in the next 10 – 15 years in order to ensure maximum returns, ie, find a balance between expensive engineering related skills versus relatively low-cost services oriented training.*
- XII. *Setting up a framework for curriculum development, staff and infrastructure requirements of VET institutions, minimum qualifications for trainers, systems for in-service training, etc.*

Organizational Structure

The National Institute should be set up as a public-private-academia partnership and should be adequately represented by government, industry, academia, labour unions, NGOs and other social/ community organizations. It should be autonomous, but should work in close co-operation with the concerned ministries and agencies such as the Directorate General of Employment & Training (DGE&T), the National Council for Vocational Training (NCVT), the Labour Bureau and the Ministry of Human Resource Development (MHRD)."

The **Task Force** is of the considered view that there has to be a clear distinction between vocational education (VE) and vocational training (VT). The generic term VET, which refers to vocational education and training has been used separately but, when we come to the role of the Ministry of Human Resource Development (MHRD), the Task Force's view is that the focus should be on vocational *education*. It may be argued that any distinction would be artificial but the focus on VE should be closely related to teaching in the existing *Educational Institutions*, whether at the school or the college level.

At the elementary education level, the *Sarva Shiksha Abhiyan* would refer to some of the issues in its life skills inputs and, at the secondary level, the software is already being prepared by the NCERT through the *National Curriculum Framework*. The question of electives and credits in respect of vocational education will have to be addressed by the School Boards including the CBSE, which has already done some work in this regard, the ICSC and the State Boards of Secondary Education. Vocational subjects can form a part of a curriculum and the lead role will have to be played by the MHRD. The PSSCIVE located at Bhopal is a subordinate office of the NCERT and entrusted with vocational education in addition to developing its own modules, conducting training programmes and advising the NCERT and the Government on VET matters. As indicated in the body of the main report, the Task Force does not favour a major expansion in respect of vocational training programmes for institutions under the MHRD, where the focus should be on the education aspect as a *part* of the main curriculum.

At the University level too, the University Grants Commission have looked at the question of providing VET electives as a part of the overall curriculum. The PSSCIVE could continue to be the focal point for drawing up programmes for vocational education under the overall guidance of the NCERT and the institute can, with the minimum of additional expenditure, become the National Institute of Vocational Education Planning and Development but confine its role to the pedagogical aspects of VE and software, drawing upon a variety of sources including the valuable inputs provided by the *National Focus Groups* set up by the NCERT, as a part of the National Curriculum Framework. An exception would have to be made for *distance learning*, as their canvas is much wider, and both IGNOU and NIOS should considerably step up their activities in the field of VET

The model drawn up in Annexure I of the NKC's report would also have to undergo a drastic change, looking to the limited mandate of this particular national institute. For example, the detailed manpower analysis, measures of performance in Central structures and other issues need not be the responsibility of such a body, but of the National Mission on Skill Development, of which the existing Institute of Applied Manpower Research (IAMR) might possibly become a part.

The job of vocational *training* however would be the responsibility of the concerned administrative ministry in respect of their sectors and the Director General of Employment and Training (DGET) in the overall context, particularly as he may be the head of the National Mission on Skills Development.

1. ***Increase the flexibility of VET within the mainstream education system through the following steps:***
 - i. *Aspects of general education (such as numeracy skills, etc.) should be retained in VET as far as possible, to enable students to return to mainstream education at a later stage.*
 - ii. *Courses in training institutes and polytechnics should have distinct tracks for students of different educational attainments.*
 - iii. *Entry requirements for certain trades should reflect the requirement of the trade (as appropriate, for instance the entry requirement of Class X could be relaxed to Class VIII in some cases). Students should be permitted multiple entry and exit options in the vocational education stream.*
 - iv. *Links should be established between the vocational education stream and school education as well as higher education.*
 - v. *Courses devoted to certain skills training at the primary and secondary level should be introduced in all schools.*
 - vi. *Vocational training should be made available in various literacy and adult education schemes.*
 - vii. *Schemes for lifelong skill up-gradation, through short training programmes, should be introduced.*
 - viii. *There should be a provision for generating a cadre of multi-skilled persons.*

Following from the observations made in the previous paragraph, as far as vocational education is concerned, the regular curriculum would be the main educational input, and vocational subjects taught as 'electives', and credits may be approved by the concerned secondary school boards or universities.

Coming to vocational training, such courses should naturally have numerical skills and language as inputs but the main thrust would be on skill development. The Task Force endorses the view of the NKC that there has to be flexibility between vocational training and mainstream education. In the case of VE this would not be a problem but, for VT, there would necessarily continue to be a gap, and it is for this reason that the Task Force feels that there should be flexible hours for conducting VT programmes and a system of sabbaticals which would allow a student to return to mainstream education, after undergoing a VT programme, unless he does it on a part time basis.

In the case of *Polytechnics* there is a need to relate the diploma awarded to a regular degree programme; the norms for this could be worked by the All India Council of Technical Education (AICTE) and submitted to the Ministry of Human Resource Development (MHRD) and the University Grants Commission (UGC) whenever required. Such schemes should provide multiple entry and exit options.

There should be no age limit as far as VT institutions are concerned, which would address the question of life long learning and enable older people undergoing adult education programmes to develop their skills. 'Multi-skilling' facilities may also be provided for in the VT institutions.

2. ***Quantify and monitor the impact of vocational education:*** *Data should be collected periodically and analyzed in order to assess the impact of training on employability. Empirical evidence on wage premium or other advantages enjoyed by VET graduates; seat utilisation in training institutes; nature of employment post-training; efficacy of various schemes, etc. is essential for continuous improvement. A detailed exercise of manpower analysis is a necessary step to understand the nature and quantum of demand for VET and the mismatch between the skills of VET certificate holders and the requirements of the labour*

market. This exercise may be undertaken by the proposed National Institute of Vocational Education Planning.

In the main body of the Report, the Task Force has referred to the direction of the Prime Minister that there should be a separate Mission for Vocational Training. This can be an attached but largely autonomous office of the Ministry of Labour & Employment. The Institute of Applied Manpower & Research (IAMR) could develop a close relationship with the National Mission for Skills Development. The Planning Commission has appointed a group headed by a former Cabinet Secretary to look into matters pertaining to IAMR, and that committee would be apprised of the recommendations of the Task Force.

3. *Increase resource allocation to vocational education:* *In per capita terms vocational education is costlier than general education, however public expenditure on vocational education has been extremely low, as compared to general secondary education. Given the demand for skilled manpower in manufacturing and services the Government should aim to spend at least 10 – 15% of its total public expenditure on education, on vocational education.*

Some options that may be considered for raising additional funds to finance a modernised VET scheme are:

- i. Enhancing fees, coupled with student loan schemes. This would also make VET institutions more responsive to market needs.*
- ii. Raising funds through a cess on employe(e)rs (for instance 2% of salaries of all employees, as in Singapore).*
- iii. Making it obligatory for companies to finance public vocational education and training programmes (as in Korea).*

It may be difficult for the Government to put in a lot of money into vocational educational & training. For vocational education, support should be given for expanding the role of the PSSCIVE, for developing curricula in respect of vocational subjects to the NCERT and to the Boards for Secondary Education in giving secondary school children choices, in respect of at least one ‘vocational’ subject.

The larger issue of funding vocational training would have to be addressed. The Task Force would separately propose a business model for the vocational training institutes which will include the ITIs, where vocational training would have to be cross subsidized by in-house programmes for companies to be conducted by the organizations operating in the PPP mode. This would reduce the need for raising fees dramatically but a part of the cost would have to be borne by the students themselves who would be eligible for scholarships already available under the schemes of the Ministries of Social Justice & Empowerment and Tribal Affairs, apart from student loans, an issue which is being addressed by the Ministry of Human Resource Development (MHRD). The option of raising fees through a ‘cess’ on employers or making it obligatory for companies to finance VT programmes should be a weapon of the last resort. The Task Force feels that the employers should come forward and work in partnership with the Government through the PPP mode. On its part, the Government need not pamper business and industry by meeting the entire cost of this particular externality because while the larger beneficiary would be the nation and economy, the immediate gainer would be the concerned industry / service provider.

4. *Expand capacity through innovative delivery models:* *In order to meet the burgeoning requirements of skilled and unskilled labour, a massive increase in quantity of training is needed. The Government may explore new delivery models to increase capacity such as public private partnerships, decentralized delivery, distance learning and*

computerized vocational training. A brief outline for these delivery models is at Annexure C. A more detailed proposal on the use of ICT in VET is at Annexure D. At the same time, the Government must introduce certain minimum standards as a measure of quality and ensure that these are adhered to by all public and private VET institutions.

ANNEXURE C

ALTERNATE DELIVERY MODELS FOR VOCATIONAL TRAINING FOR CAPACITY EXPANSION

The required expansion in capacity can be achieved through a combination of the models described below. This will require a framework of skills standards, assessment and certification that allows credits earned in any mode of delivery to be recognized and transferred to different delivery modes.

a. Public Private Partnership (PPP): The PPP model should be explored in order to exploit the benefits of private delivery in training and enhance linkages between ITIs and industry to solve the problem of disconnect between skills required by employers and skills imparted to ITI graduates. In this model,

- a. Curriculum development will be undertaken by the Government, with greater inputs from industry and trade as well as flexibility to allow localization of content.
- b. Certification would be provided by the Government.
- c. The cost of training will be shared by the trainees, the Government and the employers.
- d. Other avenues of revenue generation should be allowed, within certain specified parameters.
- e. Internal and external indicators of efficiency will be monitored by certifying agencies and local industry bodies, in order to incentivize better performance of training institutes.

f. Decentralized model: In order to maximize the utility of existing underutilized infrastructure, the Government could allow stakeholders to implement the following model:

- i. Identify skills required in local markets and local aptitudes to devise courses at the district level.
- ii. Use existing infrastructure by holding workshops and training sessions in schools, colleges or training institutes.
- iii. Develop curriculum to be in line with local needs.

This model is inexpensive and scalable. Short, low-intensity and low-cost programmes could be devised as a part of this system to target the unorganized sector as well.

- g. Distance learning: Distance learning enables increased access, as well as an option for continuing education and skill upgradation by workers. The option of providing vocational training through the internet should be explored.
- h. Computerized vocational training courses should be introduced at all levels. Advantages include low cost, easy adaptability to changing needs, uniform testing, paced learning, and expanded access. Existing infrastructure in schools, colleges and training institutes can be utilized. The efforts towards imparting skills through ICT could dovetail with similar efforts in the area of literacy and agricultural applications.

ANNEXURE D

NKC PROPOSAL FOR COMPUTERIZED VOCATIONAL TRAINING

I. The Role of Information and Communication Technology (ICT)

The importance of ICT has been widely recognized as a means to improve efficiency in business, government and formal education, but its application in vocational training is not fully appreciated. Studies have shown that rates of learning on computer are much faster than they are in classroom setting and learning retention is likely to be much higher. This is true both for academic as well as vocational or skill-based subjects. Computers offer several advantages for rapid and effective learning such as the use of multimedia, interactivity, immediate feedback for students, paced learning, uniform testing and quick response to changing skill needs. While in most instances, computerized training will need to be supplemented with hands-on training or apprenticeship experience, the need will actually be far less than expected. Computerized simulation has been proven an effective training tool for learning complex vocational skills.

II. Objectives

The objective of this proposal is to establish a state-wide network of computerized vocational training centers covering every village in the country and offering training courses on a wide range of occupational skills. Its salient features are:

1. *Establish 50,000 training institutes in the country.*
 - a. *Establish 40,000 training centres as privately owned businesses.*
 - b. *Establish 10,000 training centres in engineering colleges, arts colleges, ITIs and high schools that have spare computer lab capacity available for morning or evening use.*
2. *Provide vocational training to a minimum of 10,000,000¹ students per annum.*
3. *Generate self-employment for 40,000 entrepreneurs.*
4. *Generate employment in the training institutes for an additional 80,000 shop training assistants.*

III. Types of Training Centres

Computerized vocational courses can be offered using the existing computer facilities available at Liberal Arts and Engineering Colleges, Industrial Training Institutes & Polytechnics, Private Training Institutes and High Schools – Public and private.

*In addition new **job shops** can be set up under a self employment scheme with the following features:*

1. *Each centre will provide training in a range of occupational skills.*

¹ Assume each computer operates for 300 hours a month, and each complete course is 50 hours in length, then each computer can train six people per month or 72 people per year. Assuming average three computers per center, each center can train 200 people per year. 50,000 centers can train 10,000,000.

2. *Training material will be offered in a CD-Rom format, so that no internet connection is required. This will improve accessibility, reduce the cost and eliminate connectivity problems. Supplementary internet based training may also be offered where feasible.*
3. *Each centre will consist of one to ten computer terminals and a library of training CDs.*
4. *Trainees will be able to rent the computer time and CDs on an hourly or course basis. For example, if a course on sales training requires 50 hours to complete, the trainee will pay a total fee for the course and be entitled to 50 hours of computer use for completing the course (e.g. within a period of three to six months time.)*

IV. Economics of a Job Shop

Assumptions

- *Three computers per Job Shop*
- *20 vocational training programmes per Job Shop*
- *Each computer is utilized for an average of 300 hours per month or 3600 hours per year.*
- *Operating expenses for rent, two paid employees, phone, electricity may range from Rs 15,000 to 20,000 per month*

Total Investment and Cost of Operations based on these assumptions

- *Total capital investment may be around Rs 1.5 lakh.*
- *Cost of operations per computer hour = Rs 17 to 23 per hour.*
- *Cost of amortising of computers and software over two years = Rs 14 per hour*
- *Average cost of training = Rs 30 to 40 per hour*
- *Net profit = Rs 10 per hour or Rs 1,00,000 per annum*
- *Average retail price of training = Rs 40 to 50 per hour*

Based on these assumptions, 50 hours of computerized vocational training, which is equivalent to about 250 hours of classroom training, would cost the student only Rs 2500.

V. Training Course Material

Each centre will maintain a library of popular training courses from which trainees may select the topics of their interest. The availability of computerized training material for a large number of vocational skills is critical to the success of the project. Some of the training material can be drawn from the large number of educational CDs already created in India and overseas (e.g. bookkeeping, sales training, etc). However, a large number of new training programmes will have to be created by collaboration between the Government and companies with expertise in the design and development of computerized training courses, such as NIIT, Aptech, Pentasoft and others. These firms will be interested to produce the course material, if they are assured of a large market for the courses. Wherever feasible, course will be certified by a recognized institution to signify that they are of acceptable quality.

VI. Certification

NCVT and SCVTs would need to devise appropriate written and practical testing methodologies and grant certificates to successful trainees.

VII. Role of the Government

The role of the Government should include the following:

- a) *Arrange for delivery of vocational training courses through all state-owned and managed engineering colleges, ITIs, polytechnics, liberal arts colleges, high schools and related training institutions that are already equipped with computerized training equipment.*
- b) *Provide financial assistance and incentives under one of the Central Government self-employment schemes to promote establishment of 40,000 private training institutes as a self-employment programme for entrepreneurs.*
- c) *Approach financial institutions such as IDBI and the nationalized banks to provide loans to entrepreneurs for establishment of private training institutes.*
- d) *Negotiate with computer software companies for the design and production of a wide range of vocational training courses. Each course can be developed in conjunction with a recognized institutional authority that will certify the contents of the course.*
- e) *Negotiate for bulk purchase of approved training software on behalf of private training institutes in order to minimize the cost of training.*
- f) *Provide training to entrepreneurs on how to set up and manage a private institute, including training on marketing and pricing of courses.*
- g) *Provide scholarships to very low income youth to offset a portion (from 25 to 75% depending on income group) of the cost of training.*
- h) *Eliminate all taxes and duties on computer parts and equipment in order to bring down the price of PCs to a level affordable by much larger numbers of people.*
- i) *Mandate NCVT and SCVTs to devise appropriate testing methodologies and certification criteria for computer based vocational training.*

VIII. Financial Requirements of the Programme

- a. The Government can utilize existing computer infrastructure in educational and training institutions to set up the network of institutes. It need not invest in hardware.
- b. To the extent that public institutions will be part of the network, the Government will have to invest in purchase of training software. Assuming that 25,000 public institutions participate in the programme and that each centre requires Rs 2 lakh of educational software, the total cost would be Rs 500 crores.
- c. There will be no direct investment by the Government in private training centres, but the Government may offer incentives to encourage establishment of these businesses.
- d. *The Government can also provide scholarships for economically disadvantaged persons to take vocational courses.*

The Task Force shares the view of the National Knowledge Commission (NKC) that a massive increase in the quantity of training is needed and that new delivery models, as suggested, would have to be looked at while maintaining minimum standards and ensuring a degree of conformity, if not compliance. Coming to the models mentioned, curricular reviews would have to be undertaken jointly and, even more so, the certification process. The cost sharing mechanism will be spelt out in the main body of the report, keeping in mind the issue of revenue generation. This model would be largely applicable to the *organized sector*.

Coming to the *unorganized sector*, the decentralized mode will have to be relied upon as there are many grey areas, inadequate knowledge of job opportunities and need to identify new employment openings.

Distance learning would be a central component in the training process and computerization vocational courses will have to be developed keeping in mind the shortage of competent teaching personnel.

The Task Force recognizes that ICT would have to play a central role if the country's requirement of skilled manpower is to be met. The objectives of the programmes, the type of

training centre, the cost effectiveness of courses, the training course material and the certification process would have to be carried out by the reorganized NCVT.

About financial support, the educational institutions can, in addition to the forming the tasks of vocational education, also use the infrastructure to conduct vocational training courses for a fee and plough back the income into the institution itself. The financial model for supporting institutions will be addressed in the main report and other details can be drawn up by the National Mission. The cost of training would necessarily have to be kept reasonable, which will entail a cross subsidy in the shape of charging higher fees for ‘in-company’ training programmes, wherever this is feasible. Wherever this is not alternative solutions would have to be looked at like leveraging infrastructure, running peripatetic programmes, or even closing an institution down and returning the assets to the Government, if it’s a PPP venture. The assessment, certification and quality assurance issues would have to be addressed by the NCVT, which is proposed to be revamped and restructured and the National Mission.

The financial package would depend on the type of PPP model being looked at.

5. *Enhance the training options available for the unorganized and informal sector:* *The greatest challenge lies in providing training for potential entrants in the unorganized/informal sector, which accounts for the largest proportion of employment. Systematic efforts need to be made to impart the skills required by the unorganized sector. These should be formally introduced in the curricula and practical training courses. In order to achieve this, the government should act as a facilitator and provide financial support for the models described in Annexure 2. This aspect of VET is critical for the success of the system as a whole.*

This is a vast area and different ministries and departments of the GOI and State Governments have provided opportunities for self employment through different programmes. Some of these schemes have an in- built training component and the decentralized model mentioned in para b) of the NKC’s Annexure 2 above can be kept in mind. The Task Force would be looking at the issue in the main report.

6. *Strengthen the current institutional structure:* *The existing Industrial Training Institutes (ITIs) and Industrial Training Centres (ITCs) are widely recognized to face problems such as poor quality trainers, lack of flexibility, outdated infrastructure, etc. Measures to improve the existing institutions are as follows:*

- i. Extent of functional autonomy must be increased, ITIs should be given more power to strengthen and adapt their training programmes to better meet local market needs.*
- ii. Indicators of internal and external efficiency should be developed (by the proposed National Institute) to incentivize good performance.*
- iii. Modules on literacy, numeracy, communication skills, entrepreneurship and other general skills relevant to workplace requirements must be introduced in all courses.*
- iv. Different tracks within courses for different levels of specialization should be introduced.*
- v. Students should be offered incentives such as tools, membership of trade associations, etc. as part of their degree/ diploma.*
- vi. Industry and trade involvement should be enhanced not only at the internship stage, but also at the time of examinations and placements.*
- vii. Curricula should be constantly monitored and updated.*

- viii. *The skills and courses offered should be reviewed periodically. The number of skills currently offered needs to be increased.*
- ix. *Teaching should be conducted in English as well as local languages.*
- x. *Infrastructure should be regularly upgraded.*
- xi. *Quality of teaching should be drastically improved.*

The Task Force fully supports the proposal to extent functional autonomy and the other suggestions of the NKC. Adopting some of these suggestions would help in making the programme more attractive to students and a sizable investment will show that the government, on its part, is serious about extending vocational training all over the country and to different sectors of the economy.

7. *Ensure a robust regulatory and accreditation framework:* *In order to achieve the desired modernization and expansion outlined above, a critical aspect will be regulating entry of new institutions and accreditation of all institutions. It is therefore recommended that an independent regulatory agency for VET be established. This body would license accreditation agencies and prescribe standards for certification. The procedures and methodologies adopted by the body would need to be simple and transparent to ensure unhindered growth in the sector.*

A robust regulatory and accreditation framework is a *sine qua non* any serious programme on vocational education and training. The regulatory authority can be the Certification Wing of the reorganised National Council of Vocational Training (NCVT), which should be autonomous organization supported by the Ministry of Labour and Employment and manned by experts including representatives from industry, academia and NGOs.. The *accreditation process* would have to be conducted by this body in an entirely transparent manner, where each decision would be made in a quasi-judicial order and posted on the website.

8. *Ensure proper certification:* *At present the process of Certification is handled by the National Council for Vocational Training (NCVT), in association with State Councils for Vocational Training (SCVTs). Clear demarcation between the roles of the NCVT, the SCVTs and the DGE&T is essential for the proper functioning of the certification process. In order to ensure recognition of certification by employers, both in India and abroad, an electronic database of certified training providers as well as electronic identification for certified workers should be introduced. Electronic identification should contain information regarding skills and qualifications (and eventually other relevant information as well) about certified individuals and can be used in order to facilitate mobility of workers, encourage bank linkages and entrepreneurial initiatives etc.*

This process would also be conducted by the reorganised National Council for Vocational Training (NCVT) and a prominent member from Industry, nominated by the concerned Association should be a member. This process would make certification more acceptable, particularly for overseas employers.

The administrative work, including the preparation of a data base, would be the responsibility of the National Mission on Skill Development.

9. *Undertake a re-branding exercise:* *It is widely recognized that a crucial problem with vocational training in India is a negative association with manual labour. In order to match the modern requirement of the skills and competitiveness of the workforce a massive re-branding exercise is of the highest priority. This could be the prime task of the recently announced National Skills Mission. Initiatives such as replacing the use of terms such as 'vocational education' by 'skill development' are a step in the right direction. Efforts should*

be made by training institutes to chart out a career path for their students and introduce entrepreneurship training modules.

There is a felt need to make VET much more attractive than it already is. This task can be entrusted to the Mission and should cut across all professions, and not merely the more 'glamorous' ones. The report of the Task Force on Skill Development addresses this issue.

11. In conclusion, it is essential to significantly increase public and private investment in VET. However, a detailed analysis of manpower requirements in terms of numbers, skills and competitiveness is essential before formulating a master plan and deciding the quantum of expenditure in the 11th plan. A robust framework needs to be put in place as a visible and dedicated resource in the MHRD is a pre-requisite in order to ensure quality and facilitate significant private investment and participation. Most importantly, the quality as well as the image of VET needs to be actively promoted in order for it to be viewed as comparable, and as relevant as general secondary education.

There is no doubt that private and public investment in VET both have to be increased exponentially. The analysis of manpower requirement and formulation of a master plan would have to be entrusted to the newly formed National Mission on Skills while an increase in resources can be provided to the concerned Ministries: a start has already been made with the current budget.

COMMENTS OF THE TASK FORCE ON THE TERMS OF REFERENCE GIVEN TO IT:

- i) *“To catalogue/map:*
- ✿ *VET (Vocational Education & Training) courses being presently offered, both by the Government and the private sector.*
 - ✿ *All enterprises employing more than 10 persons, block, district and state-wise, in a standardized nomenclature, so that these enterprises could be used for practical/ hands on/ on-the-job training.*
 - ✿ *VET institutions, village, block, district and state-wise, along with details of the courses offered, infrastructure available, trainers and teachers, certification, etc.”*

This involves a very detailed exercise, which would take months to prepare. The Task Force has received a report from Education Consultants India Ltd (EDCIL) which lists out the vocational training providers other than the Directorate General of Employment & Training (DGET). These bulky documents have been made available to the Task Force by the DGET, but are not appended to the report. *Annexure I* gives details of the VET providers within the central government, and the literature provided by the Development Commissioner of Small Scale Industries (DCSSI) is at *Annexure XVIII*.

DGET’s office also made available to the Task Force a list of institutions registered with them and also a Directory of Don Bosco’s ‘Tech India’, a model provider of VET in the country where follow up action is taken in respect of each trainee and close liaison is maintained with the employers.

The Task Force also has in its possession the annual survey of the industries 2003-04 provided by the CSO and the third All India Census of Small Scale industries 2001-2002. The NSSO 60th Round and 61st Round Surveys, have brought out useful facts at the all India level. At present very little survey work is available at the State level. District level Employment Exchanges have not been able to address this issue. The Task Force agrees that a skills and occupation mapping, both in terms of labour available and the demand would be very useful for the private employers, in sourcing their intake of workers, and developing VT programmes. The Mission on Skill development should include a strong block / district level data collection and dissemination element, on the aspects referred to above.

- ii) *“To draw a long term plan for redesign of present courses and introduction of new ones, in a phased manner, keeping in view the needs of the economy.”*

This is not a practical job for a Task Force which has to submit a report within a limited time frame, but should form part of the mandate of the proposed Mission on Skill Development to be set up as directed by the Prime Minister, the details of which have been worked out by the Task Force.

- iii) *“To recommend the division of responsibility between the Government at various levels and the private sector in imparting VET and the steps required to facilitate the role envisaged for the private sector. More specifically, to recommend the role that Industry Associations and Chambers of Commerce should play in VET.”*

The Task Force is of the considered view that the present system of Government support to vocational education and training has not had the desired impact for reasons mentioned in the main body of the report. There is need to have a clear cut division at every level between the role of the Government and the private providers.

More specifically, the Task Force feels that there should be a demarcation between vocational education and vocational training. Vocational education here would mean that teaching of subjects in existing educational institutions, where the main thrust is on academics and not skill development. Educational institutions can certainly conduct vocational courses within their premises or in partnership with other providers, but skill development programmes should normally remain the prerogative of those involved in vocational training, like the *DGET* in particular and other line ministries in respect of the areas of their expertise. Distance learning will, however, be exempt from this general rule because it does not entail the setting up of separate institutions and as its coverage is cross sectoral.

The Task Force is inclined to believe that the only sustainable strategy is to organize public private partnerships (PPP) between *Government* (a generic term which includes the Central and State Governments and *Industry* (which includes providers of services, businesses, NGO's and charitable trusts/societies).

Ideally, the Task Force feels, 'green field' institutions should be established based on demand by industry or government, and a tripartite arrangement arrived at between the Central Government, the State Government and the concerned industry association, which could be a chapter of one of the national associations or a regional one. The Central Government could provide a capital grant for buildings and equipment on a one-time basis. The State Government will provide the land and the private party or the *concessionaire*, who would be nominated by the industry association, and selected by a committee in a transparent manner, which can involve the submission of expressions of interest and/or bids, would enter into a Memorandum of Understanding with the State Government to run the institution. Their mandate would be to provide training in their premises at a rate of fees which should be reasonable, and can be determined by an independent committee set up by the State Government. In order to achieve this difficult goal, there has to be an element of cross subsidy in that the premises of the institution may also be used by the private party/ *concessionaire* to derive additional income by providing in-house training to company employees wherever possible, or leverage the infrastructure in his capacity as a leaseholder. This matter is discussed in more detail in the main body of the report.

iv) *“Address the question of VET degrees/ diplomas/ certificates and recommend certification procedures for the various levels of VET.”*

. The Task Force would recommend that, in respect of vocational education, the students should be allowed an option for at least one vocational subject which would count towards their educational degree at the Secondary School level. There has to be lateral movement between VET institutions and the academic mainstream, although this would involve supplementary academic programmes and remedial courses in order to bring such students up to a comparable level with their peers. The certification of VE programmes would normally be done by the concerned Boards of Secondary Education and the Universities with the help of experts if they are a part of the curriculum, and the NCERT/ PSSCIVE would look at the quality aspect. In respect of VT, the revamped NCVT would be responsible for certification and should operate in a totally transparent manner.

- v) *“To recommend how the existing physical infrastructure for VET can be optimally utilized. Possibilities of Public-Private-Partnerships should be explored by allowing the private sector to make use of the physical infrastructure that exists in Government institutions.”*

The physical infrastructure can be optimally utilized by following the proposal contained in para iii) above. In the case of ITIs which are not covered under the centres of excellence project this issue could be looked at in the light of the previous paragraphs and the scheme proposed by the Finance Minister, which is discussed in the main body of the report.

- vi) *“To recommend the appropriate stage (class 8 or 10) at which pre-vocational courses should be introduced in the regular school system so that it has two broad streams to offer – the ‘academic’ and the ‘applied’. Also, to recommend the consequential changes that may be required in the school system.”*

The recommendation here would be that vocational education should be woven or streamed into the curriculum as far as primary education is concerned and how best this goal can be achieved should be left to the National Council of Education Research and Training (NCERT) and its specialist institution, the PSSCIVE, which would interact with the Boards of Secondary Education.

In Secondary School, starting from Class IX, there can be at least one subject of a vocational nature in the regular curriculum which could be *prescribed* by the Central Government for its own institutions and those funded by it and recommended to the private unaided schools and the State Governments. While NCERT would provide the expertise in this regard, the decision could be left to Boards like the CBSE, ICSE and the Secondary School Boards in the various States.

The Task Force does not favour compulsory ‘streaming’ at the Secondary level, either at Class IX or Class XI, given the prevailing social prejudice against VET. The Government of India has a commitment to provide free and compulsory education up to the age of 14 or Class VIII. Steps are also being taken to universalize education till Class X. At that stage there can be streaming on a voluntary basis while at the same time a window should be kept open for those students who wish to enter the ITIs after Class VIII, and means for encouraging their re-entry to the academic stream after Class X can be devised, if there is a demand for the same. This would cater to a large number of drop outs.

- vii) *“To explore ways to meet the requirement of quality teachers/ trainees required for expansion in VET.”*

It may not be realistic to expect quality teachers to come to VET institutions run by the Government; in any case the students would be interested in learning from those who are actually involved in a job. The Task Force feel that there should be minimum recruitment of teachers in VET institutions, as they would have to increasingly rely on ‘guest faculty’ from the industry or business concerns.

Industry can play a very important role developing the trainers and master trainers for a family of trades. The Task Force recommends that while faculty development norms can be set by the Mission/ DGET, the actual training can be assigned to leading industries. A model/scheme could be evolved by the former, and this can be funded by

Government. Accreditation of these programmes can be made conditional upon utilizing qualified/experienced resource persons and providing quality inputs.

viii) *“To recommend setting up of an effective mechanism to enable potential employers and employees to access the information they require.”*

A data base of existing institutions would have to be prepared by each ministry of the Central and State Governments and placed on their web sites which should be given suitable publicity using cost effective media like the Press and the Radio. A central data base can be maintained by the National Mission on Skill Development.

ix) *“To recommend ways in which the general perception about VET can be made more positive, including change of nomenclature and a media campaign.”*

This is perhaps the most difficult job. There does need to be a media campaign and a change of nomenclature to call the institutions Skill Development Centres. The Task Force discusses this matter in the main report, and the proposed Mission can conduct a major media campaign, with the help of advertising professionals, and involving the employers in this activity.

x) *“To consider and make recommendations on any other relevant matters that may include*

✪ *The need for a VET law*

✪ *Role of distance education in VET*

✪ *The requirements for language training in view of the fact that the trainees may have to relocate for taking up jobs.”*

The Task Force feels that there is no need for a VET law at present, as it may create barriers to entry. Besides, VET is a market driven activity, and we have the example of the Apprentices Act, 1961 with us. The scheme has been stunted to a level of 1.5 lakh apprentices in less than 30 thousand establishments, most of which are in the public sector. The Task Force feels that there is a need to revisit, if not abolish, the Apprentices Act 1961, and The Employment Exchanges (Compulsory Notification of Vacancies) Act 1959.

The legal framework could focus on a system of accreditation, jointly by business and industry. There should be a quality assessment mechanism on an entirely voluntary basis. It needs to be remembered that VET does not cater mainly to the Government but to private enterprises/ NGOs which ought to not only have a major say in running these institutions as they would be providing/ arranging employment but they should, in turn, make their own investment in manpower, rather than depend on the State.

Distance learning would be an essential component and organizations like IGNOU and NIOS should be supported in their plans to work closely with industry and cover much larger numbers. The Task Force has taken up this issue.

The VET institutions should provide for language training and remedial courses in mathematics, wherever sufficient demand exists.

Note: The Notification does not mention the underlying mandate of the Task Force, which is to recommend the *nature* of the Mission on Skill Development which is to be set up as directed by the Prime Minister. This will be taken up in the main body of the report.

The Apprentices Act, 1961

Training imparted in Institutions alone is not sufficient for acquisition of skills and needs to be supplemented by training in the actual work place. For facilitating training and enhancing Employability of the job seekers in the industrial/non-industrial establishments, the Apprentices Act, 1961 was enacted with the following objectives: -

(I) To regulate the programme of training of apprentices in the industry so as to conform to the prescribed syllabi, period of training etc., as laid down by the Central Apprenticeship Council; and

(II) To utilise fully the facilities available in industry for imparting practical training with a view to meeting the requirements of skilled manpower for industry.

2. The National Apprenticeship Scheme was started in 1959 on voluntary basis. The Apprentices Act came into force on March 1, 1962. Initially, the Act envisaged training of trade apprentices. The training of Graduates and Diploma Holders in Engineering and Technology as Graduate and Technician Apprentices was brought within the purview of the Act through an amendment in 1973. The Apprentices Act was, further, amended in 1986 to bring within its purview the training of students passing out of the (10+2) vocational stream as Technician (Vocational) Apprentices. The training of this category of apprentices commenced in terms of the requisite Rules notified by the Government in October, 1987.

3. The Apprentices Act makes it obligatory on the part of employers both in public and private sector industries to engage trade apprentices according to the ratio of apprentices to workers other than unskilled workers in designated trades prescribed under the Rules. In order to locate optimum facilities for apprenticeship training, the training places are located on the basis of the findings of surveys conducted in the industrial establishments. The duration of training for trade apprentices varies from six months to four years depending upon the requirements of the trade. The syllabi for different trades are prepared by the respective Trade Committees comprising trade experts from industry. The engagement of apprentices is done twice a year during February-March and August-September. Similarly, the test is also held twice a year.

4. The responsibility for implementing the Apprentices Act, 1961 in respect of Trade Apprentices in Central Government Establishments/Departments rests with the Central Apprenticeship Adviser/Director of Apprenticeship Training in the DGE&T, Ministry of Labour and Employment with the assistance of six Regional Directorates of Apprenticeship Training (RDATs) located at Chennai, Faridabad, Hyderabad, Kanpur, Kolkata and Mumbai. The State Governments/UT Administrations are responsible for implementing the scheme in their respective Departments, Undertakings and private sector establishments through the State Apprenticeship Advisers (SAAs). The Training Programme for Graduate Engineers, Diploma Holders and Technician (Vocational) Apprentices is controlled by four Regional Boards of Apprenticeship Training (BOATs), which are autonomous bodies under the Department of Education, Ministry of Human Resource Development. In this publication, an attempt has been made to present the overall scenario on Trade Apprentices in India.

5. Central Apprenticeship Council is an apex body. It advises the Government on laying down of policies and prescribing norms and standards in respect of Apprenticeship Training Scheme. It is tripartite by constitution with members from Government both Central and State/UTs., Employers & Trade Unions. Union Minister of Labour & Employment is the Chairman.

6. It covers employers both in Public & Private Sector establishments having requisite training infrastructure as laid down in the Act to engage apprentices. 254 groups of industries are covered under the Act.

Concept Note
Redevelopment of Existing ITIs Polytechnics
Under Public Private Partnership (PPP) Framework

Background

1. Demographic dividend vs. Demographic nightmare
 - a. Unemployable graduates- ‘degree’ syndrome
 - b. Low marketable skills
 - c. Consequent frustration with system
 - d. Greater probability of ‘nightmare’ than ‘dividend’ in the business as usual scenario

2. Professional vs. Vocational Education
 - a. Professional education- overseen by AICTE, MCI etc
 - i. Engineering
 - ii. Medicine
 - iii. MBA
 - iv. Other similar
 - b. Vocational education
 - i. Skilled/semi-skilled trades needed by Industry
 - ii. Skilled/semi-skilled trades needed in services
 - iii. Skilled/semi-skilled trades needed for academia and research
 - iv. Semi-skilled trades needed in households

3. Vocational education – poor quality
 - e. Tremendous demand for skilled people in vocations
 - f. Demand not being addressed by existing, ‘government’ supply
 - g. Inflexibility in such ‘government’ supply- ITIs /Polytechnics
 - h. Poor incentive structures for better Management of such centres
 - i. Need for PPP solutions in supply of vocational training
 - j. PPP structures (*wherever possible*) will impart flexibility to focus on market needs and thereby tailor better and increased supply of vocational education.

How?

- a. South and West Indian states have more engineering and professional colleges since they encouraged private investment in such colleges – when most north Indian states (and Government of India?) ridiculed such ‘Capitation Fees’ institutions as scams.

Today, such professional colleges attract large number of students from the same north Indian states.

- b. Hence, think of entrepreneurs- social or economic, running ITIs and Polytechnics as a business.
- c. Do not think of diffuse ‘industry associations’ being inducted on management boards of such institutions. This is not partnership in a commercial sense, and will not significantly impact flexibility or incentive structures.
- d. If want to involve private capital, prepare the bid well, and leave the risk analysis to potential bidders- their risk perception would be captured in bid values
- e. Bidding model – as simple as possible- the Government may mandate the existing capacity of students to be maintained with existing fees levels for this number of students as a minima- this would redress any criticism of downsizing facilities.
- f. Thereafter, no restriction would be placed on additional students or additional trades. The private partner would be free to add as many students in as many trades as he wants. A negative list of trades that should NOT be taught may be conceived, nothing else to be restricted.
- g. Location of such ITIs and Polytechnics would be an important determinant in whether PPP models are possible. Hence, to take MP as an example, ITIs near existing Industrial Areas like Pithampur (Indore) , Mandideep (Bhopal) and Malanpur (Gwalior) would be better to begin with. Similarly, a minimum size of the PPP bid (say three to five contiguous institutions) would be essential to attract serious bidders in the entrepreneurial mode.

Immediate intervention

1. Union Ministry of Human Resource Development has launched a programme in the central sector for upgradation of infrastructure and courses offered by ITIs 500 ITIs over the next five years shall be upgraded at the rate of 100 ITIs a year. However, this doesn’t seem to be on a PPP approach.
2. In Madhya Pradesh, the following 8 ITIs are selected in the first phase of Centre of Excellence.

ITI	Sector
Indore	Automobile
Dewas	Production & Manufacturing
Bhopal	Information Technology
Raghogarh	Agriculture Machinery Mechanic
Jabalpur	Garment Making
Chhindwara	Food Processing
Rewa	Construction & Woodworking Industry
Gwalior	Electronics Sector.

3. Directorate of Technical Education (DTE) could leverage the resources under this scheme and utilize the managerial efficiency and resources of the private sector. The level of infrastructure, international practices of instructions, intensity of industry interface and the standard of student facilities and amenities that could be provided at the ITI’s / polytechnics operated by DTE could be implemented under a PPP framework.

4. The private operator would be responsible for developing, operating, maintaining the facilities at its expense.
5. Besides the aforesaid non-academic activities, the operator could carry out the critical function of undertaking and further evolving concerted and continuous interface with the industry for the purpose of student training, placement calls & campus recruitment, faculty training, etc.
6. The private investor could also be permitted to undertake other education related activities, not limited to the following :
 - a. Commence additional educational programmes
 - b. Sports Facilities for students
 - c. Student amenities and facilities
 - d. Undertake Research projects
 - e. Optimally utilize infrastructure including taking up commercially outsourced assignments and providing access of available infrastructure to other educational related activities
7. The Project could be offered to an investor on a long term basis- a minimum of 15 years- to develop, operate, maintain and transfer basis. The roles and responsibilities could be shared between the Government and the private operator.

Next Steps

We can immediately help Directorate of Technical Education, Government of Madhya Pradesh, in the following activities for the PPP development of Polytechnics in Madhya Pradesh:

- Within the broad guidelines indicated in the aforesaid paragraphs, evolve detailed methodology for operationalisation of the scheme.
- Prepare guidelines for investment & operations, hold discussions with potential private operators and selection of private operator
- Preparation of agreement between the department and the selected private operator.
- Manage the entire bid process at no cost to Government

IDFC Delhi
March 23, 2007

EXECUTIVE SUMMARY

Program for creation of gainful employment of rural BPL youth in Apparel Industry

1. Context

- With Indian Textiles & Clothing industry expected to reach US\$ 85 Billion by 2010, the gap in the demand and the supply of skilled manpower is expected to be 2 million by 2010. The present institutional structure is inadequate to meet this huge shortage of skilled manpower, both in quantitative and qualitative terms.
- With economy growing at a rate of 9% per annum, there is a need to ensure that this growth is inclusive, in order to have positive impact on poverty levels.
- Apparel industry employs people at shop floor level with low levels of education and skills, specifically suited for women.
- Thus there is convergence between the requirement of skilled manpower for apparel industry and poverty alleviation, objective of the Government.

2. Objectives & Targets

- The program has twin objectives: To meet the skill requirements of the apparel industry and in the process enable rural poverty alleviation.
- To train and place 5 lakh rural BPL youth over a period of 5 years @ 1 lakh per year in the apparel industry as operators at the shop floor level.

3. Strategy & Approach

- **Placement Linked:** Assured placement for every trainee. Pre-requisite of the program is the commitment of the industry to employ the trained persons.
- **Selection of Trainees:** Trainees in the age of 18-30 years with education qualification of standard 5th/8th will be selected from rural BPL families, as per the list maintained by the District Rural Development Agencies (DRDAs), based on basic screening tests such as Eye-hand coordination, eye sight/color blindness, etc.
- **Training Centers:** Leverage and utilize existing infrastructure and facilities for operation of training centers. No new buildings to be constructed. Wherever possible, dormitory accommodation would be provided for the trainees.

- **Training Partners:** Partnership with agencies who have aptitude and capability to conduct training so that the government doesn't have to create new posts for the trainers.
- **Training Content :** Innovative content development with inputs from the industry to meet the global best practices. The content is multimedia based for impact, standardization, and scaling up. Updation, translation and customization of the training content will be ensured to meet the specific industry needs.
- **Skill sets:** The objective of the program is to impart basic skills necessary to become a shop floor level operator, so that the initial wages are at least equal to the prescribed minimum wages.

Technical Skills: Sewing machine operator program, garment designing, Quality evaluation, machine maintenance, etc.

Soft Skills: Health & hygiene, social security, self-management, workplace etiquette, group/team behaviour etc

- **Duration:** One-month basic course.
- **Certification of trainees :** Certification by third party (educational/vocational institution) to ensure high quality standards.

4. Funding

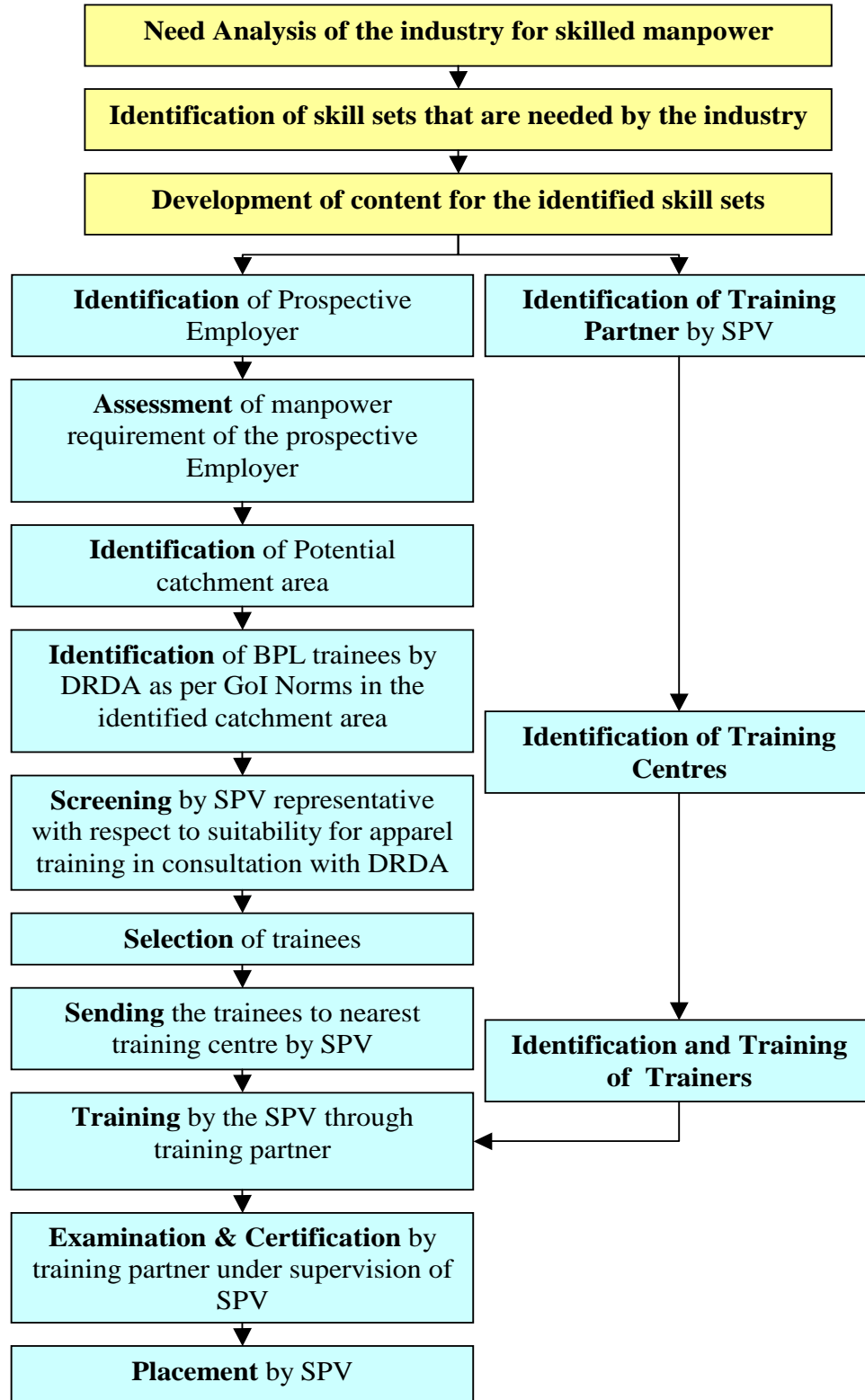
- The cost of training to cover 5 lakh persons over next 5 years is estimated to be Rs. 8,174 per person. The Govt (Ministry of Rural Development) would share Rs.5000 per person out of special SGSY projects and remaining will be contributed by the industry.

5. Implementation

- IL&FS has strong linkages with the textile industry and was nominated as Program Management Consultant by Ministry of Textiles; Govt. of India to facilitate the establishment of Integrated Textile Parks throughout India. IL&FS has been working extensively in the field of training and education, particularly related to development of multimedia teaching aids and content. Given this IL&FS has decided to plan and execute this program.
- With the objective of ensuring Public Private Partnership in the program IL&FS has established a Special Purpose Vehicle (SPV) namely, APPTTEX Manpower Development Company Limited. The textile industry associations, apex bodies and textile park SPV will be shareholders of this company in addition to IL&FS. APPTTEX will be responsible for the entire process right

from the stage of identification and selection of trainees to placement of trainees.

- The implementation process is outlined below.



6. Pilot Project

While endorsing the above project, in principle, the Ministry of Rural Development, GoI, has initially approved a pilot project to train and place 30,000 rural BPL youth in apparel industry. Based on the experience of the pilot, the project would be scaled up, subsequently.

For the Pilot Project, IL&FS has already developed multi-media based training content , identified training centers and training partners and is in the process of procurement of machinery.

The first batch of the training centers will be operationalised in July 2007.