

## Vocational Education

### Introduction:

The national policy planners have considered higher secondary stage of school education as crucial since it is at this stage that necessary skills and competencies are acquired which enable the students to enter the world of work or to go for higher education. Vocational education has been accorded high priority in the National Policy on Education, 1986. The NPE, 1986 inter alia states “The introduction of systematic, well planned and rigorously implemented programme of vocational education is crucial in the proposed educational re-organization. Vocational education will be a distinct stream intended to prepare students for identified vocations spanning several areas of activity”. The NPE, 1986 set the target, to cover 10% higher secondary students under vocational courses by 1990 and 25% by 1995. The POA, 1992 reset the targets of diversification of students in vocational streams at +2 level to 10% by 1995 and 25% by 2000. Consequently, a Centrally Sponsored Scheme (CSS) of Vocationalisation of Secondary Education was launched in 1988, which was implemented by the State of Himachal Pradesh. Under this scheme Vocational Education is being provided in General Schools with two years duration in 10+1 and 10+2 classes. The objectives of this scheme are (i) to provide diversification of educational opportunities so as to enhance individual employability; (ii) to reduce the mismatch between demand and supply of skilled human resource, and (iii) to provide an alternative for those pursuing higher education. If India wants to have a competitive advantage, it needs to restructure its Vocational Education and Training (VET) system. Consequently, based on the current and futuristic requirements and keeping in mind the experiences gained and lessons learnt from the implementation of the previous scheme of vocationalisation of Secondary Education, a revised scheme is now proposed. The revised scheme echoes the ideology inherent in the Framework for Vocational Education and Training in India developed by the MHRD, 2007. The framework proposes to integrate the general academic education, vocational education, vocational training and higher education as a comprehensive system under the Indian Qualifications. The vocational education at the higher secondary stage is a part of this proposed integrated national qualification system. Thus, vocational graduates will have opportunities not only to enter the world of work through wage or Self-employment, but also can have lateral and vertical mobility in the educational system. There is a significant drop-out of students after completion of Class 10<sup>th</sup> and they do not join class 11<sup>th</sup>. These children and a certain percentage of children enrolling in Class 11<sup>th</sup> who have aptitude for vocational courses, but are compelled to pursue academic courses in the absence of any opportunity, constitute the target group under the scheme of vocational education at higher secondary level. There is evidence that countries with a strong VET system have increased their marginal productivity and lowered the unemployment rates. The relevance of vocational education has increased in the fast growing Indian economy, especially in the light of the Government’s thrust on Universalisation of Secondary Education, skill development and social justice through inclusive education and training.

### 2. Subjects:

The following subjects are taught during two years training in Vocational education institutes and examination is conducted in all these subjects separately for (10+1) and (+2) classes as under:—

#### (10+ 1) class

1. English.
2. General Foundation Course (GFC)

#### (10+2) class

1. English
2. General Foundation Course (GFC)

- |                          |                          |
|--------------------------|--------------------------|
| 3. Vocational Theory-I   | 3. Vocational Theory-IV  |
| 4. Vocational Theory-II  | 4. Vocational Theory-V   |
| 5. Vocational Theory-III | 5. Vocational Theory -VI |
| Vocational Practical-I   | Vocational Practical -IV |
| Vocational Practical-II  | Vocational Practical-V   |
| Vocational Practical-III | Vocational Practical-VI  |

The syllabus and question papers of English for plus one and two are the same as that of academic side of 10+1 and 10+2 classes.

### 3. Tuition Fee:

Every boy student is charged tuition fee at par with science students and no fee is charged from girl students.

### 4. Working Hours:

Working hours of each Vocational Education Institute is as per Govt. Norms (*i.e.* six hours every day). Second Saturday of every month and every Sunday are closed days of the institute

### 5. Attendance :

Every student has to complete minimum 75% attendance in every year of two year courses for appearing in the annual examinations in both theory as well as practical.

### 6. Examination and Certification:

Examination of plus two students of Vocational Education is also conducted by H. P. Board of School Education Dharamshala and successful candidates are awarded certificates like other students.

### 7. Eligibility for Admission:

Any 10<sup>th</sup> pass student of any recognized board is eligible for admission in 10+1 vocational courses. There will be no percentage bar to seek admission to Vocational Courses. The girl students can seek admission in Boys schools where vocational courses are running. The concerned Principals and lecturers will make all sincere efforts to motivate the students for admission in vocational courses.

### 8. Enrolment:

The enrolment of students in vocational courses should be as per the norms prescribed by MHRD Govt. of India. Efforts will be made to promote enhancement of enrolment of girls, SC/ST/OBC, minorities, BPL, children with special needs, *etc.*

No. of vocational courses : 2 per school

No. of students per vocational course : 50 (25 in each Class *i.e.* XI and XII)

No. of vocational students in each school : 100

No. of Sections in each School: 4

## **9. Equipment and Raw Material:**

The adequate requirement in terms of tools, equipment and machinery for the development of soft and basic technical skills would be provided to the schools. The list of the tools and equipment mentioned in the curriculum would form the basis for purchase of relevant Machinery and equipment for the vocational course. In addition, the requirements for modern tools and equipment could also be assessed taking the help of employers, relevant organizations, and professionals in the field. Raw materials and consumable items like glassware, plastic-ware, chemicals, etc. would also be provided for each course, the grant for which would vary from course to course. Maintenance of tools and equipment will also be funded through the scheme.

## **10. Functions of Vocational Schools:**

- (i) To establish an effective and efficient VE system in the Institution for promotion of equality of opportunity for all.
- (ii) To run approved vocational courses/skills development programmes consistent with National Occupation Standards (NOS) in mainstream schools in the form of sections offering vocational education.
- (iii) To provide or arrange a range of support services to the students such as arranging on-the-job training, establishment of training-*cum*-production centre, establishment of linkages with industry, arranging guidance and counselling, etc.
- (iv) To arrange competent teachers/trainers and ensure their continuing education and training through capacity building programmes and action research.
- (v) To undertake publicity, image building and awareness programmes.
- (vi) Keep track of vocational students passing out with regard to their employment, vertical or horizontal mobility etc. and maintain records.
- (vii) To maintain and disseminate relevant information at various levels as a part of school level MIS.

## **11. Ensuring Girls' Participation:**

The National Policy of Education (1986) has categorically recognized education as an agent of social change in favour of girls and has particularly emphasized facilitating girls' participation in vocational and technical education. Further, women empowerment is high on national agenda. Echoing the same ideology, this policy also places equal and non-stereotyped participation of girls in vocational education on high priority. This should be the guiding principle for taking various steps for implementation and monitoring of the scheme, be it expansion or strengthening of the schools, enrolment, placement or such others. Though priority would be accorded to co-educational schools/institutes, wherever the society is not yet ready for it, all girls' schools would be included. The selection of courses in these schools should not be gender guided. Similarly, choice of courses by the girls would be promoted in such a manner that gender stereotyping is avoided. Care would be taken that girls are not 'pushed' to non-formal mode of vocational education but are encouraged to join regular courses. Specific incentives and support systems will be planned to enhance participation and good performance of girls in high employment oriented courses, ensuring their economic self-sufficiency. Special guidance and counseling session would be organized for girls as per need. The vocational Principal /co-ordinator of the school should take necessary steps to remove gender bias, if any, in the minds of employers/financiers against giving the girls employment or loans. The implementation aspects in favour of girls mentioned in other appropriate sections of the scheme would be ensured. All the reporting, data generation should be in gender segregated manner.

## **12. Coverage of Special Focus Groups:**

Efforts will be made by the Schools to mainstream children belonging to special focus groups *i.e.* SC, ST, OBC, persons below poverty line, minority and children with special needs, with special attention to the girls belonging to these groups. Special priority would be given to open/strengthen vocational schools/model vocational schools in identified minority/SC/ST concentrated districts/blocks. Schools will develop suitable incentives for their participation for which funding provision has been made in the scheme. Enrolment drives, special ampuases, provision of special facilities, working in close collaboration with parents and NGOs, etc. should be undertaken to ensure participation of special groups in vocational education. Monitoring attendance, organizing remedial classes and follow up of special groups will be done by vocational schools. Necessary support services *e.g.* special aids and appliances shall be provided for learners with special needs during the process of learning and training. Arrangements would also be made in schools for removing architectural barriers for easy access of learners with special needs. Teacher preparation for giving due care and attention to such children also need to be ensured.

## **13. Production-cum-Training Centre (PTC):**

Establishment of Production-cum-Training Centres is visualized as a methodology of providing a learning experience linking teaching learning process with the world of work, so that students not only gain relevant skills and attitudes but also the necessary hands on experience to use skills in producing and marketing goods and services. The dichotomy between education and work could be reduced by establishing PTCs in schools, as the production processes become vehicles of learning, which is related to society's needs for goods and services. A large share of earnings through the PTC is distributed amongst students which comes as an incentive and support to them. The major objectives of PTCs would be as follows: **(i)** provide educational experience relevant to market, **(ii)** enhance self-support capabilities, **(iii)** forge institute community linkages through need based products and services, **(iv)** inculcate the spirit of social accountability in educational institutions, and **(v)** prepare students for gainful self/wage employment.

## **14. School Industry Linkage and O.J.T:**

The Vocational Education Programme at the plus two stage lays great emphasis on development of need based skilled man power for all sectors of economy. The national curriculum design for Vocational Education provides communication skills and entrepreneurship skills along with competencies in vocational Theory and Practice. Linkages will have to be developed with industry and other organizations for specialized technical training using their equipment and expertise. ON THE JOB TRAINING should be started so that students become familiar with the working of industries and know about the field problems.

## **15. Support for Self Employment :**

Besides giving necessary guidance to the students for setting up their ventures, the Vocational Principal/Co-ordinator/Teachers should continue to provide technical support to them for the transition period. Efforts should be made at appropriate levels to arrange soft loans and to devise marketing strategies for these young skilled entrepreneurs. Best practices in vocational education from the School should be documented and disseminated so that such practices could be replicated or emulated by others. Special classes on entrepreneurship would be conducted for those students who opt for self employment. The students should be motivated to adopt self employment.

## **16. Placement :**

There will be a placement cell in each school so that the follow-up data of the pass out students can be maintained. Sincere efforts will be made at Directorate level to set up linkage with



industries so that campus interviews may be conducted to provide employment. Monitoring will be done at Directorate level. The Vocational lecturers of all subjects will ensure the participation of students in Job fairs/ Rojgar-Melas conducted by various companies from time to time. They will maintain record/register of pass out students who go for higher studies/ self employment/wage employment or any other field. They will remain in close contact with various private companies, chamber of commerce and employment exchange. However the state level co-ordination will be done by Vocational branch of Directorate of Higher Education, Shimla.

#### **17. Apprenticeship Training:**

Training has been consistently felt that students of the vocational courses at +2 level should be provided facilities for apprenticeship training under the Apprenticeship Act as an important catalyst for promoting vocational education. In 1986, the Apprentices Act was amended to provide training to vocational students of +2 level (Technician Vocational Apprentices). At present there are 94 vocational courses covered under the Apprentices. Efforts would be made to cover all vocational students under the Apprentices Act. The State co-ordination Cell for VE should liaise with the BOATS for apprenticeship training of the students. The Principals will send the names of students for apprenticeship to the Directorate well in time so that consolidated data be sent to **APPRENTICE BOARD KANPUR (UP)** for apprentice training of the students.

#### **18. Vertical Mobility :**

It is generally experienced that the student community and society at large, in spite of a valid economic and educational rationale for it, find Vocational Education unacceptable owing to its "terminality" and demand vertical mobility into higher level courses leading to diploma/ degree. Any Vocational programme which does not allow learner to go for a related course of higher studies will be perceived as a dead end. It will have the effect of restraining the development of individual in their working level, which in turn will breed frustration. In view of the above, it is required to find out ways and means for linking Vocational Education at the plus two level with higher education to provide right employability to Vocational pass outs. Various strategies, Modalities and action Plans were made for linking Vocational Education at plus two levels with higher education. In the entire planning of upward mobility to the field of higher education care should be taken that this linking should be complementary and supplementary to his /her basic knowledge and the resources used during/Vocational Education should not go down the drain. In Himachal Pradesh some seats are reserved in each polytechnic for Vocational Pass out students who secure 60% or more than 60% marks through lateral admission. They get admission in 2<sup>nd</sup> year of diploma in their respective area.

#### **19. Publicity :**

Extensive publicity applying various possible modalities such as local set up as well as mass media (newspapers, magazines, newsletters, radio, television, internet, etc.) should be done for creating the right image of the vocational courses and to attract the youth towards the vocational education. Specific publicity and orientation campaigns need to be designed at suitable levels.

#### **20. Role of School Management Committee:**

Every School Management Committee (SMC) will work for smooth functioning and quality assurance of the vocational schools and courses, functioning within nationally set/approved standards and guidelines. The committee will advise the school in selection of courses, teachers/trainers, guest faculty, equipment etc. It will facilitate setting up of PTC, student support systems and help the school in forging linkages with the industry and student placement for

practical and on job training and employment. In case of need, SMC can set up vocational advisory committee to improve implementation and quality.

**21. Monitoring/Inspection of Vocational Education :**

The Principals of Vocational Schools will monitor the various activities of vocational Education in respective Schools. They will apply different methods of vocational guidance, motivation and awareness among students, guardians and society about vocational Education. They will ensure that the enrolment of students should not be less than 25 in each class/section *i.e.* in each school there will be minimum 100 students in vocational Education in +1 and +2 classes. The Head of Institute will ensure that 100% practicals are performed by the vocational students as per syllabus. For this purpose Raw Materials, Instructional Material and Equipments will be arranged well in advance in starting of new session. The Principals will ensure at the end of the session the physical verification of the vocational workshops and stocks every year. The Principal will also manage field visit/industrial visit and on the job training facility for vocational students every year preferably during vacation period. The Deputy Director of concerned Districts will specially inspect/check the various activities vocational Education during inspections and report the matter to the higher authorities.