

**F. No. - 10-4/2012-VE (pt)**  
**Government of India**  
**Ministry of Human Resource Development**  
**Department of School Education & Literacy**

**Shastri Bhawan, New Delhi**  
**12<sup>th</sup> March, 2014**

**Subject:- Revision of the scheme of “Vocationalisation of Higher Secondary Education”.**

It is to inform that the Centrally Sponsored Scheme of “Vocationalisation of Higher Secondary Education” has been revised and henceforth will be known by the name of “**Vocationalisation of Secondary and Higher Secondary Education**”. The Scheme has already been subsumed under the Rashtriya Madhyamik Shiksha Abhiyan scheme with effect from 1<sup>st</sup> April, 2013.

The major changes in the scheme are as follows:-

- i) Introduction of Vocational Education from **Class IX<sup>th</sup>** onwards i.e. at the secondary stage.
- ii) **75:25** sharing pattern between Center and States for funds released under all the components of the scheme. **90:10** sharing pattern for funds released to the North Eastern States including Sikkim.
- iii) Provision for a flexible pool of **Rs. 14.50 lakhs** per annum per school for engaging resource persons including Teachers/Skill Knowledge Providers/Trainers etc.
- iv) Provision of financial costs for engaging with the Industry/Sector Skill Councils (SSCs) for assessment, certification and training.
- v) Enhancement of funds for purchase of books and e-learning material.
- vi) Financial provision (**1%** of total budgetary outlay) for Innovative Programmes under vocational education.
- vii) Cost of development of curriculum and learning materials to be a maximum of **Rs. 2.00 lakhs** per skill level per job role.
- viii) Performance linked incentive to Govt. aided and recognized, unaided private schools.

The revised scheme is enclosed herewith and is also available on the website of the Ministry - [mhrd.gov.in](http://mhrd.gov.in). You are further requested to submit proposals as per revised norms of the scheme.



(S. Radha Chauhan)  
Joint Secretary (SE)

To:-

- i) Principal Secretaries of all States/UTs dealing with the scheme of Vocational Education
- ii) State Project Directors, Rashtriya Madhyamik Shiksha Abhiyan

Copy for information to:-

- i) Shri J.P Rai, Director General, National Skill Development Agency
- ii) Director, National Council of Educational Research and Training
- iii) Director (Cabinet), Cabinet Secretariat
- iv) Vice Chancellor, National University of Educational Planning and Administration
- v) Ms. Anjali Goyal, Adviser (PAMD), Planning Commission, Yojana Bhawan, New Delhi
- vi) Chairman, Central Board of Secondary Education
- vii) Chairman, National Institute of Open Schooling
- viii) Joint Director, Pandit Sunderlal Sharma Central Institute of Vocational Education



(S. Radha Chauhan)  
Joint Secretary (SE)

# REVISED CENTRALLY SPONSORED SCHEME OF “VOCATIONALISATION OF SECONDARY AND HIGHER SECONDARY EDUCATION”

## **1 INTRODUCTION**

### **1.1 Background**

**1.1.1** The national policy planners have considered secondary and 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”.

**1.1.2** The scheme of Vocationalisation of Secondary Education was launched in 1988. Under the scheme since its inception, 10,000 schools were covered with an intake capacity of about 10 lakh students. The evaluation studies in various States/UTs led to the identification of bottlenecks in the implementation of the scheme. Some of these included lack or absence of regular teachers and their training/retraining, insufficient financial allocation, high financial implication on the part of States, non-flexible duration and delivery of courses which at times were not need based, no change in recruitment rules, poor linkage with industry, poor vertical mobility, absence of separate management structures, absence of long-term commitment from the Central Government and inadequate monitoring.

### **1.2 NEED FOR REVISION**

**1.2.1** The scheme of vocational education was revised in September 2011 with the approval of the Cabinet for the above reasons including the dire need at present for high skilled human resource to sustain the high growth rate of Indian economy and increased possibilities of international demand of skilled manpower, changes in technologies and financial markets, the growing international competition and increasing demand from various segments of population for job-oriented education. The Revised Scheme was approved for the remaining period of

the 11th Five Year Plan and it was decided that the expansion and continuation of the scope of the scheme will be taken up at the beginning of the 12<sup>th</sup> Five Year Plan. Accordingly, the Revised Scheme was implemented in the last year of the 11th Five year Plan i.e. 2011-12 and after obtaining necessary approvals in the first year of the 12th Five Year Plan.

**1.2.3** Over the past few years, the relevance of vocational education has substantially increased in the fast growing Indian economy, especially in light of the Government's thrust on universalisation of secondary education, skill development and social justice through inclusive education and training. On 3rd September 2012, Ministry of Human Resource and Development issued an Executive Order on the National Vocational Education Qualification Framework. A pilot on NVEQF under the Scheme was launched in the State of Haryana in September, 2012 across 40 schools covering approximately 4600 children in four industry sectors i.e. Retail, Automotive, Security and IT&ITeS. In light of the learning's emerging out of the Pilot in Haryana, the Scheme has been further revised to align it with the National Vocational Education Qualifications Framework. The present scheme echoes the ideology inherent in the National Vocational Education Qualification Framework and seeks to integrate general academic education, vocational education, vocational training and higher education as a comprehensive system.

### **1.3 NATIONAL VOCATIONAL EDUCATION QUALIFICATIONS FRAMEWORK (NVEQF)**

**1.3.1** The National Vocational Education Qualification Framework (NVEQF) (placed at **Appendix 1**), is a descriptive Framework that organizes qualifications according to a series of levels of knowledge along with skills. These levels are defined in terms of learning outcomes i.e. the competencies which a learner must possess regardless of whether they were acquired through formal, non formal or in formal education and training. Qualifications are made up of occupational standards for specific areas of learning units. This would provide the stakeholders such as the learners, education and skill training providers and employers to gain information about the broad equivalence of qualifications across specific skill sectors. It is therefore a nationally integrated education and competency based skill framework that will provide for multiple pathways both within vocational education and

between general and vocational education to link one level of learning to another higher level and enable learners to progress to higher levels from any starting point in the education and /or skill system.

**1.3.2** The key elements of NVEQF are to provide

- (a) *national principles* for providing vocational education leading to international equivalency,
- (b) multiple entry and exit between VE, general education and job markets,
- (c) progression within VE,
- (d) transfer between VE and general education, and
- (e) partnership with industry/employers.

**1.3.3** Salient components of National Vocational Education Qualification Framework include: National Occupation Standards, Multiple Pathways, Recognition of Prior Learning, Industry Engagement, and Competency based Curriculum, Credit Framework, Credit Accumulation and Transfer, Capacity Building, Sharing of Resources, Accreditation of Skill Knowledge Providers, Assessment and Certification and Quality Assurance.

**1.3.4** ARCHITECTURE OF THE NVEQF

		Case I	Case II	
Level	Certificate	Equivalence	Equivalence	Certifying Body
10	NCC 8	Degree	Doctorate	University and SSC <sup>^</sup>
9	NCC 7	PG Diploma	Masters Degree	University and SSC <sup>^</sup>
8	NCC 6			University and SSC <sup>^</sup>
7	NCC 5	Advanced Diploma *	Bachelors Degree**	*Board of Technical Education and SSC <sup>^</sup>
6	NCC 4			**University and SSC <sup>^</sup>

5	NCC 3	Diploma*		*Board of Technical Education, and SSC^ **School Board and SSC^
4	NCC 2		Grade XII**	
3	NCC 1		Grade XI**	
2	NCWP 2	Grade X	Grade X	School Board and SSC^
1	NCWP 1	Grade IX	Grade IX	School Board and SSC^
RPL	RPL 2	Grade VIII	Grade VIII	NIOS /State Open Schools and SSC^
	RPL 1	Grade V	Grade V	NIOS /State Open Schools and SSC^

RPL: Recognition of Prior Learning

NCWP: National Certificate for Work Preparation

NCC: National Competency Certificate

^Joint certification with industry (SSC)/industry would entail assessment for skills by SSC/industry. The credits would be communicated to the respective awarding bodies for issuance of respective Certificate/ Diploma/ Degree.

### 1.3.5 ILLUSTRATIVE PATHWAYS IN NVEQF

#### Illustrative Pathways within NVEQF

NVEQ Levels	Equivalence	
8-9	Masters Degree	h
		← g
5-7	Bachelors Degree	
6-7	Advanced Diploma	
		d → j
3-5	Diploma	
		← f
		c →
4	Grade XII	
3	Grade XI	
		e
		b →
2	Grade X	
1	Grade IX	
RPL 1 & 2	Grade V & VIII i	a →

- a. Persons having acquired skills through the non formal and informal mode can bridge literacy and numeracy and get certification from NIOS and State Open Schools to move either into Class IX and further or into ITIs or exit to the work place in the context of adult learners.
- b. candidate undergoing vocational education up to Grade X moves to general stream and goes on to complete a degree.
- c. candidate undergoing vocational education up to Grade XII moves to general stream and goes on to complete a conventional degree.
- d. candidate acquiring a vocational diploma moves to general stream and goes on to complete a degree or continue two levels more and complete advanced Diploma in vocational.
- e. candidate who has passed Grade X in general stream can join vocational stream at level 3 after passing a test of NVEQ level attained i.e. acquire skills required at NVEQF level 1, 2.

- f. candidate undergoing general education up to Grade XII moves to vocational stream at level 5 after passing a test of NVEQ level attained and goes on to complete a vocational degree provided he acquires skills of NVEQF level 1, 2, 3, 4.
- g. candidate acquiring a general degree on certification of NVEQF Level 7 can receive a post graduate diploma in vocational education.
- h. candidate acquiring a general degree on certification of NVEQF Level 9 can receive a post graduate degree in vocational education.
- i. Students pursuing vocational education have an option of vertical mobility. Students passing Class VIII and X also have the option to join it is.
- j. With assessment of prior learning a candidate could progress towards a community skill diploma in a community college/polytechnic in a special flexible curriculum determined by UGC and AICTE.

## **PILOT ON NATIONAL VOCATIONAL EDUCATION QUALIFICATION FRAMEWORK IN HARYANA**

### **1.4 LEARNING EMERGING OUT OF THE NVEQF PILOT IN HARYANA**

**1.4.1** Under the Scheme, on 3rd September, 2012 a Pilot Project on NVEQF was launched in Haryana across 40 schools covering approximately 4600 students in 8 districts i.e. Gurgaon, Faridabad, Mewat, Palwal, Jhajjar, Rohtak, Ambala and Yamuna Nagar). The Pilot attempted to connect learning and livelihoods in a model that addresses critical issues affecting the quality of life and future of high school students in Classes 9<sup>th</sup> to 12<sup>th</sup> in the ages 14-16 years. The Pilot covered levels 1 to 4 of NVEQF i.e. introduction of vocational education from Class IX to XII in four industry sectors i.e. Information Technology (IT)/Information Technology Enabled Services (ITeS), Automotive, Security and Retail. The schools were selected on the basis of demographic information, presence of industries, student's strength, school infrastructure etc. The trades for each school were finalized based on the placement opportunity, proximity to the industry, basic infrastructure already available in school, etc. Parents counseling along with individual counseling were an integral part of the student's mobilization and enrolment. Curriculum and courseware was prepared by PSSCIVE/CBSE with inputs



from the industry. Training of teachers and skill training of students was undertaken in association with industry representatives. The State School Education Board was entrusted with the task of assessment and certification along with Sector Skill Council (SSCs). Some of the significant learning's emerging out of the pilot include introduction of vocational education at the secondary stage, integration of vocational education with general education, factoring in the cost of engaging the Sector Skill Councils/industry/employers for training, assessment and certification, offering vocational subject as additional at the secondary stage and as a compulsory elective at the higher secondary stage, flexible pool of human resources for delivery of courseware and training of students, restructuring training of teachers/ resource persons, enhancing funds for curriculum development , convergence with infrastructure available in ITIs, polytechnics etc, increase in funding for books, software etc, deletion of the provision of setting up production cum training centers, convergence with the other schemes already under implementation at the secondary stage etc.

## **1.5 AIMS AND OBJECTIVES**

**1.5.1** In concurrence with recommendations of various Education Commissions, Committees, National Policy on Education (1986), Programme Of Action (1992), recommendations of the Group of State Education Ministers (In charge of Vocational Education) on National Vocational Education Qualification Framework (September, 2012) and the requirements of the prevailing national and international scenario, the major aim of the scheme is to prepare educated, employable and competitive human resource for various sectors of the economy and the global market.

**1.5.2** The specific objectives of the scheme are to enhance the employability of youth through demand driven competency based, modular vocational courses; to maintain their competitiveness through provisions of multi-entry multi-exit learning opportunities and vertical mobility/ interchangeability in qualifications; to fill the gap between educated and employable; and to reduce the dropout rate at the secondary level and decrease the pressure on academic higher education.

## **1.6 SCOPE**

**1.6.1** Vocational education endeavors to prepare skilled persons for identified vocations/trades as per demand of emerging economy, industry/employers in various trades, which would include both the organized and un-organized sectors.

**1.6.2** Demand driven modular vocational courses referenced to National Occupation Standards will be identified and developed in collaboration with industry/employers. These courses would be offered through Secondary and Higher Secondary Government, Government -aided and recognized unaided private schools in conformity with the National Vocational Education Qualification Framework.

## **1.7 NATURE OF THE SCHEME**

**1.7.1** The Scheme will be a Centrally Sponsored Scheme (CSS), under the umbrella of Rashtriya Madhyamik Shiksha Abhiyan. Under the Scheme financial assistance will be given to the State Governments/UT Administrations and incentives to Government aided and recognized unaided private schools for the remaining period of XIIth Plan for implementation of vocational education.

**1.7.2** The scheme would involve introduction of vocational education in schools, capacity building of vocational education teachers/skill trainers, development of competency based curriculum and teaching learning material, development of management information system for monitoring and evaluation, incentivizing government aided and private recognized unaided schools and taking up innovative programmes under vocational education .

## **1.8 TARGETS FOR THE 12<sup>TH</sup> FIVE YEAR PLAN**

**1.8.1** During the 12<sup>th</sup> Five Year Plan it is proposed to provide financial assistance to government schools for introduction of vocational education from Class IX onwards, incentivize government aided schools and recognized private unaided schools for introduction of vocational education in accordance with the norms of

the Scheme through School Education Boards, develop competency based curriculum and learning materials, provide in service/induction training to teachers/ skill trainers and fund innovative programmes under vocational education . Till date 1119 schools across 21 States and UTs have been covered under the Scheme in the 12<sup>th</sup> Five Year. During the remaining plan period, it is proposed to cover approximately 2 lakh students per annum as per the availability of funds.

## **1.9 IMPLEMENTING AGENCIES**

**1.9.1** The Scheme will be implemented in the schools by the State/UT Governments through the Department of Education and Boards of School Education. Other relevant Institutions involved in skill development and having requisite infrastructure and resource persons, including Industrial Training Institutes, Polytechnics, Skill Development Centers, Accredited Vocational Education and Training Centers of NIOS etc, would also be encouraged to participate in the scheme in conformity with the norms and standards laid down.

## **2 IMPLEMENTATION MECHANISM**

### **2.1 ASSESSMENT OF HUMAN RESOURCE NEEDS**

**2.1.1** Assessment of human resource needs is the first step towards planning for human resource development locally or globally. It helps in identifying the trend of emerging vocations, levels of competency required, duration for which the demand is likely to subsist, quantum of requirement and the extent to which education and training facilities are needed. It is a sophisticated exercise and requires a great deal of expertise. Therefore, in order to have realistic national estimates of human resource needs on a long term and continued basis, National Skill Development Corporation has been mandated to conduct skill gap analysis across States and UTs. Trades /job roles for implementation of vocational courses in schools shall be selected on the basis of the skill gap analysis conducted by National Skill Development Corporation and the States/UTs. In addition, States in consultation with the local industry etc. will also identify the human resource needs at the local level. While selecting the trades for the schools the State /UT should ensure that

local skill needs are appropriately addressed and suitable placement opportunities of employment are available for the students passing out in neighboring areas. Besides reflecting the needs of skills across sectors, trades that are introduced in schools should also be in tandem with the aspirations of parents and students.

## **2.2 SELECTION OF SCHOOLS**

**2.2.1** The proximity between the schools and industry/employer would be a major consideration in the selection of schools for implementation of the scheme. Every school will be required to have linkage with some related enterprise/ industry/ farm/ organization, etc., for hands - on training, specialized quality assurance and other relevant aspects. The schools should also foster linkages with other trade establishments, industries, chambers of commerce and business set ups with greater responsibilities to be taken up by FICCI, CII, ASSOCHAM and other identified apex bodies at the Central and State levels. For schools located in districts without significant presence of industries, the State Government shall introduce courses which have a high future growth potential in the district.

**2.2.2** With a view to effect convergence at the grass root level, the State Education Departments shall also map the spare capacity and infrastructure available in the Government and private run Industrial Training Institutes and seek to utilize the same for providing hands on skill training to the students through appropriate Memorandum of Understanding.

**2.2.3** While selecting schools preference will be given to schools located in Special Focus districts, Educationally Backward Block, in left wing extremism affected districts and in districts with high dropout rates at the secondary level.

**2.2.4.** At the secondary level i.e. class IXth and Xth, vocational modules will be offered as an additional or compulsory subject. At the higher secondary level i.e. Class XIth and XIIth, vocational modules would be offered to the academic stream students as a compulsory (elective) subject. In no case vocational modules shall be offered as an additional subject at the higher secondary level. The grades/marks obtained by the student in the vocational subject shall be necessarily factored in the final mark sheet and obtaining at least the minimum marks/grades specified

for the vocational subject will be essential to enable a student to move to the next standard at the secondary and at the higher secondary stage.

**2.2.5** The schools offering vocational courses may also serve as Accredited Vocational Education and Training Centers of National Institute of Open Schooling (NIOS) in accordance with the norms.

## **2.3 CERTIFICATION**

**2.3.1.** In accordance with the National Vocational Education Qualification Framework, National Certificate for Work Preparation (NCWP 1) and (NCWP 2) shall be awarded as qualification to the students successfully passing level 1 and level 2 of vocational education subject in Class IX and X respectively . National Competence Certificate (NCC 1) and (NCC 2) will be awarded as qualification to students' successfully passing level 3 and level 4 of vocational education subject in Class XI and XII respectively.

## **2.4 CREDIT FRAMEWORK**

**2.4.1** For each job role and each level of learning a credit framework will be developed by the Certification awarding bodies in consultation with the Sector Skill Councils, to meet the dual objective of achieving skill competencies of that level and the general education learning requirements of equivalent level. This will further facilitate multiple entries and exit at each level (or within a level) with the bundle of credits earned clearly certified by the institution offering courses in vocational education.

**2.4.2** Competency based modular curricula would enable multi entry and exit, encouraging performance based learning with definable competencies. This multi level entry and exit system shall allow the candidate to seek employment after any level and rejoin education as and when feasible to upgrade qualifications/skill competency. Simultaneously School Boards would be encouraged to switch to credit based curriculum for general education also to establish an equivalency between vocational education and general education and enable this mobility.

**2.4.3** The hitherto weak provision of vertical progression in vocational education would be strengthened so that the vocational pass outs of Class IXth-XIIth, ITIs and Polytechnics are able to gain entry into the portals of higher education in the vocational courses including Degree level courses namely the Bachelor of Vocational Studies, notified by the University Grants Commission. At the lower rung, AICTE would provide entry for vocational pass outs of Classes Xth-XIIth into appropriate level of Diploma Courses so as to minimize “wastage” on the line of the existing provisions for the ITI pass outs. Further the students shall have the option to move from vocational stream to general higher education stream or vice versa at various stages, as provided by the School Boards, Universities and Colleges. If there are competency gaps identified in a candidate a bridge course based on modular curricula to acquire those competencies will be imparted by the receiving institution. The illustrative pathways are given in Annexure of the NVEQF Executive Order placed at Appendix 1 of the scheme and in Para 1.3.5 above.

**2.4.4** The Credit Accumulation and Transfer system will enable learners to accumulate certain number of credits of learning from various modules with a view to convert the accumulated credits into a recognized qualification. In the non-formal mode, modular courses of short duration will be made available, which will also lead to certificates of attainment/competency certificates with provision of credit accumulation and multi entry-exit flexibility.

## **2.5 NATIONAL OCCUPATION STANDARDS**

**2.5.1** Under the scheme financial assistance will be provided for vocational courses which are developed in reference to the duly notified National Occupation Standards. The National Occupation Standards for each job role within the identified skill sectors will be laid down by the Sector Skill Councils (SSCs). To ensure all India coverage, issue of National Occupation Standards by the Sector Skills Councils will be mapped to the requirements of the States and UTs in accordance with the skill gap analysis and demand for skills in specific sectors by different States and UTs over a period of time.

**2.5.2** Till the time SSCs become functional in all the identified sectors for nationally common NOSs, All India Council for Technical Education (AICTE), Central

Board of Secondary Education (CBSE) would develop them in consultation with industry association, while contextualized State specific requirements could be developed by School Boards/Technical Boards of the State Governments in consultation with those specific industry or trade associations. The curriculum and courseware shall be vetted by Pandit Sunderlal Sharma Central Institute of Vocational Education, Bhopal and shall have to be aligned and made compliant to the National Occupation Standards as and when they are issued/notified for the concerned sector by the respective Sector Skills Councils. The process of alignment shall necessarily be completed within one year of the notification of National Occupation Standard.

## **2.6 SELECTION OF COURSES**

**2.6.1** Every selected school would offer need based modular vocational courses in identified vocations in such a manner that would provide desirable flexibility of choice to students. The selection of courses by the States/UTs should be based on assessment of skill needs conducted nationally and locally; availability of required resources e.g. industry/business set-up for linkages, skill /trainers, necessary raw material, electricity, water supply, and the prevailing and emerging employment opportunities , aspiration and interest of students etc. The school wise trades proposed by the State/UT will be forwarded to the Ministry as part of Project proposal for consideration and approval. The schools will offer on the average two vocational courses. One section of a vocational course will comprise 25 students. In one school from Class IXth to XIIth there will be eight sections and total 200 students. While selecting the course care should be taken by the States and UTs to adequately map the diversity of skill needs. Opting a single job role for large number of schools may adversely tilt the supply of skills vis a vis the demand .Over a period of time, in case the need so arises, the vocational courses offered by the school can be considered for change in accordance with the skill requirement.

## **2.7 CURRICULUM**

**2.7.1** The vocational courses would be competency based and modular with specified credits and built-in provision for multi-entry, multi-exit and vertical mobility. The competency based curriculum package would consist of syllabus,

student handbook, teachers/trainers handbook, training manual, teachers/skill trainers' qualifications, assessment guidelines, multimedia packages and e materials. The curriculum would be referenced to the notified National Occupation Standards/Qualification Packs developed for various job roles by the respective Sector Skill Councils. The modules will include vocational theory and practice for which the weightage may vary from vocation to vocation and module to module, but competency development will be the main focus. Modules will also include inculcation of soft/generic skills, language/communication skills, creativity, problem solving and collaborative approach, personality development, etc. leading to better employability of the students. A component of on-the-job training/internship would be an integral part of the curriculum.

**2.7.2** Curriculum and courseware development will be undertaken by the Pandit Sunderlal Sharma Central Institute of Vocational Education, National and State Education Boards and other reputed institutions having necessary expertise and experience in development of curriculum and courseware, with greater inputs from industry/ Sector Skills Councils in accordance with the National Occupation Standards mapped to the needs of the industry. Each curriculum would, however, have to meet national standards for competencies and other applicable norms. For assurance of quality and relevance, the vocational courses, modules and curricula will need to be reviewed and revised as per need. As far as possible, PSSCIVE will develop exemplar curricula for adoption or adaptation by the Central/State Boards.

**2.7.3** PSSCIVE and Central and State Boards of Education will also take up the development of bridge courses for the job roles taken up for implementation under the Scheme to facilitate vertical and horizontal mobility of students where ever necessary.

## **2.8 INSTRUCTIONAL AND LEARNING MATERIALS**

**2.8.1** Competency based instructional and learning materials would be made available for the identified vocational courses to the learners, teachers and trainers. Teacher and trainer guides, practical manuals/workbooks, charts, multi-media packages would be developed on a large scale and would be made available



to all the States/UTs for translation, contextualization and implementation. The State/UT Governments may translate the curriculum and courseware in the language used as medium of instruction in their respective schools with the assistance of SCERTS, School Boards etc. PSSCIVE will continue to provide support in the development of exemplar instructional and learning materials. Worksheets Handouts, Kits, etc. would form an integral part of the package to keep the learner active during the learning process. The procedure as detailed out for development of curricula will also apply to development or revision of such materials.

## **2.9 E-LEARNING**

**2.9.1** Electronic learning (E-learning) is now recognized as a human resource development modality, especially for promoting learner-centered approach. Hence, efforts would be made to make available on-line learning materials for different modules of the vocational courses. PSSCIVE and other Institutes/agencies having requisite experience and expertise will develop or e-materials for various vocational courses and would make them available to the States/UTs for application. The State/UT Government shall provide necessary and sufficient infrastructure in schools for effective use of multimedia for which provisions have been made in the Scheme. Infrastructure and software etc provided under various ICT schemes / initiatives being implemented by Central and State Governments at the secondary and higher secondary level should also be appropriately leveraged at the school level for imparting vocational education under the Scheme.

## **2.10 EQUIPMENT AND RAW MATERIALS**

**2.10.1** The adequate requirement in terms of tools, equipments and machinery for the development of soft and basic technical skills would be provided to the schools. The list of the tools and equipment would be mentioned in the curriculum, which would form the basis for purchase of relevant machinery and equipments for the vocational course. In addition, the requirements for modern tools and equipments could also be assessed taking the help of employers, relevant organizations, and professionals in the field. Linkages will have to be developed with industry and other organizations for specialized technical training using their

equipments and expertise. Funds for procuring raw materials and consumable items have also been provided for each course. The procurement of equipments and raw material should be undertaken at the school level in association with School Management and Development Committees. Funds for maintenance of tools and equipment have also been provided under the scheme. Proper inventory and upkeep of all items purchased under the Scheme should be ensured

## **2.11 FACULTY AND STAFF**

**2.11.1** The Principal of the concerned school shall act as the chief coordinator of the programme and will ensure seamless coordination and effective implementation of vocational courses in the school. The Principal shall arrange for proper guidance and counseling of the students and sensitization of the parents. He/ She shall oversee the working of the faculty/ resource persons/ skill trainers and ensure effective linkages with the industry .

**2.11.2** Vocational courses will be conducted with the help of Teachers/Skill trainers as well as guest faculty on need basis. The Schools shall be authorized to engage Teachers/Skill Trainers with such qualification and experience as laid down by PSSCIVE. The qualification for the teachers/skill trainers will vary with reference to each cluster of vocational courses. Accordingly, PSSCIVE will work out the details of qualification for engaging teachers/ skill trainers at all the four levels and would circulate the guidelines for the selection and engagement of skill trainers to all the States/UTs. The States will have to ensure that teachers/skill trainers are selected well in advance before the commencement of the programme. The Teachers/Skill Trainers will impart knowledge of both the theory and practice in their respective trades. The performance appraisal of Teachers/Skill trainers shall be conducted at the end of each academic session and their further retention shall be linked to delivery of quality output. Financial assistance will be linked to engagement of qualified trainers/teachers. Resource persons from industry, reputed institutes having requisite expertise and experience may be invited as guest faculty.

**2.11.3** For providing skill training to the students the schools may also engage accredited skill knowledge providers. The identification and registration

(accreditation) of the SKPs would be done by different relevant organization like the School Boards of Education. Even though there may be multiple accreditation agencies, the compliance of laid standards and competencies should be ensured by the awarding bodies.

**2.11.4** Industry would be an important partner in providing master trainers as well as resource persons for various vocational courses. The Principal in consultation with the industry to which the school is linked can invite resource persons for the concerned vocational courses within the specified norms and guidelines. In certain traditional skills and occupations like handicrafts and handloom etc ,the resource persons for providing training for vocational courses can be obtained from amongst Master Crafts-persons/professionals in the concerned vocation even though they may not have formal qualification (degree/diploma or a teacher training certificate). At a cluster level, for schools opting for a common trade, an industry coordinator can be engaged to assist the interface of schools with the local industry for training; assessment etc .The industry coordinator may be paid out of the flexible pool of funds for engaging resources released to the schools.

**2.11.5** Specialized practical work and training would be arranged in commercial and industrial establishments, ITIs, Polytechnics, Community Colleges, hospitals, farms, etc. depending on the vocation and the nature and level of practical training required for the course for which a funding provision has been made in the scheme. Training arrangements should also be made in the unorganized sector on half or full day basis. Structural flexibilities in the timetable would be incorporated to arrange practical training according to the mutual convenience of students and the trainer/industry. For the above purpose, MOUs shall be signed between the school/institution and industries/user organizations. The Department of Education in the States/UTs will ensure that necessary instructions are issued to appropriate State authorities and concerned officers to ensure full cooperation of industries, ITIs, Polytechnics, for imparting practical training to vocational students.

**2.11.6** Detailed guidelines for practical training in industry will be prepared by the PSSCIVE, Bhopal. Where ever possible industry engagement should be converged

with the concessions and benefits being granted to the Industry by the Central and State Government for their contribution in skill development e.g. tax benefits being given to the industries for training individuals under Section 35 CCE of the Income Tax Act.

## **2.12 TRAINING OF TEACHERS / SKILL TRAINERS / KEY FUNCTIONARIES**

**2.12.1** It is the teacher/skill trainer who interprets and implements the educational policy in actual class room situation and as such is the most crucial person in the system. PSSCIVE, Bhopal will act as the principal coordinating agency for organizing teachers/skill trainers training programmes. Competency standards and design of capacity building programmes for teachers/skill trainers will be laid down by PSSCIVE for secondary and higher secondary schools. A concise training package for in service and induction training of teachers/skill trainers would be developed by PSSCIVE/NCTE in teaching techniques, competency based training and assessment and communication skills.

**2.12.2** Pre service, induction and in service training shall be imperative to bridge the current gap between demand and availability of qualified teachers/skill trainers and to keep the teachers/skill trainers abreast with industry requirements. Regular in-service training programmes of 5 days on pedagogy, subject content and other related aspects of vocational education should be organized by the State Education Departments for all teachers/skill trainers every year through established training institutes having necessary experiences and expertise. An induction training of 20 days duration will also be organized by the respective States/UTs for all the selected teachers/skill trainers. If felt necessary the induction training can be staggered over two spells of 2 weeks each. While conducting training programmes, all efforts should be made by the States and UTs to involve the SCERTs and other Teacher Education Institutes to leverage their existing capacities while further building the same. States and UTs, may consult PSSCIVE and seek necessary assistance whenever required..

**2.12.3** Training of Trainer programme for building a pool of resource persons for providing state of the art training to teachers/skill trainers would be developed by PSSCIVE in consultation with National Council for Teacher Education (NCTE) and

would be offered in institutions like PSSCIVE, Bhopal, Regional Institute of Education of NCERT, Teacher Training Colleges, National Institutes of Technical Teacher Training and Research, Universities, etc. for meeting the requirement of teachers/skill trainers. Re tooling programmes will be developed for promotion of vocational pedagogy and blended learning.

**2.12.4** Besides teachers/skill trainers, officials of the Department of Education at the State, District and local level, members and officials of the State Education Boards, Principals of the schools as also the members of the School Management /Development Committees, representatives of the industry shall be provided orientation/sensitization through programmes/workshops organized by the Ministry of Human Resource and Development, State Education Departments and PSSCIVE every year. Capacity Building Programmes for the officials of the Central and State Boards of Education will be specially designed and organized by PSSCIVE.

## **2.13 ENGAGEMENT WITH INDUSTRIES/ EMPLOYERS / USER ORGANIZATIONS**

**2.13.1** The success of the vocational education is dependent upon industries/user organizations involvement in various activities e.g. need assessment, competency standardization, quality assurance , on the job training/internship , development of job profiles and curriculum, assessment and placement. Accordingly participation of industry and employers will be a critical prerequisite for the success of the scheme. In accordance with NVEQF, under the scheme, vocational education courses would be designed, developed, delivered, assessed and certified under the scheme in consultation with industry and employers. The industry will also provide support in terms of providing resource persons, qualified assessors, skill trainers including through Boards of Apprenticeship Training. As mentioned earlier, each school will have to have linkage with an industry/business establishment. The Principal of the school offering vocational courses , with the assistance of industry coordinators , as necessary , will approach industry / employers and seek their cooperation for various possible aspects including imparting practical training to students ,their placement etc . Adequate funding provisions have been made in the Scheme for engaging with the industry for imparting vocational education. The industry/employers will also endeavour to organize job fairs and campus interviews to facilitate appropriate placement of

students possessing desired competencies. The Corporate Social Responsibility Initiatives of the industries may also be leveraged upon where ever feasible. In all such cases, the funding for such components under the Scheme will be appropriately restricted to avoid double payment.

## **2.14 ASSESSMENT AND CERTIFICATION**

**2.14.1** The competencies acquired at each level would be assessed and certified by the Awarding Bodies i.e. the concerned National and State Education Boards to which the schools are affiliated, with the involvement of Sector Skill Councils. If the SSCs are not in place, industry associations /employers shall be associated. The results and the credits received therein would be collated by the Awarding Body with the assessment and certification of the theoretical component of the syllabi assessed in the educational institution and the skill proficiency assessed in association with the industry/SSCs. The certificate so awarded would hence reflect the competencies and marks received in both theory and skills. The skills being duly assessed by SSCs/industry would also be recognized and accepted by industry and prospective employers. Possibility of joint certification with a reputed international certification body can also be explored and implemented.

**2.14.2.** Guidelines for competency based assessment and certification of students will be provided by PSSCIVE, Bhopal, to be adapted by the concerned State Boards. While drawing the assessment and certification framework , PSSCICE will consult the industry/Sector Skills Councils. The assessment and certification framework would provide for weightage of marks for skill and theory components, minimum qualifying benchmarks, duration and design of exams, modalities of internal and external assessment of theory and skills, qualification of assessors etc. Internal assessment of the performance of students will be done by the school in a continuous comprehensive manner. The National /State Boards would conduct external competency based assessment of skills of the students in collaboration with the concerned Sector Skill Council/industry/employer.

**2.14.3** Both formative and summative assessments are critical elements that need careful consideration in the development and design of any learning experience by the skill trainer. In the context of practical skills, the assessment must measure

the performance of the skill with respect to predetermined standards. A learner must demonstrate competence by successfully performing the practical skill.

**2.14.4** Formative assessment relates to the practice or rehearsal of the skill. Clearly this requires time for the learner to master more complex skills, especially if a range of performance criteria is a feature of the assessment process. Assessment of competence should therefore be conducted after a period of rehearsal. The summative assessment relies on the learner's ability to provide evidence of his or her ability to perform the skills. This assessment may have certain performance criteria attributed to it and therefore, speed; degree of accuracy, application under certain circumstances, etc. should be measured. Feedback from the supervisor or workplace trainer or assessor at the training site is a useful measure in gathering evidence. The school should maintain student portfolio and the same should be annexed with the evaluation sheet/certificate awarded by the Board.

**2.14.5** Since preparing employable youth is the main objective of vocational education, it is important that standards are clearly laid down for the competencies required and that there should be an understanding regarding equivalence of certificates issued by various State Governments, organizations within the Government by different Departments, etc. A suitable mechanism for the purpose would be developed by the PSSCIVE including that of accreditation and recognition of vocational courses. Getting international bench marking and recognition of the vocational competencies and qualification is also a job assigned to PSSCIVE.

## **2.15 ENSURING GIRLS' PARTICIPATION**

**2.15.1** 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 scheme 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. 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. Convergence with provisions for promoting girls education at the secondary level under other schemes/ programmes will be sought to enhance participation and 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 Principal 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 shall be in gender segregated manner.

## **2.16 COVERAGE OF SPECIAL FOCUS GROUPS**

**2.16.1** Efforts will be made by the States/UTs to mainstream children belonging to special focus groups i.e. SC, ST, OBC, minority, persons below poverty line and children with special needs, with special attention to the girls belonging to these groups. Special priority would be given for introduction of vocational education in schools in identified SC, ST and minority concentrated districts/ blocks. States/UTs will encourage and ensure the participation of students belonging to the special focus groups in vocational education through suitable measures. Enrolment drives, provision of special facilities, working in close collaboration with parents and community based organization 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 the concerned schools.

**2.16.2** Necessary convergence with the scheme of Inclusive Education for Disabled at Secondary Stage will be sought to provide necessary support services e.g. special aids and appliances to learners with special needs during the process of learning and training. Arrangements will also be made in schools for removing architectural barriers for easy access of learners with special needs. The curriculum and teaching methodologies must recognize and address the needs of all learners with special needs. For giving due care and attention to such students, necessary orientation and sensitization of teacher/skill trainer preparation shall



be ensured. While selecting the vocational trades, the diverse needs of the learners with special needs will also be factored in.

## **2.17 VOCATIONAL GUIDANCE AND COUNSELING**

**2.17.1** Vocational Guidance and Counseling will be critical in ensuring requisite enrolment of students in various vocational courses and for assisting the students in making correct choice of vocational course as in accordance with their ability and interest. Specific counseling drives should be organized in the school involving suitable experts. It shall be the responsibility of the Principal of the school to invite / involve the counselors / resource persons/experts from the industry from time to time for providing necessary guidance to students and parents regarding market trends and suitable vocational choices. The Counselor would also inform students about the various job opportunities, possibilities of vertical and horizontal mobility and also opportunities for self-employment. Students from disadvantaged groups will need specific attention. Care should also be taken for guiding girls in a gender unbiased manner. Necessary fund provision for the same has been made in the scheme. Field visit of students should be organized to industry and actual work situations to enable them to understand and appreciate the real time work requirements and make choices accordingly. Necessary convergence should be sought by the schools with the assistance provided under Rashtriya Madhyamik Shiksha Abhiyan for engaging Counselors.

## **2.18 STUDENT SUPPORT SYSTEMS**

**2.18.1** A student support system will be crucial for the success of the vocational education programme. One of these will include support in determining the equivalence of various courses and qualifications for lateral and vertical mobility. In accordance with the NVEQF vocational students at the +2 level will have access to vocational courses offered at first-degree level and diploma programmes offered by the Polytechnics and Universities/Colleges. Such an entry will facilitate their pathway up to the highest degree i.e., doctorate. The School Education Department in coordination with the Department of Higher and Technical Education of the State/UT will assist and facilitate the students wishing to pursue higher education in vocational subjects in accordance with the illustrative

pathways as defined in NVEQF. Bridge courses/transfer courses would be offered through Institutions like National Institute of Open Schooling, etc. for enabling students to complete the requirements of admission to a vocational course or for a qualification.

**2.18.2** The placement of students passing out with vocational subjects will be an important parameter for measuring the outcome and impact of the Scheme. As an important stakeholder of the Scheme, the industry/ employers in the area, in close association with schools should endeavor to conduct /organize job fairs, campus interviews, recruitment drives etc in the schools for suitable placement of students passing out with vocational subjects and wishing to exit to work situations .The services of the industry co coordinators can be utilized for this purpose.

**2.18.3** On one hand the employability of vocational graduates will determine the success of vocational courses. On the other hand, the nation will benefit if competencies gained by vocational graduates are suitably utilized. For this a review of recruitment rules and procedure are a pre-requisite. Central and State Governments and employers, including private, will need to amend the recruitment policies, rules and procedures for giving preference to persons with competencies compliant with the NVEQF. The Department of Personnel in different States needs to be pursued to take up this matter on priority.

**2.18.4** Special classes on entrepreneurship may be conducted for those students who opt for self employment. Besides giving necessary guidance to the students for setting up their ventures, the teachers/skill trainer 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.

## **2.19 APPRENTICESHIP TRAINING**

**2.19.1** It has been consistently felt that students of the vocational courses at +2 levels 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 levels (Technician Vocational Apprentices). This scheme is being implemented through the four Regional Boards of Apprenticeship Training (BOAT) at Mumbai, Kolkata, Chennai and Kanpur.

**2.19.2** At present there are 102 vocational courses covered under the Apprentices Act, 1961 . Efforts would be made to cover additional vocational courses under the Apprentices Act. The State Education Department and District Education Office should liaise with the BOATS for apprenticeship training of the students.

## **2.21 AWARENESS AND PUBLICITY**

**2.21.1** Extensive awareness and publicity campaigns applying various possible modalities such as local set up as well as mass media (newspapers, radio, internet, etc.) may be taken up for dispelling the bias /negative attitude towards vocational subjects and attracting young students towards vocational education by emphasizing the integration of vocational subjects with general education under NVEQF .Orientation and sensitization workshops involving all stakeholders including government officials, teachers, students , parents , community members, PRIs, industry representatives should be organized by the State/UT implementing agencies for which a funding provision has been made in the scheme. Best practices in vocational education from the States/UTs shall be documented and widely disseminated by PSSCIVE through various media.

## **3. MANAGEMENT STRUCTURE**

**3.1.1** The scheme on vocational education requires flexibility within structures, programmes and delivery processes in order to respond to fast changing market, variable skill demands and corresponding societal aspirations from education. To achieve the desired goals, robust management structure for vocational education will be established at the National, State and District level /Block level for effective planning, implementation and monitoring of vocational education programme.

**3.1.2** Under the Scheme, an Executive Council for Vocational Education (ECVE) under chairpersonship of Minister of Human Resource Development would be

formed. It will be the highest decision making body for the scheme responsible for formulating policies & strategic decisions. The Council will include as its members, Secretary, Department of School Education and Literacy, Ministry of Human Resource Development, Nodal officer NVEQF (Ministry of Human Resource Development) , Joint Director, PSSCIVE, Chairperson, NIOS , Chairman CBSE, representatives of Ministry of Finance, Planning Commission, Ministry of Labour and Employment, Ministry of Panchayati Raj, Ministry of Social Justice & Empowerment, Ministry of Tribal Affairs , Ministry of Minority Affairs , concerned Ministers from a few States and UTs , representative from National Skill Development Agency etc . Joint Secretary, Vocational Education in the Department of School Education and Literacy, MHRD, will be the Member Secretary. Since rapid change in technology are taking place, keeping in view the requirement of the industry and the need of State Governments, the Council will be authorized to modify unit costs from time to time based on need and subject to the overall framework of the scheme and the overall financial envelope.

**3.1.3** The Pandit Sunderlal Sharma Central Institute of Vocational Education (PSSCIVE) shall be the national coordinating agency for vocational education and shall promote necessary interface between education and industry. Besides the specific tasks assigned to it under the Scheme , it would continue its function of providing R&D inputs to the vocational programmes , development of curriculum , teaching learning and other support materials and design and organization of orientation and training programmes for key functionaries and teachers/skill trainers. All efforts shall be made to build the capacities of the institute and strengthen it.

**3.1.4** The State Education Department, Technical Education Department, District Education Offices, shall ensure effective implementation and monitoring of the scheme in the schools. In order to effectively run the programme of vocationalisation of education, at the State level a Coordination Committee with members of different Departments engaged in skill building should be set up in close coordination with the State level Skill Development Missions to guide and monitor the schools covered under the Scheme. The Committee will help in

effecting necessary convergence with Department of Labour and employment, industries, social welfare etc.

**3.1.5** The National and State Boards of Secondary and Higher Secondary Education shall be important partners in the implementation of the Scheme. They shall conduct competency based assessment and certification for various vocational courses in consultation with industry and in accordance with the laid down standards. They shall also make necessary modifications in the existing assessment and certification guidelines where ever required to ensure compliance with the National Vocational Education Qualification Framework.

**3.1.6** At the Institution level too, there is a need for better management and supervision of the programme by involving the School Management and Development Committees and PRI members. This would greatly help in effective day to day management of vocational education. The existing School Management/Development Committees as provided and funded under Rashtriya Madhyamik Shiksha Abhiyan shall ensure smooth implementation of the vocational courses in the schools, as per the approved standards and guidelines. The committee will assist and advise the school in selection of vocational courses, mobilizing parents, providing guidance and counseling to the students, creating awareness about vocational education, procurement of tools , raw materials etc at the school level . It will facilitate setting up of student support systems and help the school in forging linkages with the industry and student placement for training and employment. The committee will monitor the implementation of the courses, fund utilization, quality of training imparted etc. It may invite representatives from the industry for each of the vocation being offered by the school, District Employment Officer or his/her nominee, teachers/skill trainers, guest faculty of the school and one student representative from each vocational course may also be associated with the committee. In addition, the committee will perform such other functions as entrusted to them by the State or National level bodies (MHRD, PSSCIVE).

#### **4. PROGRAMME MONITORING AND EVALUATION**

**4.1.1** Monitoring and Evaluation will be a built-in feature of the programme. Monitoring of programme implementation will be done at various levels, viz., National, State, District, Block and Institutional level. The feedback mechanism would ensure identification of deficiencies in instructions, administration, financial management, etc., so that the functionaries at each level are able to take timely decisions to fill in the gaps in policy-making, direction, budgeting, etc.

**4.1.2** For achieving above, a mechanism will be developed by PSSCIVE, involving independent, external and the existing internal set-ups at various levels. A system of Management Information System (MIS) will be created for proper monitoring and evaluation of the Scheme and for this purpose funding shall be provided from the Scheme. The MIS will be developed by PSSCIVE in collaboration with agencies such as National Informatics Centre (NIC) and reputed IT Companies approved by Ministry of Information and Communication Technology. The MIS shall on a real time basis track the students covered under the Scheme at every level in terms of their coverage, performance, exit to work situations, vertical and horizontal mobility etc. The MIS will provide disaggregated data for all categories of students to evaluate the impact of the Scheme. The use of 'Aadhar number' will be encouraged to track the students. Independent third party monitoring of the scheme will be taken up through credible institutes having necessary expertise and experience. Monitoring teams will visit the selected schools for assessment of the performance. Monitoring/evaluation teams may be constituted at the district and/or state level. Community involvement will be ensured for this crucial and complex task. Efforts will be made to ensure that every school is inspected once a year.

**4.1.3** To measure the impact and outcome of the scheme, MHRD will get independent third party evaluation of the Scheme conducted through credible, reputed institutes with necessary experience and expertise. Well defined parameters for measuring the outcome of the Scheme in terms of pass percentage, placement of students, vertical mobility of students etc will be evolved at the Central and State level. Evaluation studies and sample survey would also be conducted regularly at district, block, and school level. District level evaluation studies would be conducted by

the States /UTs and school level studies would be conducted by the District Education officer .

## **5. COORDINATION AND CONVERGENCE**

**5.1.1** Active coordination and convergence of all efforts of the Central and State governments towards skill building is essential for ensuring efficiency, effectiveness and economy in delivery of outputs and outcomes. While implementing the scheme, the State and the UTs shall make all necessary efforts to secure convergence with ongoing the Central /State government Schemes /initiatives being implemented in the secondary and higher secondary schools. As mentioned above, for ensuring effective convergence and coordination and for leveraging the existing infrastructure and resources available in the realm of skill building, Inter Departmental Committee in close coordination with the State Skill Development Mission shall be set up at the State level to guide and monitor the implementation of the Scheme.

**5.1.2** Necessary efforts shall be made to utilize the existing infrastructure (classrooms workshops, labs etc), resource persons etc available in schools and ITIs, Polytechnics, Community Colleges Skill Development Centers etc for implementation of the Scheme .Curriculum and courseware already prepared under skill development Schemes being implemented by various Departments and Ministries of Government of India and State Governments may be leveraged after necessary alignment with NVEQF. Convergence should be explored 132 courses under Craftsmen Training Scheme, 254 under Apprenticeship Training Scheme and 1426 under Modular Employable Skills can be referred to. Convergence should also be explored with ongoing schemes ,skill initiatives, financial benefits, incentives, scholarships etc on skill development funded by National and State Governments through various Ministries, Departments, Institutions, Agencies etc e.g. the National Skill Certification and Monetary Reward Scheme(STAR) launched by National Skill Development Corporation etc. Further National Institutional Media Institute at Chennai has developed large number of content and institutional media packages which can be used.

## **6. NORMS FOR FINANCIAL ASSISTANCE**

**6.1.1** The responsibility of preparing project proposals under the Scheme for consideration and approval of the MHRD will lie with the concerned States/UTs. Since the Scheme has been subsumed under the umbrella of Rashtriya Madhyamik Shiksha Abhiyan with effect from 1<sup>st</sup> April 2013, the States and UTS shall submit proposals under the Scheme as part of the Consolidated Annual Work Plan and Budget under RMSA for consideration by the Project Approval Board.

**6.1.2** Under the Scheme onetime non-recurring and annual recurring grant will be sanctioned by the MHRD to the State Governments for implementation of vocational education. Under the Scheme, financial assistance will be provided to Government Secondary and Higher Secondary Schools. Government aided schools, and recognized unaided Private Schools shall be incentivized for introducing vocational education in accordance with the norms of the scheme. The incentive shall be given on successful completion of the vocational course by students for at least two levels as per laid down norms and standards. The funds shall flow to the government schools through the concerned State Education Departments. However incentive to the government aided schools and recognized private schools shall flow through the concerned National or State Secondary and Higher Secondary Education Boards to which the schools may be affiliated. The National and State Boards of Education shall make necessary efforts to encourage government aided and private schools to take up vocational education in accordance with National Vocational Education Qualifications Framework.

### **6.1.3 COST ESTIMATE FOR DIFFERENT COMPONENTS OF THE SCHEME**

**Objective:** To introduce vocational courses in secondary and higher secondary schools .

- (i) **Target group:** Pass outs of Class VIII
- (ii) **No. of vocational courses:** 2 per school
- (iii) **No. of students per vocational course:** 100 (25 in each Class i.e. IX -XII).
- (iv) **No. of vocational students in each school:** 200
- (v) **No. of Sections in each School:** 8



## I. NON-RECURRING EXPENDITURE

In Lakhs

No.	Components	Expenditure (Rs. in lakhs)*	Centre: State share
1.	<b>Civil Work:</b>  (i) 02 Workshop/laboratory cum Class room (each of 10 X 10 sq. m)	As per State/UT SOR or CPWD rates whichever is less	75:25 90:10 for North East States including Sikkim
2.	Tools, Equipment Furniture, Computers, Diesel Generator Set etc	10.00	75:25

- (i) A suitable piece of land will be provided by the State Government for construction of workshops/ laboratories (cum Classrooms) within the premises of the existing secondary and higher secondary schools. (ii) Re-appropriation of funds among the heads would be allowed after due approval of the competent authority. (iii) The cost of civil construction works shall be factored in at the CPWD rate or the State Schedule of Rates (SOR) whichever is less.

## II. RECURRING EXPENDITURE

In lakhs

No	Components	Annual expenditure  ( Rs in lakhs)	Centre: State share
1.	Flexible Pool for engaging resource persons including teachers/skill trainers, Skill Knowledge Providers, Coordinators, guest	14.50 lakhs	75:25

	faculty etc.		
<b>Sub-total</b>		<b>14.50</b>	
2.	Raw Materials, maintenance of tools and equipment's purchase of books, software, e- learning material etc	<b>2.80</b>	<b>75:25</b>
3.	Cost of providing hands on skill training to students in industrial and commercial establishments	<b>1.5</b>	
4.	Cost of Assessment and Certification @ Rs 600 for Class IX and X and Rs 800 for Class XI and XII.	<b>1.4</b>	
9.	Office Expenses/ Contingencies (including expenditure on awareness & publicity, guidance and counseling, transport, field visits, stationery, electricity, water office expenses etc.)	<b>2.00</b>	
<b>Sub-total</b>		<b>7.70</b>	
<b>Total</b>		<b>22.20</b>	

#### 6.1.4 TRAINING OF TEACHERS / SKILL TRAINERS: INSERVICE AND INDUCTION:

- I. In service Training of Teachers/Skill Trainers - Batch of 30 Teachers/Skill Trainers for One Week (5Days).

1	TA to Teachers	<b>22,500.00</b>
2	Transportation and Boarding of Resource Persons	<b>20,000.00</b>
3	Honorarium to Resource Persons	<b>20,000.00</b>
4	Working lunch , tea etc	<b>15,000.00</b>

5	Institutional Charges including miscellaneous expenditure	12,500.00
	<b>TOTAL</b>	<b>90,000.00</b>

Cost per trainee for 5 days= Rs. 3000/-

Unit cost per trainee per day =Rs 600/-

**II. Induction Training For Teachers/Skill Trainers - Batch of 30 Teachers/Skill Trainers for 4Weeks(20days) I**

1	TA/ to Teachers	90,000.00
2	Transportation and Boarding Charges for Resource Persons	50,000.00
3	Honorarium to Resource Persons	80,000.00
4	Working lunch , tea etc	60,000.00
5	Institutional charges including miscellaneous expenditure	50,000.00
	<b>TOTAL</b>	<b>3,30,000.00</b>

Cost per trainee for 30 days

Rs 11,000/-

Unit cost per trainee per day

Rs 550/-

**6.1.5 DEVELOPMENT/ACQUISITION OF COMPETENCY BASED CURRICULUM AND LEARNING MATERIALS**

- (i) Approximately, 600 curriculum and courseware for various levels to be developed/acquired for the Vocational Courses during 12<sup>th</sup> Five Year Plan depending on the issue of National Occupation Standards and demand by various States and UTs :
- (ii) Maximum expenditure for development of curriculum and learning materials per skill level per job role including Students Hand Book ,Teachers Handbook, Training Manual , Multimedia packages, E-

teaching learning material, bridge course , assessment guidelines will be Rs 2 lakh .

- (iii) If required, curriculum and courseware reference to National Occupation Standards may be procured from the open market within the norms of the Scheme after necessary contextualization.

The work will be undertaken by PSSCIVE, Bhopal in consultation with NIOS / CBSE / State Education Boards etc.

#### **6.1.6 INCENTIVE TO GOVERNMENT AIDED AND RECOGNIZED PRIVATE SCHOOLS FOR INTRODUCTION OF VOCATIONAL EDUCATION**

A large number of secondary and higher secondary schools in the country are aided by the government or are in the private sector. With a view to ensure active and effective participation of government aided schools and recognized private schools in promotion of vocational education, it is proposed to incentivize the government aided schools and recognized unaided private schools which introduce NVEQF compliant vocational education courses in accordance with the norms of the Scheme.

Under the scheme it is proposed to release grants to the government aided and recognized unaided private schools @ Rs. 6500 per child on successful completion of two levels of the course by the students in accordance with the norms of the scheme and laid down standards. The grants shall be released to the schools through the concerned National or State Board of Secondary and Higher Secondary Education to which the school is affiliated. Further the National /State Boards of Education shall make efforts to encourage the schools to take up the introduction of vocational education as per norms of the scheme. 25% of the seats for vocational courses shall be filled by the government aided and private unaided schools receiving grants under the Scheme with children belonging to socio-economically weaker sections i.e. (SC/ST/OBC/Minorities/Children with special needs/Children below poverty lines-out of which 50% would be girls). Detailed guidelines for the release of grant in aid shall be issued by the Ministry subsequently in consultation with the key stakeholders. Provision will be made so

that the private and aided schools incentivized under the Scheme pass on the incentives to the students including fee concession.

While considering proposals for release of financial assistance, preference will be given Govt. aided schools particularly those located in Special Focus Districts, Educationally Backward Blocks, left wing affected districts and those with high dropout rates at the secondary level. It will be linked to the Aadhar number of the students and tracking of all students assisted through these schools will be done through MIS at the District, State and National level. Assistance will be provided only for the students who acquire the desired competencies and complete at least two levels of NVEQF within a prescribed time frame.

#### **6.1.7 INNOVATIONS UNDER VOCATIONAL EDUCATION**

In order to encourage flexibility and creativity in vocational education assistance under the Scheme will be made available to State governments , School Boards , schools etc for innovations in vocational education on case to case basis. 1% of the total budgetary outlay under the Scheme shall be earmarked for funding innovative programmes with a view to provide flexibility and to encourage innovation in design and delivery of vocational education. The guidelines for providing the funds for innovative programmes under the Scheme will be formulated with the approval of the Executive Council on Vocational Education set up under the Scheme.

#### **6.1.8 MANAGEMENT, MONITORING, EVALUATION AND RESEARCH**

Management Information System (MIS) would be developed for monitoring of the scheme. MIS and Web Portal will be developed at all levels i.e. National, State, District and School levels. The financial cost for the same will be met out of the funds earmarked under the scheme for MMER. Well defined parameters for measuring the outcome of the Scheme in terms of pass percentage, placement of students etc will be specified. The MIS shall on a real time basis track the students covered under the Scheme at every level in terms of their coverage, performance, exit to work situations, vertical and horizontal mobility etc. The use of 'Aadhar number' will be encouraged to track the students.

In order to meet the expenditure on management, monitoring, evaluation and research 5% of the project cost is earmarked for these activities. Out of 5 %, 1 % of the total budget allotted will be retained at the level of the Ministry for taking up activities pertaining to orientation/awareness/sensitization of various stakeholders, capacity building of stakeholders, development of MIS, monitoring and evaluation of the scheme etc.