Skill Development Programs and Quality Framework

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INTRODUCTION

India has the largest population in the world in the age bracket of 5-24 years with 580 million people presenting a huge opportunity in the education and skill development sector.

India has over 250 million school-going students, with more than 1.5 million schools.

It has one of the largest networks of higher education system in the world, 45,000-degree colleges, over 1000 universities, and around 1500 top institutes.

According to the International Labour Organisation (ILO), India is likely to face a shortage of ~29 million skilled personnel by 2030.

INTRODUCTION

India has the largest and most diverse education system in the world. The challenge is to integrate vocational education with general education to improve the social status of vocational education and make general education more meaningful, relevant, and competency-based so as to meet the skill demands of employers and the world of work.

The quality issues of Vocational Education and Training (VET) institutions in India are of great concern, and reforms have been introduced to address the challenges of both increasing Vocational Education and Training and employment opportunities by skilling, upskilling, and reskilling a large number of young people, and ensuring the availability of standardised formally trained skilled workforce to meet the regional, national and global labour market demands.

INTRODUCTION

In spite of the magnitude and diversity in the education and skill development sector, India is working towards meeting the key challenges and issues for becoming the “Skill Capital” of the world. The National Education Policy (NEP) 2020 proposes the revision and revamping of all aspects of education, including the educational structure, regulations, and governance, to create a new educational system, which is aligned with the aspirational goals of 21st-century students.

India can realise its demographic dividend through a workforce that is trained in ‘employable’ skills and is “industry-ready”. The Ministry of Skill Development and Entrepreneurship, established in 2014, is the nodal agency for promoting skill development. It has collaborated with Central Government Ministries, State Governments, Industry, Non-Profit Organisations, and Academia to synergize and accelerate the skilling efforts across geographies.

INTRODUCTION

Quality Education, which is enlisted as Goal 4 under the United Nation's Sustainable Development Goals, aims to "ensure inclusive and equitable quality education and promote lifelong learning opportunities for all" by 2030". This goal is of critical importance for improving the standard of living of people and creating better opportunities for livelihood.

Recognising that education is the most important factor for human capital formation, the National Education Policy (NEP) 2020 provided for the revision and revamping of all aspects of the education structure. This includes its regulation and governance, creation of a new system that is aligned with the aspirational goals of 21st century-education, including SDG4, while building upon India's traditions and value systems. The National Education Policy 2020 provides for nurturing the all-around development and skill acquisition by youth in an inclusive, accessible, and multilingual set-up.

Structure and Policy

NATIONAL SKILL DEVELOPMENT MISSION

The National Skill India Mission, launched in 2015, focuses on skilling, re-skilling, and up-skilling through short-term and long-term market-relevant training programs. The National Skill Development Mission seeks to provide a strong institutional framework at the Centre and States for implementation of skilling activities in the country.

The Union Government, through more than 20 Central Ministries/Departments, is implementing various skill development schemes and programs across the States/Union Territories of the country, mostly through the Public-Private Partnership mode. The two major Ministries implementing the skill development programs are the Ministry of Education (MoE) and the Ministry of Skill Development and Entrepreneurship (MoSDE).

NATIONAL SKILL DEVELOPMENT MISSION

Skill development schemes and programs, including both long-term and short-term Vocational Education and Training, Apprenticeship Training, and Recognition of Prior Learning (RPL) in various sectors have been introduced by the government. Sector means a grouping of professional activities on the basis of their main economic function, product, services, or technology.

Recognition and standardization of Vocational Education and Training qualifications are being done by the National Council for Vocational Education and Training (NCVET), which is under the Ministry of Skill Development and Entrepreneurship.

NATIONAL SKILL DEVELOPMENT MISSION

The National Council for Vocational Education and Training (NCVET), established in 2018 subsumes the skill regulatory bodies- National Skill Development Agency (NSDA) and National Council for Vocational Training (NCVT) and now acts as an overarching regulator for skill development schemes and programs.

National Council for Vocational Education and Training is responsible for implementing the National Skill Qualifications Framework (NSQF), maintaining the National Qualification Register (NQR), and approval of the NSQF aligned Qualifications and National Occupational Standards (NOSs) in each of the qualification. NCVET is also responsible for monitoring, evaluation, and supervision of recognized entities, and grievance redressal of the varied stakeholders.

NATIONAL SKILL DEVELOPMENT MISSION

National Skill Development Corporation (NSDC), which is a not-for-profit public limited company incorporated on July 31, 2008, was set up by Ministry of Finance as Public Private Partnership (PPP) model. The Government of India through the Ministry of Skill Development and Entrepreneurship aims to promote skill development by catalyzing creation of large and quality Vocational Education and Training schemes and programs and for-profit Vocational Education and Training institutions.

The National Skill Development Corporation provides funding to build scalable and profitable vocational training initiatives. Its mandate is also to enable support system which focuses on quality assurance, information systems and train the trainer academies either directly or through partnerships.

It also develops appropriate models to enhance, support and coordinate private sector initiatives.

NATIONAL SKILL DEVELOPMENT MISSION

Sector Skill Councils (SSCs), which play a vital role in bridging the gap between skill demand and supply, operate as autonomous bodies and could be registered as a Section 8 Company, or a Society.

The National Skill Development Corporation is mandated to initiate and incubate Sector Skill Councils with initial seed funding to facilitate their growth and enable them to achieve self-sustainability in a time-bound manner. They create National Occupation Standards and Qualification bodies, develop competency frameworks, conduct train-the-trainer programs, conduct skill gap studies, and assess and certify trainees on the curriculum aligned to National Occupation Standards (NOSs) developed by them. There are currently 37 Sector Skill Councils, which are operational.

NATIONAL SKILL DEVELOPMENT MISSION

Directorate General of Training (DGT) in the Ministry of Skill Development and Entrepreneurship, is an apex organisation for the development and coordination of vocational education and training in Industrial Training Institutes, including Women's Vocational Training Institutes and to provide skilled manpower to the economy. It acts as a secretariat and the implementing arm of the National Council for Vocational Education and Training, which is under the Ministry of Skill Development and Entrepreneurship.

It has a Quality Assurance and Grievance Redressal Unit to ensure the implementation of common norms and guidelines for the affiliation of training institutes, setting curricula for different trades/courses, and conducting assessments.

STATE SKILL DEVELOPMENT MISSIONS

There are State Skill Development Missions (SSDMs) that align their skill development programs with the schemes and programs of the National Skill Development Mission. District Skill Committees (DSCs) have been constituted in all the States, and are mandated to plan, manage and monitor skilling activities at the District level.

District Skill Committees, under the guidance of the State Skill Development Mission, play a key role in the implementation of skill development, related to schemes in the States by ensuring convergence, coordination, and coherence among schemes and programs of different departments, addressing the issues of skill gaps and skill demands at the district level and identifying the priorities and drawing up a list of activities for developing and implementing District Skill Development Plan (DSDP).

POLICY FOR SKILL DEVELOPMENT AND ENTREPRENEURSHIP

The National Policy for Skill Development and Entrepreneurship 2015 was launched on 15th July 2015. The policy acknowledges the need for an effective roadmap for promotion of entrepreneurship as the key to a successful skills strategy.

The vision of the policy is to create an ecosystem for empowerment of people through skilling on a large “Scale” at greater “Speed” and with high “Standards” and to promote a culture of innovation-based entrepreneurship which can generate both wealth and employment so as to ensure sustainable livelihood opportunities for all citizens in the country.

NATIONAL EDUCATION POLICY 2020 : REIMAGINING VOCATIONAL EDUCATION

The Union Government of India determines the policy of education, including technical and vocational education and training, which is then followed by the States/ Union Territories.

The National Education Policy (NEP) 2020 lays emphasis on providing vocational exposure to children at an early age, especially in middle and secondary school, and integration of quality vocational education into higher education in order to ensure that every child learns at least one vocation and is exposed to several more.

NATIONAL EDUCATION POLICY 2020 : REIMAGINING VOCATIONAL EDUCATION

The National Education Policy 2020 envisages that by 2025, at least 50%of learners shall have vocational exposure through school and higher education.

Activities through pre-vocational education programme, 10-days bagless period, and internships, sometime during Grades 6-8 with local vocational experts, such as carpenters, gardeners, potters, artists, etc. are also envisaged as a means of joyful learning.

Lok Vidya,' i.e., important vocational knowledge developed in India, will be made accessible to students through integration into vocational education courses.

Main Skill Development Schemes and Programs

VOCATIONAL EDUCATION AND TRAINING IN INDIA

Vocational Education and Training (VET) in India is organised through the formal, informal, and non-formal sectors.

Among the various Ministries, the Ministry of Skill Development and Entrepreneurship (MSDE) and the Ministry of Education (MoE), Government of India are responsible for the implementation of the majority of the skill development schemes and programs.

VET provisions through schools, polytechnics, colleges, and universities, come under the purview of the Ministry of Education.

VOCATIONALISATION OF EDUCATION IN SCHOOLS

Vocational education was accorded high priority in the National Policy on Education 1986 and also in the National Education Policy 2020.

Vocationalisation of education in India was introduced under the Centrally Sponsored Scheme of Vocationalisation of Secondary Education (VSE) in 1988. The scheme was implemented by the States/Union Territories for the formal sector and by the Non-Government Organisations (NGOs)/Voluntary Organisations (VOs) in the non-formal sector. Vocational courses under the scheme were introduced in Grades 11 and 12 through a distinct stream intended to prepare skilled personnel for identified vocations/trades in several areas, which included both the organized and un-organized sectors.

The scheme became redundant due to irrelevant courses, due to a mismatch between the labour market needs and the skills required in the market, lack of focus on emerging areas of industrial development, outdated syllabi being followed in schools, and use of obsolete tools and equipment. Inadequate practical training skills acquired by the students and lack of social acceptability or employment opportunities led to an overall poor enrolment in vocational stream in schools.

VOCATIONALISATION OF EDUCATION IN SCHOOLS

The Ministry of Education, Government of India revised the CSS of Vocationalisation of Secondary Education which was introduced in 1988 and introduced the revised scheme in 2012. Vocationalisation of School Education (VSE) under 'Samagra Shiksha' was introduced in 2018.

Vocationalisation of School Education under the '*Samagra Shiksha*", meaning holistic education, is being implemented in government and government-aided schools by the Ministry of Education, Government of India. Within mainstream general education, the choice of one vocational subject (as an optional) is offered in Grades 9 and 10, aligned to NSQF level 3 and the choice of one vocational subject (as an elective) in Grades 11 and 12, aligned to NSQF level 4 are being offered. Occupation-based vocational subjects in 19 sectors are being offered from Grades 9 to 12.

VOCATIONALISATION OF EDUCATION IN SCHOOLS

The overall objective of the scheme is to provide vocational exposure at every stage (Foundational, Preparatory, Middle, and Secondary) of school education and add value to general education through vocationalisation of education and make vocational education and training aspirational and relevant for students.

According to the NEP 2020, by 2025, at least 50% of learners through, the school and higher education system, shall have exposure to vocational education, for which clear action plans with targets and timelines are to be developed. Every child in school will learn at least one vocation and will be exposed to several more. This would bring about the importance dignity of labour and the knowledge of various vocations involving the indigenous knowledge and skills of Indian arts and artisanship which in Hindi we call Lok Vidya.

VOCATIONALISATION OF EDUCATION IN SCHOOLS

Vocational courses through Open Distance Learning (ODL) mode are being offered, both at school and higher education levels. Special e-content for the visually and hearing impaired has been developed on Digitally Accessible Information System (DAISY) and in sign language.

High-quality e-content in languages spoken in States/Union Territories have been developed for delivery of Vocational Education and Training content via the internet, mobile phones, Television, and radio.

Virtual Skill Labs are being developed for facilitating access to practical learning, especially for those who do not have access to physical labs.

SKILL HUB INITIATIVE PROGRAM IN SCHOOLS

The Skill Hub Initiative (SHI) program is being implemented in schools under Pradhan Mantri Kaushal Vikas Yojana (PMKVY) 3.0 by the Union Ministry of Education and Ministry of Skill Development and Entrepreneurship in a Hub and Spoke model, as envisaged in the National Education Policy 2020.

The Skill Hubs are the nodal skill centers identified to provide short-term skill development training opportunities to school students, school drop-outs, and out-of-education candidates.

CRAFTSMEN TRAINING SCHEME IN INDUSTRIAL TRAINING INSTITUTES

The Craftsmen Training Scheme (CTS) was introduced by the Government of India in 1950 to ensure a steady flow of skilled workers in different trades for the domestic industry, to raise quantitatively and qualitatively industrial production through systematic skill training, to reduce unemployment among the educated youth by providing them employable skills, and to cultivate and nurture a technical and industrial attitude in the minds of younger generation. Government and Private Industrial Training Institutes (ITIs) are implementing Craftsmen Training Scheme (CTS) across India.

Industrial Training Institutes deliver post-school technical as well as vocational training certificate or diploma courses of six months, one-year and two-year duration. The training includes employability and vocational skills modules, which are aligned to the qualifications under the National Skill Qualifications Framework (NSQF).

VOCATIONAL EDUCATION AND TRAINING IN POLYTECHNICS

Government and privately-managed Polytechnics offer Diploma courses that comprise vocational education in the specialized streams of science, technology, engineering or any other technical subject. Few of these institutions organize skill development programs only for girls.

Polytechnics facilitate admission to 2nd or 3rd year semester of Bachelor of Technology in most of the states.

VOCATIONAL EDUCATION AND TRAINING IN PRIVATE INSTITUTIONS

Private Vocational Education and Training Institutions, which include Industry-based training centers and centers run by Non-government Organizations (NGOs) or Vocational Training Partners (VTPs) are engaged in sharing training infrastructure and implementing Pradhan Mantri Kaushal Vikas Yojana (PMKVY) 3.0, besides the government-managed education and training institutions.

The Pradhan Mantri Kaushal Vikas Kendras (PMKKs) conduct training for industry-driven courses of high quality with focus on employability and they create an aspirational value for skill development training under the PMKVY scheme, as per the common norms.

VOCATIONAL EDUCATION AND TRAINING IN JAN SHIKSHAN SANSTHANS

Jan Shikshan Sansthan (JSS), also known as the Institute of People's Education aims to provide vocational skills to non-literate, neo-literates, persons with a rudimentary level of education up to Grade 8 and school dropouts up to Grade 12 in the age group of 15-45 years.

It is implementing Vocational Education and Training programs through a network of non-government organisations in the country since the year 1967. The main target groups of the scheme are Women, Scheduled Castes, Scheduled Tribes, Minorities, and other disadvantaged sections of society in both rural and urban areas.

It is under the Directorate of *Jan Shikshan Sansthan,* which is a sub-ordinate office of Ministry of Skill Development and Entrepreneurship.

PRADHAN MANTRI KAUSHAL VIKAS YOJANA

Pradhan Mantri Kaushal Vikas Yojana (PMKVY) is the flagship scheme of the Ministry of Skill Development & Entrepreneurship implemented by the National Skill Development Corporation. The objective of this scheme is to enable a large number of Indian youths to take up industry-relevant skill training that will help them in securing a better livelihood.

It includes short-term training, recognition of prior learning, special projects, Kaushal mela, which means skill exhibition and Rozgar mela, which means employment fair. It also provides placement assistance, and continuous monitoring of programs.

PRADHAN MANTRI KAUSHAL VIKAS YOJANA

In short-term training, there is a provision of 200 to 500 hour skill-oriented training, at Pradhan Mantri Kaushal Vikas Yojana affiliated and accredited training centres for the school/college dropouts and unemployed youth.

Individuals with prior learning experience or skills are assessed and certified under Recognition of Prior Learning (RPL). Recognition of existing skills after a 12 to 80 hours orientation-cum-bridge course is done with provision of Pradhan Mantri Kaushal Vikas Yojana certificate to candidates who clear the assessment.

DEEN DAYAL UPADHYAYA GRAMEEN KAUSHALYA YOJANA

Deen Dayal Upadhyaya Grameen Kaushalya Yojana (DDY-GKY) is designed to provide high-quality skill training opportunities to the rural poor and also to establish a larger ecosystem that supports trained candidates to secure a better future.

The target group for DDU-GKY is poor rural youth in the age group of 15-35 years. Customized need-based programs are offered for specific-age groups in communication, life skills, positive thinking skills, language skills, behavioural skills, management skills, etc.

SKILL ACQUISITION AND KNOWLEDGE AWARENESS FOR LIVELIHOOD PROMOTION

Skill Acquisition and Knowledge Awareness for Livelihood Promotion (SANKALP) is a program of the MoSDE with loan assistance from the World Bank.

It aims to improve short-term skill training, both qualitatively and quantitatively, through strengthening of institutions, bringing in better market connectivity, and inclusion of marginalized sections of the society.

SKILLS STRENGTHENING FOR INDUSTRIAL VALUE ENHANCEMENT SCHEME

The Skills Strengthening for Industrial Value Enhancement (STRIVE) scheme, is a World Bank-assisted project launched with the objective of improving the relevance and efficiency of skills training provided through Industrial Training Institutes and organisations imparting apprenticeship training.

It aims at bringing about institutional reforms and improving the quality and market relevance of skill development training programs in long-term vocational education and training. It is incentivizing Industrial Training Institutes for improving overall performance, including apprenticeship training, and by involving Small and Medium Enterprises, business associations, and industry clusters.

APPRENTICESHIP TRAINING

Apprenticeship Training is a course of training in any industry or establishment, done in pursuance of a contract under the Apprentices Act (1961; which was amended in 2014 and 2019) between employer and apprentices and under prescribed terms and conditions of the National Apprenticeship Training Scheme (NATS). It is imparted in different government-run and privately-owned companies.

Apprenticeship Training consists of basic training and on-the-job-training(ojt)/practical training at the workplace or in the industry. Basic training is an essential component of apprenticeship training for those who have not undergone any institutional training/skill training before taking up on-the-job training or practical training.

The apprentice must possess a minimum of 14 years of age, for non-hazardous industries and educational and physical qualifications, as prescribed for the trade and other requirements of the Apprentices Act, 1961.

APPRENTICESHIP TRAINING

There are two types of recognised apprenticeship training:

i. Designated trade, which means apprentices pursuing any trade or occupation as notified by the Government.
ii. Optional trade apprentices, which means apprentices pursuing any trade or occupation as may be determined by the industry.

Apprentices are categorized into five categories on the basis of entry-level qualifications possessed by them:

i. Trade apprentices
ii. Optional trade apprentices
iii. Technician (Vocational) apprentices
iv. Technician apprentices
v. Graduate apprentices

APPRENTICESHIP TRAINING

Administration of Trade, Optional, and Technician (Vocational) categories of Apprentices is under the Ministry of Skill Development and Entrepreneurship and that of Technician and Graduate categories of apprentices are under the Ministry of Education.

Directorate General of Training (DGT) through Regional Directorates of Skill Development and Entrepreneurship (RDSDE) and National Skill Development Corporation (NSDC) under Ministry of Skill Development and Entrepreneurship (MSDE) are responsible for the implementation and monitoring of the Apprentices Act 1961 in respect of the designated trade and optional trades respectively, for the central government departments and undertakings and establishments which are operating business or trades from different locations situated in four or more States.

APPRENTICESHIP TRAINING

The duration of apprenticeship training depends upon the trade and it varies from 6 months to 3 years. However, duration of basic training is 3 months to 6 months depending upon the trade. Apprentices get stipend during the training.

National Apprenticeship Promotion Scheme (NAPS) was launched by the Government of India in 2016 to provide financial support to establishments undertaking apprenticeship training. It consists of basic training and on-the-job training/practical training at the workplace or in the industry. The Regional Directorates of Skill Development and Entrepreneurship (RDSDE) under the control of the Directorate General of Training (DGT) are the implementing agencies in their regions in respect of all “Designated Trades” under the Act for all establishments falling under the Central Government jurisdiction.

VOCATIONAL EDUCATION AND TRAINING IN HIGHER EDUCATION INSTITUTIONS

Higher education in India covers all post-secondary education beyond Grade 12 in different subject areas, including all professional streams, such as engineering and technology, medical, agriculture, etc.

It comprises three levels of qualifications - Bachelor's or undergraduate degree programmes, Master's or Postgraduate degree programmes and the Pre-doctoral and doctoral programmes [Master of Philosophy (M.Phil.) and Doctor of Philosophy (PhD)].

VOCATIONAL EDUCATION AND TRAINING IN HIGHER EDUCATION INSTITUTIONS

The integration of skills in higher education is being done through skill enhancement courses under the National Skill Qualifications Framework (NSQF), National Higher Education Qualifications Framework (NHEQF), and National Credit Framework (NCrF).

Full-time vocational diploma/advanced diploma/degree programs which include (Bachelor of Vocation - B.Voc. degree) are being offered through Colleges, Universities and *Deen Dayal* Upadhyay centers for Knowledge Acquisition and Upgradation of Skilled Human Abilities and Livelihood (KAUSHAL).

VOCATIONAL EDUCATION AND TRAINING IN HIGHER EDUCATION INSTITUTIONS

Bachelor in Vocation (B.Voc.) course is enabling the student's multiple entry and exit at different levels.

One-year diploma program results in NSQF level 5 certification, two-year advanced diploma program results in NSQF level 6 certification and three-year B.Voc. degree program results in NSQF level 7 certification.

B.Voc courses are also considered equivalent to the any other bachelor's degree course.

VOCATIONAL EDUCATION AND TRAINING IN HIGHER EDUCATION INSTITUTIONS

Skill Universities and Digital Universities are being set up to provide greater access to higher education, thus reducing all direct and opportunity costs. Skill Universities are developing and conducting advanced vocational education and training programs and doing extensive research to enhance the quality and delivery of Vocational Education and Training.

Apprenticeship/Internship embedded degree program will be offered by the colleges and Universities, in emerging and frontier technology, such as Artificial Intelligence, Drone Technology, new evolving and emergent areas including expertise required for the Production Linked Incentive Scheme, and PM Gati Shakti programme of the Government.

CENTRES OF EXCELLENCE FOR SKILL DEVELOPMENT

Centre of Excellence (CoE) is an Institution where the highest standards are maintained and it provides leadership, best practices, research, support, training of trainers and skill training for a specific sector.

Centre of Excellence is envisioned to be a one-stop resource centre, which would be working in partnership with industry to raise training standards, boost productivity, address emerging skill gaps and align training and research with industry needs.

Skilling in new and emerging technologies, namely Artificial Intelligence, Blockchain, Big Data Analytics, Cloud Computing, Cyber Security, Internet of Things, Mobile Technology, Robotic Process Automation, Virtual Reality and 3D Printing is being taken up on a large scale by the Centres of Excellence.

Quality Framework

NATIONAL SKILL QUALIFICATIONS FRAMEWORK (NSQF)

The National Skill Qualifications Framework (NSQF) was introduced in 2013 as a single unified framework for all Vocational Education and Training qualifications. Qualification means a formal outcome of the assessment and validation process, which is obtained when a competent body determines that an individual has achieved learning outcomes to given standards. This outcome is actualized in the form of a formal certificate.

National Skill Qualifications Framework is a competency-based skill framework that organises qualifications according to a series of levels of knowledge, skills, and aptitude. It establishes a basis for improving the quality, accessibility, linkages, and labour market within a country and also internationally.

NATIONAL SKILL QUALIFICATIONS FRAMEWORK (NSQF)

The National Skill Qualifications Framework has 10 levels: level 1 is the most basic and level 10 is the most advanced.

It is operationalised through the National Skill Qualifications Committee (NSQC) of the National Council for Vocational Education and Training (NCVET), which is under the Ministry of Skill Development and Entrepreneurship. The National Skill Qualifications Committee, which meets every month, approves the qualifications submitted by various bodies.

Earnest efforts have been made by the organisations to implement NSQF-aligned Vocational Education and Training programs through various institutions.

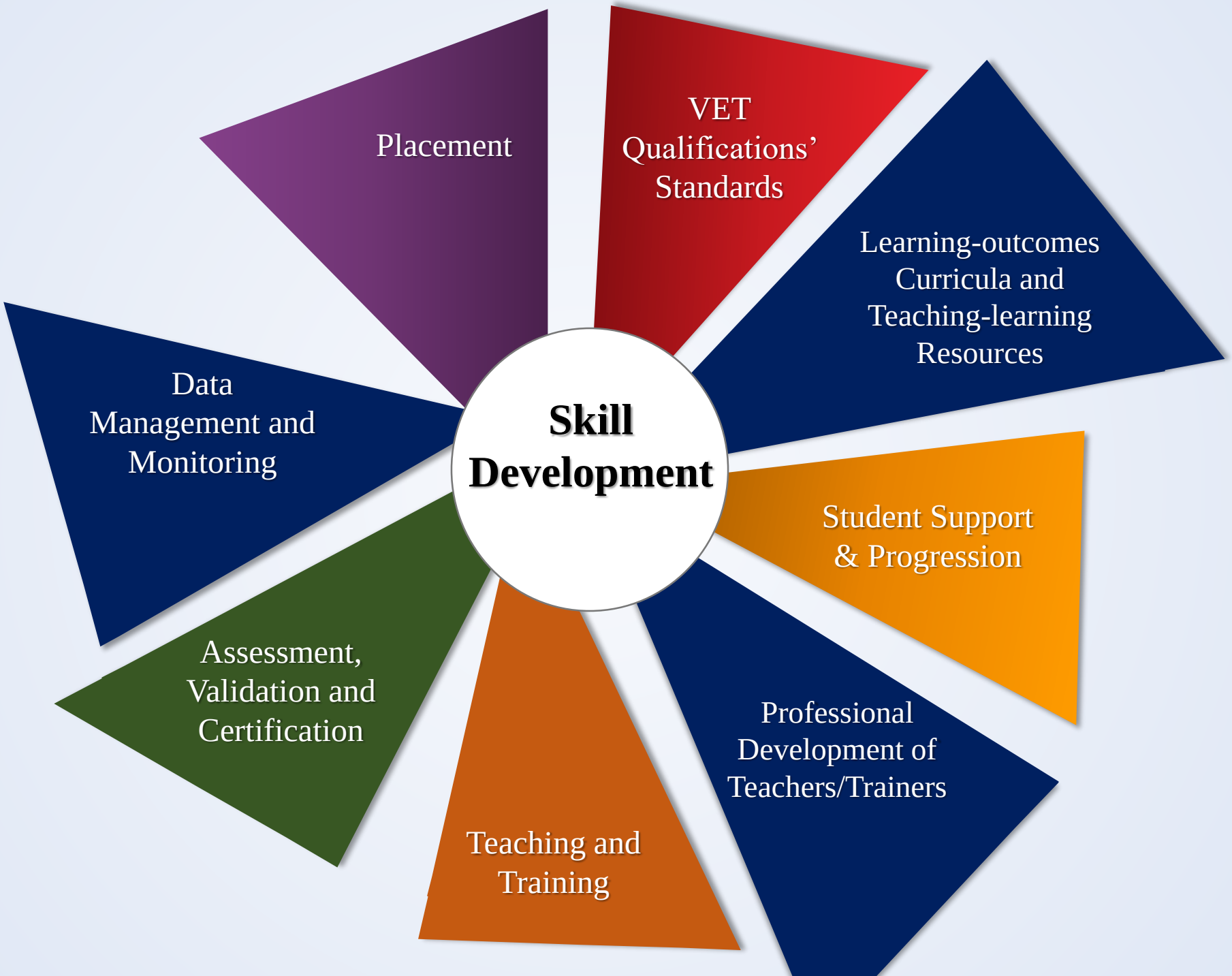
National Skill Qualifications Framework (NSQF)			
Levels	**General Education**	**Vocational Education and Training**	**Certification/Awarding Body**
Higher Education Sector			
10	Doctorate/ Doctor of Philosophy	Doctorate/ Doctor of Philosophy	Universities
9	Post Graduate Degree	Masters in Vocation	Colleges/Universities
8	Post Graduate Diploma	Post Graduate Diploma	Colleges/Universities
7	Bachelor Degree	Bachelor in Vocation	Colleges/Universities
Vocational Education and Training Sector			
6	Advanced Diploma	Advanced Diploma	Technical Boards/Polytechnics/ Colleges/Universities
5	Diploma	Diploma	Technical Boards/Polytechnics/ Colleges/Universities
4	Certificate	Certificate	Secondary Boards
3	Certificate	Certificate	Secondary Boards
2	Certificate	Certificate	--
1	Certificate	Certificate	--

A Comparison of Indian and Australian Qualifications Framework		
Levels	National Skill Qualifications Framework (NSQF)	Australian Qualifications Framework (AQF)
Higher Education Sector		
10	Doctorate/ Doctor of Philosophy	Doctorate/ Doctor of Philosophy
9	Post Graduate Degree	Post Graduate Degree
8	Post Graduate Diploma	Bachelor Honours Degree Graduate Certificate Graduate Diploma
7	Bachelor Degree	Bachelor Degree
Vocational Education and Training Sector		
6	Advanced Diploma	Advanced Diploma
5	Diploma	Diploma
4	Certificate	Certificate IV
3	Certificate	Certificate III
2	Certificate	Certificate II
1	Certificate	Certificate I

COMMON NORMS FOR STANDARDISATION OF VET

The Government of India has notified common norms in 2015 for bringing about uniformity and standardization in the implementation of various skill development schemes by different Central Ministries/ Departments, as there were over 70 odd skill development programs, which are being implemented by the Government of India, each with its own norms for the eligibility criteria, duration of the training, cost of training, outcomes, monitoring and tracking mechanism, etc.

Common norms seek to rationalise the whole spectrum of skill development processes and systems, including inputs, outputs, funding or cost norms, third party certification and assessment, monitoring or tracking mechanisms, and empanelment of training providers.


Placement
VET Qualifications' Standards
Learning-outcomes Curricula and Teaching-learning Resources
Data Management and Monitoring
Skill Development
Student Support & Progression
Assessment, Validation and Certification
Professional Development of Teachers/Trainers
Teaching and Training

VET QUALIFICATIONS' STANDARDS

The qualifications which are occupation based are classified as per the National Classification of Occupations (NCO). The Sector Skill Councils (SSCs) and other awarding bodies submit their information in a template called Qualification File (QF) with supporting documents like model curriculum, 30 industry validations from small, medium, and large industries, accreditation and assessment norms, occupational map and evidence of the need for the qualification.

The Qualification File (QF) comprises tasks involved in the occupation together with the skills, knowledge, attitudes, and responsibilities that are required from the worker for the performance of the various tasks in the occupation.

VET QUALIFICATIONS' STANDARDS

The Qualification File template captures all necessary information, such as job description, National Skill Qualifications level, notional learning hours, entry requirements, progression pathways, National Occupation Standards, performance criteria, etc. to establish National Skill Qualifications Framework compliance for a qualification.

Each National Occupation Standard defines one key function in a job role. National Occupation Standard is one of the main pillars of India's current effort to develop a standardized and quality Vocational Education and Training system.

VET QUALIFICATIONS' STANDARDS

The qualifications are then approved or disapproved by the National Skill Qualifications Committee (NSQC) anchored in the National Council for Vocational Education and Training (NCVET) of the Ministry of Skill Development and Entrepreneurship.

National Qualification Register (NQR), is the official national public record of all qualifications aligned to NSQF levels and contains sector-wise qualification files for the job roles.

LEARNING-OUTCOMES BASED CURRICULA AND RESOURCES

The VET curricula can be broadly categorized as competency-based and non-competency-based curricula.

The learning-outcomes-based curricula have explicit learning outcomes to be achieved for performing the tasks in the occupation as per the National Occupation Standards (NOSs). It is a combination of a series of modules with corresponding learning outcomes, assessment criteria, contents, learning conditions, instructional methodologies, and assessment methods. These curricula are being developed in consultation with academicians, experts from industries, and representatives from Sector Skill Councils and VET Institutes.

LEARNING-OUTCOMES BASED CURRICULA AND RESOURCES

The vocational curriculum for Grades 9 to 12 includes employability skills and vocational skills. The employability skills curriculum has been made a mandatory part of the vocational courses for developing communication skills, self-management skills, information and communication technology skills, entrepreneurial skills, green skills, life skills (yoga, physical fitness, health and hygiene, personality development), and 21st-century skills (decision making, problem-solving, creativity, innovation, etc.).

DIGITAL PLATFORMS FOR VOCATIONAL EDUCATION AND TRAINING RESOURCES

The Digital Skilling Solutions and Innovations (DSI) at National Skill Development Corporation (NSDC) focuses on the facilitation and aggregation of learning resources for the skilling ecosystem, thereby enabling structure and consistency across the skilling endeavours in the country. In addition to facilitation, aggregation, and capacity building, the team invests in leveraging technology to enhance the reach, speed, and scale of learning resources.

Bharat Skills, ‘e-Skill India, and PMe-Vidya have been created as the central repository of resources for skill development. The digital platforms provide National Skill Qualifications Framework-aligned curricula, course material, videos, question banks, and mock tests for trainers and students.

DIGITAL PLATFORMS FOR VOCATIONAL EDUCATION AND TRAINING RESOURCES

The ‘e-Skill India’ portal links Business to Commerce e-learning sites that operate digitally to track the life cycle of the training process of candidates (enrolment-training-assessment-certification post-certification tracking) and monitoring on a real-time basis linked with Aadhaar-enabled biometric attendance and provide e-learning content on platforms, such as Digital Infrastructure for Knowledge Sharing (DIKSHA), e-Pathshala, and Swayam Prabha TV channel.

DIGITAL PLATFORMS FOR VET RESOURCES

Skill India Portal (SIP) is a comprehensive technology platform that enables the administration of PMKVY, and non-PMKVY schemes run by both central and state governments. SIP supports the rapid scaling up of skill development efforts in India by creating an end-to-end, outcome-focused implementation framework, which aligns with the demands of establishments for a well-trained skilled workforce with aspirations of Indian citizens for sustainable livelihood.

The apprenticeship portal was developed in 2016 by National Skill Development Corporation with the mandate to implement the Government of India's prestigious National Apprenticeship Promotion Scheme (NAPS).

Ministry of Education
Government of India

सत्यमेव जयते

DIKSHA | SWAYAM Portal | SWAYAM Prabha TV | Radio | e-Content for CWSN | Online Coaching for Competitive Exams | Hindi

eविdya

- Will enable digital/online/on-air access to education
- Will benefit more than 25 Crore school going children
- DIKSHA : Digital Infrastructure for Knowledge Sharing
- SWAYAM online courses in MOOCS format for school and higher education
- One earmarked TV channel per class from 1 to 12
- Extensive use of Radio, Community radio and CBSE Podcast - Shiksha Vani
- Special e-content for visually and hearing impaired

कौशल भारत - कुशल भारत

BHARAT SKILLS

Directorate General of Training (DGT)

STUDENT SUPPORT AND PROGRESSION

Career Guidance and Placement Cell in Vocational Education and Training Institutions and the various departments organize guidance and counselling.

Short courses, through which a learner may or may not be awarded credits towards a qualification, depending upon the purpose of the program are also conducted. Bridge courses and enrichment courses are offered to improve the skills of the students.

Workshops are conducted for writing Curriculum Vitae and preparing students for the interviews.

IndiaSkills, the country's biggest skill competition, is designed to demonstrate the highest standards of skilling and offers a platform to young people to showcase their talent at national and international levels.

STUDENT SUPPORT AND PROGRESSION

Career guidance contributes to the lifelong learning, as it helps a student to plan his/her career, decide career choices and manage career changes. Career counselling helps in addressing the career issues and changes required for advancing in a career.

There are several challenges in career guidance and counselling. These challenges can be addressed by the teachers as they are directly in contact with students most of the time. The teachers should be well-prepared in helping their students in career awareness, career orientation and exploring the various opportunities in the world of work.

There are State Vocational Guidance Unit in some States, which coordinates with the District Education Officers, District Employment Exchange Centres and Heads of the Institutions for organizing career guidance programmes.

STUDENT SUPPORT AND PROGRESSION

Teachers help students' progression to higher education by providing guidance and counselling on skill development courses, such as Bachelor in Vocation (B.Voc.) and Masters in Vocation (M.Voc.), which are aligned to the National Skill Qualifications Framework.

Career Fairs, Skill Exhibitions, Seminars, and Orientation Programs are conducted to make teachers and students aware of higher education options available in Vocational Education and Training.

National Career Service (NCS) portal, which serves as a one-stop guidance center, has been created by the Government of India with a dashboard for providing access to information related to career guidance and job opportunities for skilled people. The portal facilitates online registration of job seekers, information related to job providers and skill training providers, career counsellors, etc.

STUDENT SUPPORT AND PROGRESSION

The Skill Loan Scheme was launched in July 2015 to provide institutional credit to individuals for skill development courses aligned to National Occupation Standards and Qualification Packs and leading to a certificate/diploma/degree by training institutes as per National Skill Qualifications Framework.

The scheme is applicable to all member banks of the Indian Banks' Association and any other banks and financial institutions as may be advised by the Reserve Bank of India (RBI). Under the scheme, the loan is provided by banks to those who are seeking to attend skill development programs. The National Handicapped Finance and Development Corporation (NHFDC) under the Ministry of Social Justice and Empowerment, Government of India extend the loan to Persons with Disabilities for the upgradation of their skills.

TEACHING AND TRAINING

Vocational teachers or trainers and instructors do not belong to a clearly defined profession and work in various vocational education systems, but they are expected to possess teaching competence and competence related to a specific work or life vocational practice. Teacher education consists of pre-service and in-service education. Pre-service education can be either concurrent to general education or consecutive or after the general education. Teaching and training of vocational students are being done both by regular and contractual vocational teachers or trainers.

Off-the-job training for students is being organised by the teachers using both traditional and modern pedagogical methods in the schools, colleges or universities. On-the-job training includes field visits, hands-on learning at the workplace, internships, apprenticeship training, industrial visits, study tours, internships, and campus placement interviews which give an opportunity to the student to interact with the personnel working in enterprises, workshops or industry.

FACULTY PROFESSIONAL DEVELOPMENT

Teacher training is a continuous process. Vocational teachers/trainers training programs in vocational pedagogy, domain-specific skills, and for promoting new learning methods (experiential learning, and use of digital tools like Massive Open Online Courses (MOOC's), flipped learning, and virtual learning methods) are being organized by PSS Central Institute of Vocational Education (PSSCIVE), National Institute of Open Schooling (NIOS), Central Board of Secondary Education (CBSE), State Education Departments, Sector Skill Councils (SSCs), Vocational Training Providers (VTPs), Universities, etc.

FACULTY PROFESSIONAL DEVELOPMENT

The pedagogy of pre-vocational education and vocational education has been made part of NISHTHA (National Initiative for School Heads' and Teachers' Holistic Advancement), an initiative of the Department of School Education and Literacy, Ministry of Education, Government of India and National Council of Educational Research an Training (NCERT) to train teachers teaching students at the elementary stage and secondary stage so that they develop competencies for holistic education.

FACULTY PROFESSIONAL DEVELOPMENT

Training of Craft Instructors of Industrial Training Institutes is the responsibility of Directorate General of Training (DGT) and It has been operational since the inception of the Craftsmen Training Scheme (CTS).

Comprehensive training both in skills and training methodology is being imparted to the instructor trainees to make them conversant with techniques of transferring hands-on skills to train skilled manpower for the industry.

FACULTY PROFESSIONAL DEVELOPMENT

The National Education Policy (NEP) 2020 has recommended that each teacher will be expected to participate in at least 50 hours of Continuous Professional Development (CPD) opportunities every year for their own professional development, driven by their own interests.

The training will be done on National Professional Standards for Teachers (NPST) and will include competency-based education and work experience through work-based learning in the workplace or industry.

ASSESSMENT, VALIDATION AND CERTIFICATION

Competency-based assessment and evaluation process is being implemented and skill certification is being done by the awarding bodies recognised by the National Council for Vocational Education and Training.

The guidelines for validation of assessment are being developed for ensuring that the assessment and evaluation of learners in different programs are being done as per the National Occupation Standards and meet the requirements of the National Skill Qualifications Framework (NSQF).

DATA MANAGEMENT AND MONITORING

Programme Monitoring and Database Management Systems have been developed for periodic and regular monitoring, and review of the implementation of Vocational Education and Training Programs and institutions at various levels. It includes monitoring of Vocational Education and Training provider institutions, licensing, registration, accreditation, and award conferrals.

Daily candidate attendance monitoring through Aadhaar enabled biometric attendance system (AEBAS) have been mandated and AEBAS machines have been installed in institutions to keep track of candidates during the training duration. To ensure compliance to this, payment to the training centres have been linked to the attendance of the candidates.

Key performance indicators (KPIs) are being constructed to enable the collection of data on the performance of institutions that would also help to measure outcomes for quality Vocational Education and Training.

PLACEMENT OF VOCATIONAL PASSOUTS

To bridge the demand and supply of skilled manpower, high-quality, curated and digital profiles of all skilled workforce are being maintained on the *Aatmanirbhar* Skilled Employees-Employer Mapping (ASEEM) portal, which acts as a directory of skilled workforce.

National Skill Development Corporation (NSDC) implementing the *Pravasi Kaushal Vikas Yojana* (PKVY) for youth seeking global mobility for jobs. The qualifications under the NSQF are being aligned to the globally recognized qualifications framework for ensuring quality and international workforce mobility.

India International Skill Centre (IISC) provides skill training and certification benchmarked to International Standards.

FUNDING

The National Skill Development Fund (NSDF) was set up in 2009 by the Government of India for raising funds from Government and Non-Government sectors for skill development in the country.

Contribution to the National Skill Development Fund comes from various sources, including Government and donors to enhance, stimulate and develop the skill ecosystem and institutions.

A public Trust set up by the Government of India is the custodian of the Fund. The Fund is being utilised through National Skill Development Corporation which is an industry-led 'Not-for-Profit Company' set up for building skill development capacity and forging strong linkages with the market. The National Skill Development Fund is operated and managed by the Board of Trustees.

KEY TAKEAWAYS

INTEGRATING VOCATIONAL EDUCATION WITH GENERAL EDUCATION

Integration of vocational education with general education will pave the way for providing holistic education and the development of learners. It will help learners to equip themselves with the competencies required for the world of work and prepare themselves for lifelong learning.

Integration of vocational education with general education will also help in elevating the social status of vocational education and removing the stigma attached to it by instilling the feeling of equality, self-worth, respect, and dignity of labour.

RESPONDING TO THE NEEDS OF LABOUR MARKET REQUIREMENTS, INDIVIDUALS AND SOCIETY

Skill development schemes and programs have to be designed for closing the gap between skills required by the industry i.e. the demand and the skills people possess for availing employment opportunities i.e. supply. So, the supply and demand patterns are being studied for preparing demand-based skilled manpower in almost all the states in India. Jobs are now best matched with skillsets and interests.

The focus of all skill development programs is on building workplace competencies, rather than giving people mere qualifications or certificates.

FACILITATING STAKEHOLDER'S ENGAGEMENT AND SUPPORT

Active engagement of private sector and social partners in different sectors of the economy is required for building a strong public-private partnership (PPP) in skill development, as also has been highlighted in the National Skill Development and Entrepreneurship Policy 2015 and the National Education Policy 2020. This is being ensured by the various agencies involved in Vocational Education and Training and skill development.

FOSTERING CAPABILITIES THROUGH EMPLOYABILITY AND LIFELONG LEARNING SKILLS

Focus on improving the employability of the youth so that they are developed as entrepreneurs and also get job employment. Offering opportunities for lifelong learning by developing skills through higher education courses in Vocational Education and Training is also the need of the hour.

CREATING BETTER OPPORTUNITIES FOR RURAL LIVELIHOOD

India has a rural based economy. An important hallmark is ‘Rural India Skill’, under which skill training is provided for traditional employment opportunities in occupations like farmers, weavers, cobblers, carpenters, welders, masons, blacksmiths, nurses, etc. to promote indigenous knowledge and skills (*Lok Vidya*) and at the same time empower them with future skills, such as the use of artificial intelligence, internet of things, drone technology, mobile applications, use of computers in designing, etc.

LEVERAGING THE POTENTIAL OF INFORMATION AND COMMUNICATION TECHNOLOGY FOR PROMOTING SKILL DEVELOPMENT ACTIVITIES

India is advocating the skill development programs is being done through print media, electronic media, and State Government campaigns on a large scale at the National, State, District, and Block level for reaching the unreached and taking skill training to the doorstep of the learners.

BUILDING CAPACITY OF VOCATIONAL TEACHERS/TRAINERS THROUGH CONTINUOUS PROFESSIONAL DEVELOPMENT

Teachers' career progression should be uniform with respect to the qualification for eligibility, tenure, professional development, salary, promotion, incentives, and recognition. The capacity of the Vocational Teachers/Trainers needs to be developed on employability skills, 21st-century skills, entrepreneurial skills, green skills, inclusive education, vocational pedagogy, vocational skills, information and communication technology skills, and indigenous knowledge and skills.

Teacher training institutions should therefore, need to collaborate with specialised institutions, industry, and community for garnering the support of local experts/craftspersons/masters for developing the competencies of teachers.

INTERNATIONAL COLLABORATIONS FOR RECOGNITION OF QUALIFICATIONS AND PREPARING GLOBAL WORKFORCE

The National Council of Educational Research and Training (NCERT) has signed a Memorandum of Understanding (MoU) with South Korea and Finland for strengthening Vocational Education and Training in schools.

The Ministry of Skill Development and Entrepreneurship (MSDE) has signed MoUs with 11 countries, Australia, Belarus, China, Denmark, France, Germany, Japan, Qatar, Switzerland, United Arab Emirates, and the United Kingdom in the field of skill development and vocational education training.

The National Skill Development Corporation has signed B2B MoUs with countries like Australia, Canada, Germany, Japan, Malaysia, the Kingdom of Saudi Arabia, UAE, etc.

Thank you
for your kind attention!