

A Study of Vocational Education and Training System in India

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Abstract - India is at the cusp of demographic transition and is currently going through a 'demographic dividend'. This has presented a challenge to policy makers to ensure that there are enough employment opportunities for the ever-expanding labor force. Skill development is one of the areas which is in urgent need of reform. Vocational education depends on business and occupation and it is very important for every nation to have a solid professional training framework. This can be characterized as gifted based instruction. Vocational education helps in financial development and the study in which discussed about vocational education, Vocational education and economic development, Development of vocational education in India, The technical and vocational education & training system, All India council of technical education, Current structure of vocational & technical education in India

Keyword - vocational, training

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INTRODUCTION

Technical and vocational education and training (TVET) must be the master key that may relieve poverty, promote peace, protect the environment, enhance the quality of life for everyone, and assist achieve sustainable development, as "education is regarded the key to successful development strategies"

By equipping the next generation with the skills and information they'll need to contribute to the development of their country, education is essential. When it comes to boosting national productivity and economic development, education is the only game in town. When it comes to promoting secularism, democratic traditions, civil freedoms, and justice, India's educational system is crucial. The population of India is mostly youthful. India has a population that exceeds the 125-core mark. A large majority (approximately 70%) of the population falls between the ages of 15 and 59. Anyone in this age range is often considered to be of working age. About 11% of the population in 2001 fell into the 18-24 age range; by the conclusion of the 11th Five Year Plan, that proportion was projected to climb to 12.5%. If this population is well educated, they may help both the national and international economies grow. The goal is for all students in India to have access to a quality education and for the country as a whole to benefit from its vast human resource potential. Education and National Development: The Report of the Kothari Commission, 1964-1966 outlined a number of important goals for the Indian government. Perhaps

the most crucial was the push to make high school more like a real workplace.

The Prime Minister of India, in his Independence Day addresses to the nation in 2006 and 2007, acknowledged the importance of Vocational Education by announcing the opening of sixteen hundred new Industrial Training Institutes (ITIs), ten thousand new vocational schools, and fifty thousand new Skill Development Centers. This will allow more than one billion students to receive vocational training each year. In his Budget Speech the same year, the Minister of Finance acknowledged a talent gap in many industries. Because of this, it is crucial to increase Vocational Education offerings to capitalize on the country's demographic dividend and help young people find employment so they can make meaningful contributions to the economy.

"The goal of Technical and Vocational Education and Training (TVET) programmes is to provide students with the information and abilities they need to secure gainful work in a variety of industries. TVET, as argued by Atchoarena and Delluc (2002), is crucial in preparing the country's youth for future employment. To advance economically and socially, any nation must provide its young people with the necessary skills. The nation relies on TVET to produce a labour force that can adapt to the changing needs of the workplace. Even at the university level, students in India may take a programme designed to help them find a career. It is well acknowledged that all specialized educational institutions are quite costly. Various resources, including equipment and educational materials, are

needed to be imported for technical and vocational education. As a result, it is particularly challenging for underdeveloped nations to raise the necessary finances to cover the cost. Almost all of India's vocational training institutions and technical schools, as noted by Washi (2004), are funded in large part by the United Nations via international and bilateral donors. In turn, the state of these organizations worsened when donors ceased providing financial help to them owing to political difficulties. Inconsistencies exist between the trained worker and the working environment, as noted by UNEVOC (1997), and these discrepancies are exacerbated by the fact that most TVET teachers' graduate-level education is funded by institutions located outside of their home countries due to the prohibitive cost of obtaining a domestic technical education." [1-2]

Vocational Education

Career and Technical Education (CTE), also known as Vocational Education, is designed to help students acquire the skills they'll need to succeed in whichever field of work they want to enter. Sometimes referred to as "Technical Training," this is where a student is taught the fundamentals of a particular trade or profession. The pursuit of a professional education is motivated by the need to acquire or hone skills relevant to the pursuit of a certain profession. According to Smith (1942), the best way to ensure that future service providers are adequately educated and equipped is to use professional ways of training and retaining current employees. There are no limitations placed on the kind or extent of these mandatory services by the duration of the contract. Education at the professional level emphasises a wide range of disciplines, including economics, sociology, and democracy. Vocational education is "a component of the school's educational curriculum designed to make the student marketable in at least one of the fields of profession," according to the American Educator's Encyclopedia (1982). Education in the fields of agriculture, commerce, office work, welfare-related careers, the working class, home economics, international trade, and contemporary education and development. Vocational education, according to the Encyclopedia American (1985), is the process of preparing students of all ages for skilled labour and lucrative business ventures. Secondary and elementary schools are common places to find it, and unlike higher education, it does not often include preparation for careers like law and medicine. Vocational education, as stated by the New Encyclopedia Britannica (1985), plays a crucial role in preparing individuals for careers in the contemporary or commercial sectors. [3]

Vocational education refers to courses taken at all three levels of schooling (primary, secondary, and maybe postsecondary) that focus on preparing students for certain careers. Vocationalization, then, refers to advanced vocational training in addition to general academic study. Indeed, here is where vocationalization shines brightest. We envision the

future pattern of school training to be toward a productive blending of general and Vocational Education, the Indian Education Commission (1966) in this organization writes. This means that both general education and vocational education will play a role in shaping students' educational experiences."

- **Formal Vocational Training**

Training that leads to official credentials from a government-recognized institution, a public or private organization, or a learner's own initiative is called "formal vocational training."

- **Non-formal Vocational Training**

Gaining marketable skills in one's ancestral trade via non-formal vocational training is helpful. A person receives "Hereditary" occupational training as part of their non-formal education. Common "Other Sources" of "Non-Formal" Vocational Education include the workplace, the internet, and books. If one's forefathers didn't work at the same profession, it's likely that the person's current line of work isn't related to his or her education or expertise.

The purpose of the vocationalization movement is to make high school more career-oriented. A variety of Vocational Courses ranging in duration from one to five years should be offered in the ancillary schools alongside general education courses. In other words, this finding shows that General and Vocational Education may not belong in silos but rather that they should be combined. According to the concept of vocationalization, students' educational goals should be prioritized. Each day, meeting the need for additional output has become the nation's top priority. Thus, the present calls for us to engineer a link between learning and output. [4]"

Important of Vocationalisation of Education

It is possible to evaluate vocational education's significance in light of the following considerations:-

- **The feeling of fullness in life**

If a person has just a general or vocational education, their growth will be unbalanced. However, he may find happiness and fulfillment via Vocational Education. A lack of specialized training leads to unemployment and social support. Children may become proficient in some occupations with vocational education alone, but this does not guarantee their overall development.

- **Hope for getting employment**

Individuals who have received a vocational education are better able to provide for themselves. The lack of a vocational focus in today's schools is a major contributor to young unemployment.

- **Hope for economic development of the society and nation**

Natural resources are abundant, but they have not been completely exploited due to a lack of vocational education. As a result, the United States has fallen well behind many other industrial nations. Skills for productivity are developed via vocational education. This character flaw might help him become a shrewd resource miner. The country's economy will benefit from this in the long run."

- **Hope for creating a spirit of self-dependence**

Individuals get a sense of independence via vocational education since they begin to make a living while still in school or college. In the end, he contributes to society and is valued for his contributions. [5]

- **Hope for satisfaction of many psychological tendencies**

Individuals might gratify their inclinations toward building and showcasing oneself by means of Vocationalized Education. It's also possible that many of his dormant passions may finally be given the spotlight. He develops new skills. It's possible that his abilities, if any, may be nurtured further. Vocational education obviously does not treat the learner as a passive recipient of information. Rather, he takes an active role in his own education. He is a doer who learns best by doing. There should be a wide range of occupations available in a vocationalized curriculum so that it may meet the needs, interests, and abilities of all people."

- **Development of feeling of respect for manual works**

In a vocational education programme, students learn via hands-on experience. This quality inspires in him a deep appreciation for labour of the hand. When learning is limited to the classroom and textbook, this cannot happen."

Vocational Education And Economic Development:"

There was widespread anxiety about India's economic future when it gained independence. There was a rising awareness of the need of economic growth, which bolstered the push for better educated and trained workers to keep up with the expanding economy. New technology, and especially the needs of rural sectors, will need the development of specialized skills in order to increase business output and personal job security. Because of this, technical and vocational training is more important than ever before. According to "The Report of the Working Group for the Revision of CSS of Vocationalisation of Secondary Education" (NCERT, 1998) "The goal of this nation's "Delhi of Vocational Education" is to provide the labour necessary for long-term economic

growth and social stability. Goods and services of the highest quality and standards are essential to maintaining economic viability in a globalised market economy, and this can be ensured only by vocationally competent individuals who have been prepared through a need-based, appropriate, and adequate education and professionally sound training programme. In order for the Vocational Education Programme (VEP) to meet the needs of an ever-evolving labour market, it must account for the current and future social, economic, political, and environmental consequences of fast scientific and technical advances and other worldwide trends. The VEP's long-term success as a developmental and environmental tool requires that it include mechanisms for making course changes midstream." Vocational education, in addition to universities and colleges that provide technical education, was widely regarded by educationalists to have a significant impact on the country's economic status. This career-focused education would not only benefit employers looking to fill middle- and upper-level positions, but also the larger issue of rising youth unemployment in the country, which is exacerbated by the large number of high school dropouts and college grads who lack the practical experience necessary to find gainful employment in today's dynamic labour market. They would be more marketable to potential employers after completing a vocational education programme, where they would get both classroom instruction and on-the-job training. [6]

Development of Vocational Education In India

"Vocational education was provided in a variety of forms even during ancient times in India. The youngster would learn from his elders' efforts and eventually overtake them. A major centre for specialist education emerged in the nineteenth century as a result of the lawful development of the frontier economy. During the time of British rule in India, officials called Supervisors were on hand to oversee the construction and repair of public spaces including roads, sewers, and watering holes. Further evidence suggests that ancient Indian weavers lacked the technical expertise to produce high-quality textiles. To address this need, schools began popping up at around this time to teach the fundamentals of reading, writing, arithmetic, and mechanics. Similarly, pupils lacked an interest in honing their craft and developing their expertise in the classroom. They learned the trade secrets and specialized skills of their superiors in a methodical manner. Connected to the establishment of the Gun Carriage Factory in 1842, Madras saw the opening of the first modern school in Quite a while. Roorkee, then in Uttar Pradesh but now in Uttarakhand State, opened its first design school in 1847 to take use of the nearby massive factories for the Upper Ganges Canal Project. To further solidify India's position as a global leader in the design industry, further design institutions were established in cities like Pune, Calcutta, Bombay, and eventually Delhi. The Indian Institutes of Technology (IITs) are some of the best

in the world, and eight of them offer design programmes all the way up to the doctoral level. Government organizations, public and private specialized foundations, and Polytechnics all provide programmes leading to certification and endorsement. India gained its independence in 1947, and since then the country has established a system of polytechnics and other institutions dedicated to providing technical and vocational education and training (TVET) at the graduate and postgraduate levels. Similarly, the growth of the Indian Air-Force, Army, and Navy has coincided with the expansion of extensive professional and specialized preparatory offices. These institutions continue to produce highly qualified TVET graduates, mostly for the military but also increasingly for civilian industries like the avionics sector. Massive corporations like Reliance and Tata, as well as a plethora of IT companies, have developed in-house training programmes for its employees. Similarly, a consortium of regional outreach initiatives has been formed to link up with readying networks in both provincial and urban areas. Various school-related committees were established and it was recommended that students participate in Vocational Education.”[7]

The Technical and Vocational Education & Training System”

The Technical and Vocational Education and Training (TVET) system in India is now undergoing a large-scale reform in its structure, curriculum, and examination system, as are all other parts of the Indian education sector. Because of India's rapid economic growth (about 8.5 percent per year), the country's manufacturing sector is short on educated and skilled people. As of the 2011 census, 53% of India's population was comprised of persons under the age of 25, and almost 31 crore people were in that age range. It's a shame that just 5% of the population has a TVET credential, whereas the regional average for Asia is closer to 60%. In India, the informal economy employs more than 90% of the country's trade workers. Therefore, it is not an exaggeration to say that India's government sector is hindered in its fast expansion by a dearth of skilled workers.

Since the Indian Constitution divides responsibilities for ensuring citizens' access to a quality education between the federal and state governments, the two levels of government in Australia do the same for their citizens' educational needs. The State Government is primarily responsible for arranging Technical and Vocational Education and Training, however it is clear that the State Government cannot fulfill the pedagogical Delhi's on its own.[8]

Along these lines, for the monetary advancement of the country it was a major test for the Central Government to grow and to improve the Technical and Vocational Education and Training framework during the eleventh Five Year Plan. The focal spending subsidizing was multiple times to grow and to improve

the Technical and Vocational Education and Training in India. The Central Government is working almost with State Government, just as industry and local gatherings to build admittance to the nature of the Technical and Vocational Education and Training across the India.

Specialized Universities, Indian Institutes of Technology, Polytechnics and Institutes of Technology are the significant Technical and Vocational Education and Training establishments in country. Endeavors are being made among all above organizations to build the quality and access of instructing and figuring out how to make a huge number of more young people to acquire TVET training. Adaptable learning program centered at the individuals who were at that point working being embedded so they may get qualified or accomplish further developed abilities.

The Kothari Commission has delightfully expressed, "We picture the future patterns of school training to be towards a productive blending of general and Vocational Education, general instruction containing a few components of pre-professional and specialized instruction and its turn having a component of general instruction. In the sort of society wherein we will be living progressively in the coming years, a total partition between the two will be bothersome as well as unthinkable."

All India Council of Technical Education

The All India Council for Technical Education (AICTE) was created in 1954 by an act of parliament as a national level advisory organization to organize surveys of technical education facilities and to encourage the growth of technical education throughout the country in a coordinated way. Public funding and the field of technical education are within its purview. The organization has legislative responsibility to formulate and uphold standards, provide quality assurance by financing in appropriate areas, accredit, monitor, and evaluate, and ensure certification and award consistency.

The AICTE is a regulatory authority for programmes ranging from certificate courses through post-graduate and research levels in the fields of technology, engineering, town planning, architecture, management, pharmacy, training research, hotel management, applied arts and crafts, and catering technology.[9]

Provisions in the law now exist for VET programmes.

Legislative Provisions: Words like "legislative" and "provisions" mean anything is connected to or relates to the act of enacting or changing a law. The Constitution of India is the supreme law of the land, and it is used to direct the actions of both the federal and state governments. The Union and the States

must each provide for elementary and secondary education.

The Union is responsible for (a) institutions that have been designated by law as institutions of national significance and (b) the coordination and establishment of standards in higher and technical education.

There are five Acts of Parliament at the Central Government level that deal with Technical Vocational Education and Training in addition to the constitution:

- The Industrial Training Institutes Act 1961
- The Apprentice Act 1961
- The Architects Act 1972
- The All India Council for Technical Education Act No. 2, 1987.
- National Institutes of Technology Act 2007

These laws establish the structure of the Vocational Education and Training system, including how it is to be governed and funded at the state and federal levels. They outline the means through which vocational courses, from those in the trades and arts to those in professional engineering, such as carpet and handcraft manufacturing, are taught.

The most recent law creates a whole new level of institution called the National Institute of Fashion Technology (NIFTs). In fact, existing high-performing technical institutions are being provided with extra cash to hire more faculties and build up facilities in preparation for their transition to NIT status. This is part of a larger initiative by the Central Government and other organizations to increase access to higher-level technical education in India, where a total of four million students compete each year for just five thousand spots at the Indian Institutes of Technology.

Regulation: The majority of Engineering Colleges in India are governed by the All India Council of Technical Education Regulation of 2005, established under the 1987 Act, although other types of Technical Education and Vocational Education, such as Design of Journalism Schools, are also governed by the regulation. All international institutions of technical education operating in the country are subject to these rules.

The rules are quite clear about how and when international service providers may establish connections with their Indian counterparts. In this case, the rules take precedence. If a Foreign Service provider is thinking of teaming up with an Indian government agency, they should study these rules and regulations carefully to familiarize themselves with the requirements.

Current Structure of Vocational & Technical

Education in India

In India, vocational training is increasingly being offered as a means to meet the country's growing need for skilled workers, as an alternative to university, and to boost students' chances of finding gainful employment. Success for every nation depends on its people, and the most important human resource is a skilled and educated labour force. Individual productivity, business profitability, and national growth have all been demonstrated to benefit from vocational education and skill development. The goals of vocational education are twofold: (1) to provide the unorganized economy with the skilled labor it requires via a range of courses, and (2) to inculcate in young people the skills they'll need to become self-employed adults.

Increases in vocational education will help prepare workers for jobs in the informal market, where the vast majority of people work since just 7 to 10 percent of people are engaged in the formal economy. A highly trained and skilled labor force is the single most significant component of a country's human capital. Vocational education and skill development have been proved to boost individual productivity, employer profitability, and national growth. The goals of vocational education are twofold: to provide workers with the necessary skills for the informal economy and to encourage pupils to choose careers in which they may work for themselves. Even if only 7–10% of people now have jobs in the formal economy, raising the profile of vocational education would help the informal economy benefit from a skilled labour force and boost output. Both the CAFE and the NKC have emphasized the need to expand access to and enrollment in vocational programmes. Since the government has reemphasized vocational education in the XI and XII Five Year Plans, NYC has proposed raising capacity via creative delivery modalities and improving public-private partnerships. Vocational Training in High School It has been in effect since 1988 that the Centrally Sponsored Scheme of Vocationalization of Secondary Education at the + 2 levels. A revised strategy has been in place since the 1992–93 fiscal year. States receive funding from the Scheme to improve their administrative structures, conduct area vocational surveys, create curricula, textbooks, workbook curriculum guides, training manuals, and teacher training programmes, as well as to strengthen their technical support systems for research, development, training, and evaluation. It also helps non-profits and charities raise funds for implementing innovative programmes for intensive training sessions.[10]

The plan allows students to enrol in two-year vocational programmes at their local public high schools. Numerous Committees/Review Groups' suggestions resulted in significant changes to the existing Scheme. For the 12th Plan, it is proposed that the Scheme be included into RMSA and implemented beginning with the secondary level (IX

standard) rather than the higher level (XI standard) as is now stipulated.

- There are 9583 schools providing a total of 150 two-year vocational programmes in a wide range of fields in the elementary, secondary, and tertiary economic sectors. About 10 lakh secondary school pupils are served by the enormous system's 21000 divisions in 9619 schools. In addition, there are 80 different occupational courses available via the National Institute of Open Schooling. A total of about 6,000 students are enrolled in these programmes.
- **STEP FORWARD** The NVEQF will considerably increase access to schools offering vocational training by establishing a uniform set of standards. Classes XI and XII will now include vocational education thanks to the revised Vocationalization of Secondary Education Scheme, which mandates the creation of a dedicated vocational education cell inside the Central Board of Secondary Education. It also urges state legislatures to do more to support the nation's roughly one thousand technical and trade schools. Five hundred technical schools will get government support, and public-private collaborations will be encouraged. As an added bonus, the government will pay for ongoing professional development for all educators.
- As well as aiding 150 NGOs in implementing short-term innovative education programmes, the focus will be on producing 250 competency-based modules for each distinct vocational programme. All fifty states and the District of Columbia should join the NVEQF. The availability of vocational education necessitates the provision of infrastructure suitable to such education. The success of NVEQF depends on the involvement of private enterprise in the selection of vocational courses and the development of a curriculum. In order to foresee market demands and design courses appropriately, it is necessary to establish close ties with the industry.

CONCLUSION

The proper implementation of Vocational Education will unquestionably help to address many of the challenges facing a country like India, which is burdened with a billion-plus population and facing severe challenges in almost every important area, including education, health, employment, agriculture, energy, and rural development. Adequate design of successful Vocational Courses in different disciplines, as well as the proper implementation of schemes advised by various bodies, may contribute to the socioeconomic progress of the country. Vocationalization of higher education requires proper preparation. In order to meet the rising need for qualified personnel in a variety of sectors, we need to do extensive study in this area with the participation of

a significant number of intellectuals, who will provide us with excellent fresh ideas for designing newer Vocational Courses. Undergraduate Vocational Education programmes should anticipate a boost in success from the introduction of new, well-considered government legislation. However, the introduction of Vocational Education at the graduate and post-graduate levels takes on more relevance since students at these levels are on the cusp of entering the working world and are preparing to shoulder greater socioeconomic obligations.

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