

The Role of Automobiles in Vocational Education: A Review

VILAS HANS^{1*}

Automotive service technician
Govt. Boys Sr.Sec. School Dharamshala Distt. Kangra

ABSTARCT:

The engines of any country's economic and social progress are skills and knowledge. Countries with upper ranks of skills and knowledge are better positioned to respond more swiftly and efficiently to globalization's challenges and opportunities. India is shifting to a knowledge-based economy, and the ability of its people to generate effectively will decide their competitive advantage. This change will require India's workers to become more adaptable, and inter functional skills will be required in the emerging knowledge economy to provide secondary and tertiary education, according to India's Human Resource Development Minister, but he warns that if policymakers do not make it up to date, the country's educational policy will be limited. India will need a flexible school curriculum to reach this goal, one that sets the framework for learning, provides secondary and higher education, and develops the necessary skills for lifelong learning. In this paper we will discuss about technical vocational education and its major challenges in school curriculum.

KEYWORDS: Vocational education, technical vocational education, challenges and issues of vocational education

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I. Introduction:

Any country's economic and social progress is powered by its citizens' skills and knowledge. Countries with advanced ranks of knowledge and skills are better prepared to adapt to the challenges and possibilities of globalization more quickly and efficiently. India is transitioning to a knowledge-based economy, and the ability of its people to successfully develop, disseminate, and use knowledge will determine their competitive advantage. India's workforce will need to become more adaptive, imaginative, creative, and multi-skilled knowledge workers as a result of this transition. In the rising knowledge economy, professional, management, operational, behavioral, interpersonal, and inter-functional skills will be required (Goel, 2009). India will need a flexible school curriculum to reach this goal, one that sets the framework for learning, provides secondary and higher education, and develops the necessary skills for lifelong learning. Mr. Kapil Sibal, India's Human Resource Development Minister, has supported the claim, predicting that industrialized nations will look to India for a growing generation in the next ten years. Only 5.3 percent of India's population is over 65, according to 2009 estimates, with 63 percent of the country's working population between the ages of 15 and 65. (Mukerji & Tripathi, 2012). In contrast, many industrialised countries' populations are growing as a result of lower birth rates and improved health care, and the share of their workforce that is likewise retired is dropping. According to the United States Census Bureau, employment in the European Union would decline by 14% by 2030.

Education is widely regarded as the most effective tool for achieving total change and ensuring a country's rapid economic growth and development. In post-independence Nigeria, for example, academic accomplishment was stressed over the attainment of technical vocational skills that might organize students for a more useful and meaningful living in society. In other words, the system motivated and put emphasis on humanities and arts topics at the expense of TVE, which can aid in the acquiring of practical skills that are generally supposed to be more relevant to a country's development (Audu et al., 2013). For more than a decade, many protagonists in India have been particularly interested in vocational education and training (VET). Countries and international organizations associated with foreign aid and economic growth have been active in the field, using a variety of approaches and projects to promote skill development (Pilz & Regel, 2021). According to Mona Sedwal, Vocational education is centred on work and occupation. It's also known as technical and vocational education and training (TVET) or career and technical education (CTE) (TVET) (Sedwal & Delhi, n.d.). The idea of 'human capital,' according to Fagerlind and Shah (1989), states that education and training boost workers' output and lifetime earning capability. When the labour supply rises quickly, employment grows quickly, or employment increases dramatically, governments see a bigger need for skills,

according to Alam(2007). They argue that governments have started to turn to vocational education and training (VET) systems to assist unemployed young people and older workers in finding work, reduce the cost of higher education, attract foreign investment, ensure rapid growth in earnings and employment, and to reduce income inequality between rich and poor people. However, Technical vocational education, according to Zymelman (1976), Paschopoulos (1987), and Tilak (1998), has a worse rate of return (ROR) than general education. Foster also attacks vocational schools as a fallacy in development planning, pointing out that vocational education might be useful provided the acquired skills are effectively employed. Colin (1999) agrees that TVE may play an important part in development planning, but cautions that it will be ineffective if policymakers do not keep it up to date, and TVE schools do not have enough trained teaching faculty and adequate facilities to provide quality Technical vocational education. He also contends that these are not constraints of Technical vocational education in and of itself, but rather limitations of the country's educational policy. According to Bennell (1996), while TVE has had a significant influence on advance planning, comprehensively providing TVE may have a detrimental impact on development.

The automobile industry is one of the most important industries in the world, employing thousands of students each year, many of whom have attended or progressed from vocational schools. For more than two decades, the automobile industry has experienced market scale expansion and high demand growth since the mid-1990s. As China's vehicle industry has risen and globalization has advanced, since its inception, the automobile industry has evolved from a labor-intensive to a capital-intensive and technology-intensive business. (Challenges & Ways, n.d.).

History of Vocational Education:

In Indian philosophy vocational education is not a novel notion in general, or in the educational process in particular. The system, which is deeply rooted in our philosophy, thrived thanks to the Guru-Shishya (father-son) tradition (Ch.6.Pdf, n.d.). In 1854, a Wood telegram planned the introduction of prevocational education at the secondary level. Many recommendations on vocational education have been made by various committees and commissions on Indian education both before and after independence. The Radhakrishnan committee (1948) underlined the necessity to offer vocational orientation to educational courses in order to fulfil the diverse demands of our young men and women while maintaining the emphasis on university preparation. The Mudaliar Commission (1952) is concerned with educational diversification and the construction of a chain of multipurpose schools.

Recognizing the views of Rabindernath Tagore, Mahatma Gandhi, and Zakir Hussain on the pattern of education and its ineffectiveness for the majority of the school-going population, the education commission emphasised the need to integrate education with work and to give secondary education a strong vocational bias. The National Policy on Education and Program of Action (1986, 1992) stressed the importance of prevocational school at the secondary level of education and gave a new impetus to vocational education at the higher secondary level. In February 1988, a centrally supported vocational education system was started to provide support to vocational educational programmes. Thorndike's curricular learning paradigm is also credited with establishing standardised testing as a scientific tool for evaluating students and institutions. Although Dewey's philosophical impact is more admired, Thorndike's practical approach to education is far more common in today's public school systems (Lagemann, 1989). In the first half of the twentieth century, national efforts to expand or import vocational education around the world were not always successful, in part due to the tension between academic and technical education, as well as the empirically well-founded notion that students who obtain an academic education earn more over the course of their careers. Ghanaian case studies are provided (Lauglo, 2010). Even today, the debate over whether there is enough vocational education for those who want it versus too much for those who don't is rarely settled. Even among those who feel that formal education, particularly vocational education, is beneficial to the economy, there is dispute over the best effective way to teach about labour. Internship, the earliest kind of vocational education, is remarkably similar to labour (Carruthers & Jepsen, 2021). An apprenticeship is a formal contract that pairs a student with a professional for a period of time. In many places, traditional internships have been modified to include classroom instruction, such as Germany's dual system, which requires apprentices to devote their time between work and education.

TECHNICAL AND VOCATIONAL EDUCATION SYSTEM IN INDIA:

Technical and vocational education contributes significantly to the country's human resource development by providing skilled labour, increasing industrial productivity, and improving overall quality of life. Technical education and vocational training are two phrases that are frequently used interchangeably. On the other hand, the phrase technical education now refers to post-secondary education and practical training programmes targeted at preparing technicians to serve as supervisory personnel (Goel, 2009). Vocational education and training has long been a popular social engineering technique for attaining a variety of goals, such as boosting economic growth, reducing young unemployment, and enjoying the benefits of globalisation. Despite widespread scepticism about its utility, this is the case (Psacharopoulos, 1997). Vocational training is

lower-level education and training for a population of skilled or semi-skilled workers in a variety of trades that does not enhance their general education level. The MSDE is in charge of vocational training, as are a number of other national and state-level institutions and bodies. The MSDE's principal authority for vocational training at the national level is the Directorate General of Training, which directly oversees central institutes like the Advanced Training Institute (ATI) and presides over the National Council for Vocational Training (NCVT) (MSDE, 2018). Both agencies are in charge of learning material and curriculum. Authorities at the state level handle the day-to-day administration of institutions while adhering to national standards (Pilz & Regel, 2021). The following are the key agencies involved in the development and implementation of technical vocational education and training policies: National Skills Development Council, Department of School Education and Literacy, Department of Higher Education, Ministry of Labour and Employment, Directorate General of Employment and Training (for Vocational Training) • Ministry of Human Resource Development, National Skills Development Council, Department of School Education and Literacy, Department of Higher Education, Ministry of Labour and Employment, Directorate General of Employment and Training (for Vocational Training). There are another 20 ministries and departments in the central government that run modest TVET programmes. NGOs in the private sector, State Government, Directorate of Technical Education.

Major Challenges and Issues in Technical Vocational Education and Training:

The impediments and challenges in the VET system are caused by a variety of economic, political, and social factors. Vocational training and education in India are associated with low-status manual work and low-paying jobs. VET (Vocational Education and Training) is a sort of education developed for the poor and educationally disadvantaged sections of society who are unable to get admission to higher education (Agrawal, 2012). Schools face a financial challenge since materials are costly, significant, and always changing. As a result, several workshops present simpler pedagogical models of automotive systems as an alternative approach of instruction in this sector (Baron & Zablott, 2015).

Some Reasons for Low Performance are as follows:



Some Issues on Vocational Education:

A flowchart depicting some of the issues surrounding technical vocational education and training in India is presented below:



Employment after Vet:

Vocational education and training programmes are critical in India for a variety of reasons. The primary goal of these programmes is to create career prospects and provide the necessary skills for self-employment. In India, the relevance of self-employment as an occupational category cannot be overstated. In 2011–2012, 54 percent of the rural population and 42 percent of the urban population were self-employed (Jose, 2018). Second, a large number of pupils drop out of school before or shortly after completing primary school. Because these students lack employable abilities, VET allows them to obtain vocational skills that will enable them to compete in the labour market. Third, VET can make a significant effect in two important areas: underage labour and the unorganised sector (Agrawal & Agrawal, 2017). Vocational education and training (VET) programmes are regarded to be advantageous. VET programmes are viewed as an important aspect of international efforts to fight child labour by equipping young people with marketable skills, among other things. Workers in the unorganised sector need VET to boost their productivity and employability (King, 2012).

II. Conclusion:

India is making the shift to a knowledge-based economy, and its people's ability to develop, transmit, and apply knowledge will decide its competitive advantage. According to the US Census Bureau, employment in the European Union would fall by 14% by 2030. Education is widely regarded as the most effective tool for achieving total change and ensuring a country's rapid economic growth and development. For example, in post-independence Nigeria, the educational system prioritised academic achievement over the acquisition of technical vocational skills that prepare individuals for a more useful and meaningful existence in society. Institutions and organizations involved in foreign aid and economic development have been active in the sector, attempting to promote skill development through a variety of methods and projects. According to Mona Sedwal, vocational education is based on occupation and employment. It is also known as career and technical education (CTE) or technical and vocational education and training (TVET). The automobile industry is one of the world's most important sectors, employing thousands of young people each year, many of whom have graduated from or studied at vocational schools. Since the mid-1990s, the automobile industry has undergone market scale expansion and strong demand growth for more than two decades. In Indian philosophy in general, and in the educational process in particular, vocational education is not a new concept. The system, which is deeply rooted

in our philosophy, thrived thanks to the Guru-Shishya (father-son) tradition (Ch.6.Pdf, n.d.). The National Policy on Education and Action Plan emphasised the importance of pre-vocational schooling at the secondary level of education and provided vocational education at the higher secondary level a fresh lease on life. A centrally subsidised vocational education system was established in February 1988 to provide assistance to vocational education programmes. By producing skilled labour, enhancing industrial productivity, and improving general quality of life, technical and vocational education contributes considerably to the country's human resource development. The MSDE1 is in charge of vocational training, as are a number of other authorities and bodies at the national and state levels. The impediments and challenges in the VET system are caused by a variety of economic, political, and social factors. Because materials are expensive, significant, and always changing, schools have a budgetary barrier. These programmes are primarily aimed at developing job opportunities and providing the essential skills for self-employment. In 2011–2012, 54 half of the populace in the rural sector and 42 percent in the urban sector were self-employed.

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