

Role of Vocational Education and Skill Training to Stimulate Human Development



Rina Kumari Singh

Abstract: Vocational education and skill development work in tandem and are inextricably linked. In India, there is a need for vocational education that improves skill development because it is quite low in percentage when compared to traditional higher education. The study discusses the state of vocational education in the India. It also mentions the difficulties that vocational education faces, such as a lack of quality, obsolete modules, and insufficient courses. The report also looks at the government's new policies and efforts aimed at improving the quality of vocational education and skill development in India. Finally, the key issues and opportunities for the sector's future growth are emphasized from several systemic angles to stimulate human development.

Keywords: Vocational Education, Skill Training, Human Development.

I. INTRODUCTION

Vocational Education, Training and Skill Development refers to all forms and levels of the educational process entailing, additionally to general knowledge and academic skills, the study of technologies and related sciences, the attainment of practical skills, know-how, attitudes and understanding concerning to occupations in the different sectors of economic and social life. Vocational Education and skill Training is a critical component of the country's educational strategy.

It is critical to rethink the objectives of vocational education and training in order for it to play an effective role in the changing global environment. It must be adaptable, current, relevant, inclusive, and creative. It's vital to remember that, by 2025, India will have more than 35 percent of its population under the age of 15, 700 million young people under the age of 35, and a population expanding at 1.8 percent each year [1]. India, with its enormous young population, has the opportunity to position itself as a quality supplier of trained personnel for the rest of the globe in the emerging era of knowledge-driven society, shrinking workforce, and ageing population in rich countries. By focusing on delivering high-quality vocational education and skill training to the country's enormous population, the country will benefit greatly. Vocational education consists

primarily of practical courses in which students learn skills and experience that are directly related to a potential vocation. It assists students in becoming more skilled, which leads to improved job chances. Time management and meeting deadlines are critical to success in a vocational course, and students typically develop a portfolio of evidence (plans, reports, drawings, videos, and placements) during their study that is used to demonstrate their abilities for a job. According to the National Sample Survey Organization (NSSO), India has two categories of vocational training: formal and non-formal. Formal vocational training follows a planned training programme and results in certifications, diplomas, or degrees that are recognised by the state/central government, the public sector, and other reputable organisations. Non-formal vocational training aids in the acquisition of marketable skills that enable a person to continue working in her or his ancestral trade or occupation. In a sense, a person acquires occupational training from 'hereditary' sources through non-formal vocational training. Over the course of the twentieth century, vocational education has expanded to include areas like as retail, tourism, information technology, funeral services, and cosmetics, as well as traditional crafts and cottage industries. In addition, the Indian government has demonstrated a strong interest in formal VET skill development in order to fully utilise the enormous potential of a youthful and expanding population[2]. 12–13 million young people leave school each year in search of employment or vocational education [3].

Nevertheless, a scarcity of competent workers is apparent despite the fact that 59 percent of the population is between the ages of 15 and 54 [4]. To address the issue of "skilling" a significant portion of the population, a significant investment in formal vocational training and education is thought to be necessary [5]. However, the current system does not meet the needs of either employers or students, is of poor quality [6], and has significant quantitative issues [7].

The Government of India (GoI) has made various attempts since 2004 to modernise the formal VET sector, focusing on both the quantitative problem and qualitative difficulties[8]. However, despite the fact that a skill development programme was formally adopted in 2009, overall efforts to enhance the system fell short of the government's ambitious target of increasing the proportion of skilled workers from 2% in 2007 to 50% in 2022[9]. Considering less than 3% of the population now participates in formal VET[9]. In the part that follows, we'll examine closely at the VET programmes, initiatives, and policies already in place in India in order to identify the system's potential futures and present difficulties.

Manuscript received on 15 August 2022 | Revised Manuscript received on 27 August 2022 | Manuscript Accepted on 15 September 2022 | Manuscript published on 30 September 2022.

* Correspondence Author

Rina Kumari Singh*, Research Scholar, Department of Applied Economics and Commerce, Patna University, Patna (Bihar), India. E-mail: kumari.rina95@gmail.com

© The Authors. Published by Lattice Science Publication (LSP). This is an open access article under the CC-BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>)

II. RESEARCH METHOD

The problems of vocational education in India were the subject of this study's literature review. Secondary data were employed in this investigation. Secondary data is information gleaned from previous researchers' study findings. The primary or original scientific books and reports found in articles or journals (printed or non-printing) are the secondary data sources in question. In the twenty-first century, the data is employed with themes and talents. Utilize an annotated bibliography to analyse data. Research methods using book and journal article organisations that are pertinent to the topic combine findings on the articles, identify concepts that are thought to be vital, and create data that is the core of the research.

III. RESULT

1. India's Formal Education and Training:

The Indian educational and training system includes a wide range of institutions and players. India currently has 1.5 million schools with approximately 260 million students enrolled [3]. The Right of Children to Free and Compulsory Education Act (RTE), passed by the GoI in 2009, ensures that all children between the ages of 6 and 14 are entitled to free education. The average number of years spent in school in India has increased dramatically during the 1990s, but it is still 6.5 years, which is significantly less than the average in other growing nations like China[4] Primary education up to grade 8 is included in the elementary education covered by the RTE, while institute-based school-based VET may be included in secondary education[2]. Over the past few years, India has increased its educational investment [3], nevertheless there are still significant issues with basic and upper primary education in the nation[10]. Ten years ago, the Confederation of Indian Industry (CII) reported that less than 30% of grade five students in public schools had proficiency in fundamental arithmetic abilities and that only half of these students could read[11].

2. However, investments in education did result in benefits, as seen by the recent sharp decline in primary school dropout rates and the increase in literacy rates among children between the ages of 5 and 15 to over 70%[12]. But even though the government obviously prioritises education and training, progress is either slow or stagnant[13]. There are large discrepancies between the rural and urban regions[5] both inside the federal states and. Basic literacy and numeracy skills are severely underdeveloped. Parents that can afford tuition fees send their kids to private schools, which have an overall proportion of 31%, as a result of the shortcomings highlighted for public schools[3]. There are 39,050 colleges and 903 universities that offer academic degrees, and another 10,011 schools that offer diplomas that are categorised as non-academic. In India, 25.8% of the population between the ages of 18 and 23 who are relevant are enrolled in higher education[14]. Thus, it is obvious that in Indian society, courses that lead to academic degrees are preferred[15].

2. Regulation of Education and Training.

There is a major difference between vocational education and vocational training within the Indian educational and training system. The higher education system includes vocational education, which includes programmes that start in secondary or upper-secondary schools and institutions that grant occupational diplomas. These latter institutions include ones that are typically associated with postsecondary education, such as polytechnic colleges, nursing schools, or teacher training institutes, but which award occupational diplomas rather than academic degrees[3]. Since they are 'independent institutions', the GoI uses that term[14], showing that these universities fall midway between the two types of education. Another contrast is established between technical and vocational education, the former being provided by polytechnic colleges. The separation of tasks among governmental agencies is also clearly envisioned in the division of education and training. At the federal level, the Ministry of Education (MoE) is in charge of overseeing the many institutions offering vocational education, and after that comes the All India Council for Technical Education (AICTE)[3]. The AICTE's primary duties include quality assurance and development, planning and development, and regulation and maintenance of technical education norms and standards[16]. They consist of college curriculum and syllabus design, as well as the recognition and accreditation of the institutions[17]. At the state level, similar authorities oversee vocational education, however the departments' names vary from state to state. The MSDE and a larger number of authorities and organisations at the federal and state levels are in charge of vocational training. The Directorate General of Training, which directly oversees central institutions like the Advanced Training Institute (ATI) and preside over the National Council for Vocational Training, is the primary authority under the MSDE for vocational training at the national level (NCVT)[18]. Both organisations are in charge of developing curricula and learning materials. Authorities at the state level manage institutions' daily operations in accordance with federal regulations. The states are in charge of administering tests, administering quality assurance programmes, and administering and distributing additional teacher preparation[18];[11]. Numerous additional ministries that participate in vocational training projects and programmes in one way or another, often ineffectively, through parallel programmes add to the complexity of educational governance in India[19]. There are a wide variety of programmes, projects, and initiatives, especially with regard to training and programmes that are aimed at the unorganised sector[7].

With 16 ministries participating, the MSDE attempts to group skill development projects for efficient implementation[18].

3. Vocational Education And Training: Depending on the type and level of course provided, vocational training may begin in grade nine and continue through post-secondary education[20]. It refers to certificate-level training in a number of craft skills but is not connected to higher education. A successful completion of grade 8 is a basic condition for all courses, with the exception of those initiatives aimed at the unorganised sector, whose entry criteria vary from course to course. It is offered through two significant programmes: the Craftsman Training Scheme (CTS) and the Apprentices Act's apprenticeship training. [18].

➤ **Craftsman Training Scheme (CTS):** The CTS, which was launched in 1950 by the GoI, is the most significant programme in terms of the number of seats available for industrial trade training[18]. Depending on the occupation and subject, courses are available in public or private Industrial Training Institutes (ITIs) that give training lasting 6–24 months. There are currently 13,912 ITIs with a total seating capacity of about 2,960,000[18]. There are 126 jobs covered by the courses, 73 of which are categorised as technical and 48 as non-technical. The CTS plan has a strong emphasis on practical instruction, which makes about 70% of the total training. Depending on the profession, different grades from eighth to twelfth are needed for entry[21]. If students pass the exam after completing the course, the NCVT may award them a National Trade Certificate[18]. In 12 ATIs, as well as other ITIs and training centres affiliated with the NCVT, teachers at ITIs receive one-year of training under the Crafts Instructor Training Scheme (CITS)[18]. Despite a growth in ITIs over the past few years, there are still not enough seats available to satisfy the demand for skill training. Governmental and private ITIs both have significant obstacles when it comes to hiring and providing qualified teachers, providing equipment, providing learning materials, and designing curriculum[22]. The country requires 95,000 additional instructors to adequately staff ITIs. Although just 15% of the personnel is now certified through the CITS, training facilities can only produce 5,168 instructors annually. Additionally, even though there is a limited number of seats available, they are typically not completely occupied. Only 85% of all available CITS teacher training positions were filled in 2017–2018[18]. Therefore, it is not reasonable to anticipate any sudden increase in the number of certified teachers. Although there should be a greater practical and a lesser theoretical portion to the training, in fact theoretical instruction is found to be predominate, a trait present in all Indian VET segments[8].

➤ **Apprenticeship Training:** Under the terms of the Apprentices Act, many schemes provide apprenticeship training. It uses a dual training strategy, combining

training in institutions and on the job. The Apprenticeship Training Scheme (ATS) provides a range of training in trades and businesses, spanning vocations flagged by the government or "optional trades" recommended by employers in accordance with specific criteria[18]. The programme was established in 1961 in accordance with the Apprentices Act and designed to address the demands of business while organising informal training in accordance with specific guidelines. Because institutional training was deemed insufficient to produce the whole range of practical skills needed, the primary objective was to involve employers in VET and use industrial workplace environments for practical training[18]. Plans are directed at two different categories of apprentices: On the one hand, the ATS offers training that lasts between six months and four years under the heading of "Trade Apprenticeship." Weaver, tailor, administrative assistant, and welder are among the professions in which trainees are qualified. There are 259 different professions in 39 different categories[23]. The Government of India launched a new programme in 2016 called the "National Apprenticeship Promotion Scheme" to enhance employer support and participation and to expand the number of apprentices, with a target of 2,000,000 in 2020[18]. However, there are also a limited number of apprenticeships available in the service industry, stringent regulatory requirements for employers, and poor stipends for trainees, and a low participation rate. Similar flaws as those in the CTS are present in the scheme, the primary issues include a lack of experienced trainers, inadequate facilities at training facilities, rigid and somewhat outdated curricula, and low employment rates after graduation[19].

➤ **Polytechnic Colleges:** Polytechnic colleges, which make up the second-largest category of schools after ITIs and play a significant role in Indian vocational education, offer formal technical vocational education that culminates in a diploma[3]. They are managed by the State Departments of Technical Education at the state level, which are responsible for organising graduation events and presenting diplomas [8]. Diploma programmes typically last three years, however some may go as long as four, while post- and advanced diplomas last one or two years. There are currently 3,239 polytechnic colleges recognised by the AICTE[19]. Engineering and technology, other vocational fields, and applied crafts are the three occupational categories into which programmes are divided, covering a wide range of programmes and subject areas from civil or mechanical engineering to medical lab technology, library science, or architectural assistantship[19]. Many polytechnic colleges, in one way or another, share the main difficulties and issues that face all Indian VET institutions. These include obsolete curricula, insecure or insufficient funding, poor quality training, absent or insufficient certifications for instructors and personnel, and inadequate facilities and equipment.

Role of Vocational Education and Skill Training to Stimulate Human Development

Additionally, because states approach administration and responsibilities differently, institutions' quality varies greatly. The GoI intended to dramatically increase the number of institutions under the Skill Development Initiative starting in 2013, with a target of the development of 700 additional colleges across the nation, due to the comparably modest number of seats offered. How successful such initiatives will be in the future needs to be seen given that the number of universities certified by the AICTE has declined since 2015[19].

4. Policies and Initiatives: An Improved Skills Agenda

Such historic trades were mostly handled by the conventional vocational training system, which frequently concentrated on individual skill sets solely[11]. It was realised that the government needed to take some action in order to address the qualitative and quantitative issues facing the nation[10]. VET was regarded as a crucial area during the five-year development period of the Eleventh Plan, and the GoI began to develop measures to modernise formal VET in 2006, partially in collaboration with the private sector.

This led to the implementation of the first National Policy on Skill Development in 2009[22]. The introduction of the National Skills Qualification Framework, the Apprentices Amendment Act, and the creation of the MSDE, which assumed the duties of the former Ministry of Labour and Employment, were some of the initiatives and programmes that came after the first National Policy on Skill Development (Ministry of Skill Development and Entrepreneurship, 2019). The original policy was updated in 2015 as part of the Skill India Initiative as the National Policy on Skill Development and Entrepreneurship[3]. The initiatives that make up the government's skills development policies are examined in more detail in the section that follows.

➤ **Promoting Public-Private Partnerships:** One of the main objectives of the first skill agenda was to enhance private sector participation in formal VET, which fit within the ambition to significantly raise the share of formally skilled workers in a short amount of time. A public-private partnership called the NSDC was established with that goal in mind[3]. Under the direction of the MSDE, it oversees the Sector Skill Councils and NCVT-affiliated training facilities[7]. Its main responsibility is to organise initiatives, private sector participation in VET, and the creation of Sector Skill Councils. The corporation participates in curriculum development, certifies trainers, and serves as the government's information system. Parallel to the current CTS and ATS schemes, the NSDC is also engaged in own skill training and development programmes[18].

➤ **NSQF:** A person can achieve desired skill levels by using the NSQF, a framework that integrates education and competency-based assessment nationally[19]. According to a hierarchy of knowledge, skill, and aptitude levels, the National Skills Qualifications Framework (NSQF) classifies qualifications[24]. These levels, which range from one to ten, are described in terms of learning objectives that all learners must possess, regardless of how they learned them (informally, formally, or both).

Therefore, it is a nationally integrated education, competency-based skill, and quality assurance framework that will offer numerous pathways, both horizontal and vertical, linking one level of learning to a higher level through vocational education, vocational training, general education, and technical education[24].

➤ **Revitalizing of ITIs:** Over half (45 crore) of the 90 crore people who are currently employable, according to the Center for Monitoring Indian Economy (CMIE), a private research organisation, have given up seeking for work[25]. According to the same organisation, the labour force participation rate will drop from 46% in 2017 to 40% in 2022[25]. More people will appreciate and cherish skills in the country if vocational education is promoted, and more young people will be willing to choose skill-based occupations over pursuing degrees or applying for government jobs. This will significantly lower unemployment in our nation[19].

5. **Plans Aimed towards Informal Environments:** More than 90% of Indians who are working are employed in the informal economy, which accounts for around 60% of national output. The Skill Development Scheme (SDI), which is part of the new skill agenda, was introduced in 2007. It offered short-term courses, some of which could result in certificates recognised by the NCVT[18]. The programme trained 1,400,000 people up until 2013, and it was deemed successful. Additionally, it was given a favourable evaluation in terms of the industry's response and the acknowledgement of prior learning for individuals who were already employed. However, the programme experienced the same difficulties as conventional VET in India, including: a lack of a connection between training and job, a lack of employability potential, a lack of knowledge of the programme; and a high barrier in terms of formalities associated with the plan[18]. The MSDE designated the Pradhan Mantri Kaushal Vikas Yojana, which was introduced in 2015, as its "flagship outcome-based skill training scheme." It is put into practise by the NSDC, offers brief instruction, and acknowledges past learning. It is designed to help school or college dropouts and unemployed people become employable and find career possibilities that are sufficient to support a family[26]. The first iteration of the programme was harshly critiqued for its subpar employability results, a mismatch between the offered skills and the industrial need, and participant financial outcomes. If long-term qualitative issues are to be resolved and short-term quantitative objectives are to be achieved, the scheme needs to be assessed as it proceeds[26].

6. **Primary Opportunities and Challenges** Due to the existing state of VET in India, students who meet the standards will invariably choose an academic path, which has serious implications on adverse selection.

The NSQF was established to make it possible to compare various credentials, abilities, and educational courses. The National Institute of Open Schooling (NIOS) and the DGT reached an agreement in 2016 that established the academic equivalency of approved ITI courses and qualifications as well as the linking of the systems to facilitate vertical educational mobility[26]. Such frameworks and efforts could be a significant step in raising the aspirational level of vocational training and education if they are adopted by stakeholders and put into reality. A considerable portion of the population is barred from formal programmes due to stringent entry standards and expensive tuition prices, even though VET is considered a "second choice" for individuals who meet the requirements for further general and academic education[9]. Despite an increase in higher education enrollment over the past ten years, the majority of children drop out of school while still in the basic grades. The educational landscape in India is characterised by a significant gap between great institutions that produce excellent learning and test results and draw good students and inferior institutions that fall short of the requirements for offering high-quality education[7]. The difficulty of raising the educational bar must be taken into account in terms of both quantity and quality of institutions and training offered at the same time. Otherwise, it is unlikely that general education or VET participation will expand. One of the biggest obstacles and possibly the weakest point of Indian vocational training institutions is the availability and qualification of trainers/instructors. Teachers in general education are often qualified, carefully chosen, and paid a fair wage.

Regarding polytechnics and colleges, the situation in higher vocational education is likewise pretty excellent. Even the MSDE notes that only 15% of all ITI teachers are certified under the CITS programme in terms of VET[26]. The fragile status of the institutions is further exacerbated by the fact that just 55 to 60 percent of the positions are filled. Trainers are frequently hired on part-time or fixed-term contracts because they lack the requisite skills and proper training[18]. Such circumstances do not encourage skilled and experienced individuals to apply for roles as trainers. More facilities for fundamental teacher certifications in the field of VET are required, as well as further pedagogy-focused training for current instructors. In order for more people to choose to become trainers, the conditions must essentially be improved. Comprehensive theoretical knowledge is required for VET, but it also needs to be transferable to real-world situations. In India, formal VET is heavily theoretical, with little emphasis placed on practical training, in-service education, or the application of academic knowledge. Returning to the debate over general education vs vocational education and training, the preponderance of theoretical instruction may also be linked to the low regard for physical labour and the widespread discredit of VET in society. This brings up the subject of trainer qualification, which must be of a high standard, encourage a practical orientation, and be founded on contemporary teaching methodologies. Students' employability is boosted by the connection between theory and practise, and "physical exercise actually helps the

organisation of the learning process and should not be seen as bad connotation," [27]. significant emphasis on theory is accompanied by a strong control of the teaching staff. Instead of acting as a facilitator or supporter of the learning process, trainers and teachers choose to assume the role of a lecturer[27]. However, problem-solving, comprehension, communication, and social skills are in high demand by employers and are crucial for both individual and society growth and success. The Indian government has taken various steps to improve learner-centred practises in general and higher education through modernised curricula that incorporate innovative approaches and teaching techniques. However, curriculum often do not include specific teaching-learning techniques, and most teachers lack the necessary pedagogical knowledge to implement learner-centered strategies, particularly in vocational training[28]. Targeting teacher development and working circumstances can help the issue here as well.

IV. CONCLUSION

Although there have been extensive attempts to modernise the Indian VET system for more than a decade, it still confronts significant obstacles in both the quantitative and qualitative domains. Although not extensive, the foregoing explanation of the system's primary pillars, policies, difficulties, and potential futures demonstrates the need for a thorough approach to system development. Lack of governmental direction and goals, as well as a narrow concentration on quantity, are detrimental to the long-term growth of a successful VET system. The complex governance structure adds to the complexity and inefficiency of plans and activities. The autonomy of the states with regard to educational programmes and administration exacerbates this problem. But despite the system's difficulties and ongoing flaws, it's important to recognise the serious efforts to make improvements as well as the early accomplishments in crucial areas. It is necessary to better strengthen VET accessibility, which includes formalising informal learning. Raising the system's standing and acceptance is essential for the growth and development of Indian VET. Raising the quality of VET is vital to raise the appeal and demand for the provision of VET, even though views about the subject may change slowly across cultures. It remains to be seen how the private sector will develop in the future; a greater involvement by business and employers is thought to be advantageous. Last but not least, proper teacher preparation and support, along with respectable working conditions for the profession, are essential for the length and quality of training. Initiatives must be designed on a long-term basis since a multilayered strategy is required to strengthen critical aspects of the system.

REFERENCES

1. "Table 1. Comparison of provisional population estimate for India from the Census of 2001 with some selected projections made before 1980 using the component method 1," pp. 1-15, 2001.
2. T. Agrawal, "Skill development in India: an examination," J. Educ. Work. 276, 629-650, 2014. [CrossRef]

Role of Vocational Education and Skill Training to Stimulate Human Development

3. L. Ernsberger, "Overview of India's Evolving Skill Development Landscape," Br. Council, pp. 1–30, 2016, [Online]. Available: www.britishcouncil.org/sites/default/files/18.10.16_overview_of_skill_landscape.pdf
4. "United Nations Population Division's World Population Prospects: 2019 Revision."
5. V. Awards, "Press Information Bureau Government of India Vice President's Secretariat," pp. 1–7, 2019.
6. R. Medina and D. D. Suthers, EQUITY AND QUALITY IN EDUCATION: SUPPORTING DISADVANTAGED STUDENTS AND SCHOOLS - © OECD 2012, no. PART 2. 2008.
7. A. Mitra, "Training and Skills Development for Decent Work in the Informal Sector: Case Studies from South India," Meet. Basic Learn. Needs Informal Sect., pp. 155–182, 2005, doi: 10.1007/1-4020-3427-x_9. [[CrossRef](#)]
8. M. Pilz and J. Regel, "Vocational Education and Training in India: Prospects and Challenges from an Outside Perspective," Margin, vol. 15, no. 1, pp. 101–121, 2021, doi: 10.1177/0973801020976606. [[CrossRef](#)]
9. M. Kuczera, "Learning for Jobs. The OECD International Survey of VET Systems: First Results and Technical Report," 2008.
10. UNESCO, UNICEF, and World Bank, The State of Global Education: a path to recovery. 2021. [Online]. Available: https://www.unicef.org/media/111621/file/The_State_of_the_Global_Education_Crisis.pdf
11. M. Aring, "Youth and Skills: Putting Education to Work. Report on Skills Gaps," Unesco, pp. 1–51, 2012, [Online]. Available: <http://unesdoc.unesco.org/images/0021/002178/217874e.pdf>
12. S. Gouda M and D. T. . Sekher, "Factors Leading to School Dropouts in India: An Analysis of National Family Health Survey-3 Data," IOSR J. Res. Method Educ., vol. 4, no. 6, pp. 75–83, 2014, doi: 10.9790/7388-04637583. [[CrossRef](#)]
13. E. Innovation, Innovating Education and Educating for Innovation. 2016. doi: 10.1787/9789264265097-en. [[CrossRef](#)]
14. (AISHE), "All India Survey on higher education," vol. 12, 2013.
15. A. Singh, "The Downside Of India's Obsession With Good Grades," 2017. <https://www.ndtv.com/education/the-downside-of-indias-obsession-with-good-grades-1773244>
16. AICTE, "All India Council For Technical Education," 2020. <https://www.aicte-india.org/about-us/overview>
17. novi yulia Budiarti, "FEATURES OF NEP 2020: HIGHER EDUCATION," Sustain., vol. 4, no. 1, pp. 1–9, 2020, [Online]. Available: <https://pesquisa.bvsalud.org/portal/resource/en/mdl-20203177951%0Ahttp://dx.doi.org/10.1038/s41562-020-0887-9%0Ahttp://dx.doi.org/10.1038/s41562-020-0884-z%0Ahttps://doi.org/10.1080/13669877.2020.1758193%0Ahttp://serc.org/journals/index.php/IJAST/article>
18. GOI, "Skill India, Annual Report 2020-21," Minist. Ski. Dev. Entrep. Gov. India., 2021.
19. Z. Zhao and X. Wu, Technical and vocational education. 2017. doi: 10.4337/9781783470662.00019. [[CrossRef](#)]
20. V. Education, "November 2018," TAPPI J., vol. 17, no. 11, 2018, doi: 10.32964/tj17.11. [[CrossRef](#)]
21. N. Instructional, "TRAINING," vol. 032, no. 3142, 2019.
22. W. Bank, "Government of India and World Bank Sign Agreement to Give Impetus to India's Skill's Agenda," 2017. <https://www.worldbank.org/en/news/press-release/2017/12/13/governmm ent-india-world-bank-sign-agreement-give-impetus-indias-skills-agenda>
23. S. Schneider and M. Pilz, "The function and institutional embeddedness of Polytechnics in the Indian education system," Int. J. Res. Vocat. Educ. Train., vol. 6, no. 3, pp. 284–308, 2019, doi: 10.13152/IJRVET.6.3.5. [[CrossRef](#)]
24. "National Institute of Electronics & Information Technology."
25. T. Federal, "CMIE Report," 2022. <https://thefederal.com/business/over-45-crore-indians-not-looking-for-jobs-2-cr-women-workers-quit-report/>
26. MSDE, "Annual Report 2018-2019 (English).pdf," 2019.
27. L. Zenner, K. Kumar, and M. Pilz, "Entrepreneurship education at Indian industrial training institutes - A case study of the prescribed, adopted and enacted curriculum in and around Bangalore," Int. J. Res. Vocat. Educ. Train., vol. 4, no. 1, pp. 69–94, 2017, doi: 10.13152/IJRVET.4.1.4. [[CrossRef](#)]
28. K. Issues, Anticipating and preparing for crises. 2019. doi: 10.18356/dc647229-en. [[CrossRef](#)]

AUTHORS PROFILE



Rina Kumari Singh, Research Scholar at Department of Applied Economics and Commerce Department, Patna University Ashok Rajpath Patna University Campus Patna. Research domain is Human Resource Management and takes keen interest in research activity of skill development and employment opportunities for the youth of India initiative and policy making. She has completed post graduate degree (M.com) in commerce and holds an online certificate in Swayam Arpit Online Course (Refresher Course) in Commerce, Shri Ram College of Commerce, University of Delhi. Besides that, she enjoys exploring, journals and books.