



## Empowering India's Workforce: The Transformative Role of Open and Distance Learning in Vocational Education and Training


Dr. Manju Gupta<sup>1\*</sup>

<sup>1</sup>Professor, Jagan Nath University, Chaksu, Jaipur, India.

**Corresponding Author:** Dr. Manju Gupta

*Professor, Jagan Nath University, Chaksu, Jaipur, India.*

**DOI:** 10.67224/ioasdjbm.2026.v03i01.003

ABSTRACT	Review Article
<p>This abstract presents an analysis of the role of Open and Distance Learning (ODL) in enhancing Vocational Education and Training (VET) in India, a critical need for the nation's burgeoning economy and its rapidly expanding workforce. It highlights the integration of ODL in vocational training as a strategic approach to democratize education, making it more accessible and inclusive, particularly for marginalized and remote communities. The exemplification of this approach is seen through the Indira Gandhi National Open University's (IGNOU) initiatives, notably its program targeting the footwear industry workforce, showcasing ODL's potential to significantly upgrade skills and improve livelihoods across sectors.</p> <p><b>Keywords:</b> Open and Distance Learning, Vocational Education, Training.</p>	<p><b>Article History</b></p>
	<p>Received: 02-02-2026</p>
	<p>Accepted: 11-03-2026</p>
	<p>Published: 14-03-2026</p>
	<p><b>Copyright © 2026 The Author(s):</b> This is an open-access article distributed under the terms of the Creative Commons Attribution 4.0 International License (CC BY-NC) which permits unrestricted use, distribution, and reproduction in any medium for non-commercial use provided the original author and source are credited.</p>
	

### INTRODUCTION

In recent years, the landscape of education has been significantly reshaped by the advent and expansion of open and distance learning (ODL) systems, marking a pivotal shift in how vocational education and training are delivered across India. (Fozdar, B. I., & Kumar, P. S. 2008). This evolution is not merely a reflection of technological advancement but is a response to the urgent need for an empowered and skilled workforce capable of meeting the demands of a rapidly changing global economy. As the world moves towards more specialized and technical job roles, the importance of accessible vocational education and training cannot be overstated.

ODL systems, through their flexibility and reach, have emerged as vital catalysts in democratizing education, particularly in the vocational and technical sectors. They offer a lifeline to those who are traditionally marginalized or unable to participate in the conventional educational framework, including working adults, women, and residents of remote areas. By breaking down geographical and socio-economic barriers to education, ODL platforms have significantly contributed to leveling the playing field, enabling

countless individuals to acquire job-ready skills and knowledge (Sikandar, M. A. 2019).

This paper delves into the transformative role of ODL in vocational education and training in India, examining its capacity to not only equip individuals with the necessary skills for employment but also to foster an environment of continuous learning and improvement. By highlighting various initiatives and programs, such as those spearheaded by the Indira Gandhi National Open University (IGNOU) among others, this study illustrates the substantial impact of ODL on workforce empowerment. Through this lens, we explore the potential of ODL to significantly contribute to the national agenda of skill development and economic advancement, thereby supporting India's ascent in the global marketplace.

### Evolving Landscape of Vocational Learning in India

In the multifaceted realm of Indian education, vocational education and training present two distinct paths: the formal vocational education embedded in the curriculum of the 11th and 12th grades under the national policy known as 'Vocationalization of Secondary Education,' and vocational training, which spans

certificate-level craftsmanship training (Rao, K. S., Sahoo, B. K., & Ghosh, D. 2014). This latter category is designed for individuals who conclude their schooling between grades 8 to 12 and is provided through schemes like the Craftsmen Training Scheme (CTS), facilitated by entities such as Industrial Training Institutes (ITIs), Polytechnics, and Industrial Training Centres (ITCs), under the oversight of the Director General of Employment and Training (DGET) of the Ministry of Labour and Employment.

The journey of the Vocational Education Program (VEP) began in the academic year 1976-77, aiming to integrate vocational learning within the fabric of higher secondary education. The evaluation and subsequent guidelines provided by the National Working Group on Vocationalisation of Education underscored the need for the Centrally Sponsored Scheme (CSS) for Vocationalisation of Secondary Education, initiated in 1988 (Singh, S. P., Grover, S., & Padmanabhan, J. 2015). This scheme's core mission was to bolster employability, align the workforce's skills with market demands, and furnish an educational avenue for those less inclined towards conventional academic routes. The oversight of vocational education falls to the Ministry of Human Resources Development (MHRD), with strategic and operational support from the All-India Council for Vocational Education (AICVE) at the national level and State Councils for Vocational Education at the state level (Vaishali, & Thakur, N. 2023).

A myriad of courses across diverse fields such as Agriculture, Business and Commerce, Humanities, Engineering and Technology, Home Science, and Health and Para-medical Skills are offered under this scheme. Despite these offerings, the engagement in vocational

education trails behind expectations, with a mere 5% of students opting for vocational streams, falling short of the benchmarks set by the National Policy on Education 1986 and its Programme of Action (1992).

Several factors contribute to this disparity, including misconceptions about vocational training, administrative hurdles, financial limitations, and the stigma of vocational education as a lesser alternative. Challenges such as insufficient infrastructure, outdated curriculum, the dearth of qualified teaching staff, and the lack of effective evaluation and apprenticeship frameworks have hindered the growth of vocational education. To address these issues, the National Curriculum Framework 2005 recommended a mission-driven approach for vocational education, advocating for the establishment of dedicated Vocational Education Institutions and Centers at various administrative levels, from rural clusters to urban settings (Fiagbe, Y., Amedorme, S. K., & Fiagbe, Y. A. K. 2013). This proposal includes upgrading infrastructure, professional development for educators, and periodic curriculum revisions to adapt to the evolving global economy.

### A Global Perspective on India's Vocational Secondary Education: Comparative Analysis

In assessing the global educational landscape, particularly the vocational secondary education segment, India's position reveals significant contrasts with OECD (Organisation for Economic Co-operation and Development) norms. This comparative analysis aims to distil key statistics and insights, presenting a clear picture of India's standing in the context of vocational education compared to international benchmarks (Carruthers, Celeste K., and Christopher Jepsen. 2020).

**Table-1: Educational Enrolment Overview: India vs. OECD**

Educational Segment	India Enrolment (%)	OECD Average Enrolment (%)
General Upper Secondary Education (Ages 15-19)	34	37
Vocational Upper Secondary Education (Ages 15-19)	2	23
Lower Secondary Programs	1	12
Tertiary Programs	1	12

This table illustrates a stark disparity in vocational upper secondary education participation, with India's enrolment rate significantly lower than the OECD average.

### Attainment and Participation Metrics

When examining the educational attainment and labour-market readiness, 66% of India's youth aged 25-34 years lack an upper secondary qualification, a figure considerably higher than the OECD's average of 14%. This discrepancy highlights a substantial challenge in harnessing the full potential of India's youthful workforce (Paul, B.2008).

### Comparative Attainment Rankings

A deep dive into specific indicators reveals where India stands in contrast to OECD and partner countries:

- **Upper Secondary Attainment** among adults (25-64 years) in India is notably low, placing India at the bottom of international rankings.
- **Below Upper Secondary Attainment** showcases India leading, indicative of a significant portion of the population not completing secondary education.
- **Doctoral or Equivalent Tertiary Education Degrees** attainment reflects a brighter spot, with India ranking highly, suggesting a strong output at

---

---

the highest academic levels despite broader challenges.

### Gender-Specific Educational Attainment

Examining the educational landscape through a gender lens further reveals disparities:

- Both **male and female** populations in India exhibit one of the lowest rates of attainment for upper secondary education and general degrees at the tertiary level compared to OECD and partner countries.
- However, in terms of **doctoral degrees**, both genders in India are among the top rankers, indicating notable achievements in advanced academic pursuits.

### Enrolment in Vocational Programs

Focusing on vocational education, India's enrolment rates for such programs are among the lowest when compared to OECD countries. This underscores a significant area for educational policy and system reforms, aiming to bolster vocational training as a means to enhance skill development and employability among the Indian youth.

### Programme Goals and Implementation Strategy

#### Objectives of the Programme:

- Enhancing the educational credentials of participants to foster personal and professional growth.
- Providing access to practical, industry-relevant training within workplaces to support ongoing learning and skill development.
- Advancing the broader educational prosperity of communities through accessible learning opportunities.
- Developing and delivering academic programs that cater to the immediate needs and aspirations of learners.
- Introducing continuous education initiatives focused on employment, aiming to boost the inherent capabilities and economic prospects of participants. (Bank, T. W. 2006).

This program is tailored for individuals currently engaged in or aspiring to join the footwear industry, including those working within both the private sector and government-run organizations.

#### Strategy for Programme Delivery:

Aligned with IGNOU's established educational practices, this program adopts a comprehensive multimedia instructional approach. Key components of this strategy include:

- **Self-Learning Materials:** Designed to facilitate independent study, these resources allow learners to progress at their own pace.

- **Audio/Video Aids:** Supplementing written materials, these aids enhance understanding through visual and auditory learning techniques.
- **Teleconferencing:** Facilitates real-time interaction with instructors, providing an avenue for clarification and deeper understanding of complex topics.
- **Counselling Sessions:** Offer personalized guidance and support, helping learners navigate through their educational journey.
- **Seminars and Workshops:** Provide hands-on experiences and opportunities to apply theoretical knowledge in practical settings.
- **Personal Contact Programme (PCP):** A distinctive feature requiring mandatory participation, PCPs offer direct engagement with faculty and peers at designated Training Centres and IGNOU's Programme Study Centres.

The emphasis on a blend of self-directed learning and interactive sessions, supplemented by practical workshops, is designed to meet the diverse needs of learners. This approach not only ensures the acquisition of comprehensive knowledge and skills but also fosters an engaging learning environment conducive to the holistic development of each participant.

### Global Educational Participation

In broader educational participation, India's rates in early childhood education and tertiary enrolment among young adults show room for improvement, signalling potential areas for intensified focus and investment to align closer with international standards.

### Enhancing Vocational Education in India through Open and Distance Learning (ODL): A Detailed Overview

India's educational landscape is undergoing a significant transformation, with Open and Distance Learning (ODL) playing a crucial role in making vocational education accessible, flexible, and inclusive. Here's an elaborated point-by-point overview of how ODL is reshaping vocational education in India:

#### 1. Introduction to ODL in India:

- ODL is recognized for its learner-centric approach, offering educational opportunities to those who have been traditionally excluded from the formal education system due to geographical, economic, or personal constraints.
- The Indira Gandhi National Open University (IGNOU) leads this initiative, supported by 13 other Open Universities and over 150 distance learning institutions under the conventional education framework, making a substantial impact on higher education enrolment in India.

## 2. **ODL's Appeal and Accessibility:**

- Its cost-effectiveness and the flexibility to learn while maintaining full-time employment make ODL particularly appealing.
- ODL breaks geographical barriers, enabling individuals in remote areas to access vocational programs that would otherwise be unavailable to them, thereby democratizing education across diverse socio-economic backgrounds.

## 3. **Supporting the Workforce and SMEs:**

- The global market's evolving skill demands, especially within SMEs, necessitate continuous learning opportunities, which ODL efficiently provides.
- For the vast majority of India's workforce employed in the informal sector, ODL offers a pathway to enhance skills, thereby potentially increasing productivity and employability.

## 4. **Vocational Education through ODL:**

- Institutions like the National Institute of Open Schooling (NIOS) and IGNOU have set precedents in offering comprehensive vocational training courses, thereby expanding the scope and reach of vocational education through ODL.
- These programs are designed to cater to the burgeoning demand for skilled labor in various sectors, including the traditional and emerging industries.

## 5. **The Transformation of Traditional Industries:**

- The leather and footwear industries in India, characterized by their rich heritage and significant economic contribution, exemplify sectors undergoing modernization and global market expansion, partly through ODL-facilitated vocational training.
- Supported by technological advancement and institutional infrastructure, these industries are transitioning towards more efficient, innovative, and competitive market positions (Bank, T. W. 2006).

## 6. **Programme Offerings and Objectives:**

- ODL institutions offer tailored certificate programs aimed at equipping learners with the necessary skills for various roles within industries, emphasizing hands-on training and practical knowledge.
- These programs aim to upgrade educational qualifications, offer in-house industry training for continuing education, and focus on skill development, capacity building, and employability enhancement.

## 7. **Methodology and Delivery:**

- IGNOU and similar institutions employ a multimedia approach in instruction, leveraging self-learning materials, audio/video aids, online

resources, and interactive sessions to ensure comprehensive learning.

- Personal Contact Programs (PCPs) and teleconferencing sessions are integral components, facilitating direct interaction and practical exposure, essential in vocational training.

## 8. **Impact and Future Prospects:**

- ODL is instrumental in bridging the skills gap in India, providing an effective platform for vocational education and training across sectors.
- As India aims for economic growth and a competitive edge in the global market, ODL's role in vocational education is set to become increasingly pivotal, offering scalable, flexible, and inclusive educational solutions.

## **Summary and Forward Outlook**

The imperative for a robust, skilled, and well-trained workforce is paramount for India's burgeoning economy. The conventional education system, while foundational, falls short of meeting the comprehensive skill demands of the modern workforce. This gap underscores the critical need for alternative educational models like Open and Distance Learning (ODL), which hold significant promise for bridging these gaps. ODL's capacity to deliver high-quality vocational education and training is increasingly recognized for its efficacy in fostering effective learning outcomes.

Particularly in developing countries, where the challenge is not only the sheer volume of workers requiring training but also the constraint of limited resources, ODL emerges as a pivotal solution. It presents a scalable, cost-effective method to enhance the skill set of the workforce, thereby contributing to the nation's economic development and global competitiveness. The flexibility of ODL platforms allows for the tailoring of educational programs to meet the evolving needs of various industries, ensuring that learners are equipped with the relevant skills required in today's job market.

Moreover, the adaptability of the ODL system facilitates continuous learning and upskilling, catering to the lifelong learning needs of the workforce. This is crucial in a rapidly changing global economy where new skills and knowledge areas are constantly emerging. Through ODL, learners have the opportunity to update their skills in accordance with the latest industry standards and innovations, thus maintaining their employability and contributing to the growth and sustainability of their sectors.

Looking ahead, the role of ODL in vocational education and training is set to expand, with technology playing a key role in this evolution. Innovations in digital learning platforms, AI-driven personalized learning experiences, and virtual reality-based practical simulations are likely to further enhance the effectiveness and reach of ODL. These technological

---

---

advancements, coupled with the scalability of ODL, could revolutionize vocational training, making it more accessible, engaging, and aligned with industry needs than ever before.

## CONCLUSION

As India continues to navigate its path toward economic prosperity and industrial diversification, the strategic integration of ODL into the vocational education framework represents a forward-thinking approach to workforce development. It not only addresses the immediate skill gaps but also lays the foundation for a resilient, adaptable, and skilled workforce capable of driving sustainable growth and innovation in the global arena. The potential of ODL to transform vocational education and training is immense, offering a beacon of hope for millions seeking to enhance their skills and contribute meaningfully to India's economic journey.

## REFERENCE

- Fozdar, B. I., & Kumar, P. S. (2008). The Role Open and Distance Learning in Vocational Education and Training in India Authors. <https://www.researchgate.net/publication/258149116>
- Sikandar, M. A. (2019). Open Distance Learning System: A Critical Reflection on the Issues, Challenges and Opportunities of Open and Dual Mode Universities in India. *Asian Journal of Managerial Science*, 8(1), 66–72. <https://doi.org/10.51983/ajms-2019.8.1.1445>
- Rao, K. S., Sahoo, B. K., & Ghosh, D. (2014). The Indian Vocational Education and Training System. In *India's Skills Challenge* (pp. 37–85). Oxford University Press. <https://doi.org/10.1093/acprof:oso/9780199452774.003.0002>
- Singh, S. P., Grover, S., & Padmanabhan, J. (2015). Vocational education in higher secondary schools. *Mediterranean Journal of Social Sciences*, 6(5), 455–466. <https://doi.org/10.5901/mjss.2015.v6n5p455>
- Vaishali, & Thakur, N. (2023). Re-Examining Vocational Education in Indian Education System on Reproducing Status quo among the Marginalized. *Diaspora, Indigenous, and Minority Education*, 17(3), 198–213. <https://doi.org/10.1080/15595692.2023.2193882>
- Fiagbe, Y., Amedorme, S. K., & Fiagbe, Y. A. K. (2013). Index Terms: Technical and Vocational Education and Training (TVET), College of Technology Education. *International Journal of Scientific & Technology Research*, 2. [www.ijstr.org](http://www.ijstr.org)
- Carruthers, Celeste K., and Christopher Jepsen. (2020). Vocational Education: An International Perspective. (EdWorkingPaper: 20-327).
- Paul, B., Pellissery, S., Shabnam, S., Paul, B. G., Bhardikar, K., Shabnam, S., & Sil, M. (2008). Educational attainment of youth and implications for indian labour market: An exploration through data. <https://www.researchgate.net/publication/292453203>
- Bank, T. W. (2006). SKILL DEVELOPMENT IN INDIA THE VOCATIONAL EDUCATION AND TRAINING SYSTEM Human Development Unit South Asia Region.