

Bridging the Gap: The Role of Apprenticeship Training Programs

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ABSTRACT

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This paper summarizes a study on the prospects and challenges of apprenticeship training programs for vocational students from schools in India. The study explores the current state of vocational education in India and the potential benefits of apprenticeship programs for students. It also discusses the challenges faced by the implementation of such programs, including the lack of coordination between educational institutions and industry, inadequate infrastructure, and inadequate regulatory framework. The study concludes that apprenticeship training programs have the potential to address the skills gap in India's workforce and improve the employability of vocational students, but significant efforts are needed to overcome the existing challenges and create a more supportive ecosystem for apprenticeship training programs in India.

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Introduction

The objective of the Apprentices Act, 1961 (The Apprentices Act, 1961) was to regulate the training program of apprentices in the industry by utilizing on-the-job training facilities. The Ministry of Skill Development and Entrepreneurship is responsible for implementing this act. The National Policy of Skill Development and Entrepreneurship 2015, launched by the Hon'ble Prime Minister on 15th July, 2015, places a strong emphasis on apprenticeship as a crucial program for creating skilled manpower in India. The policy aims to work proactively with the industry, including

the MSME sector, to increase apprenticeship opportunities in the country tenfold by 2020.

In India, vocational education has been identified as an essential tool for meeting the country's skilled workforce demands. Apprenticeship training is one of the significant aspects of vocational education, which is aimed at providing practical experience to students in various industries (Gupta, R., & Dharap, O. 2022). With the increasing demand for skilled workers in India's rapidly growing economy, apprenticeship training programs have become more critical than ever before. However, there are still significant challenges faced by vocational students and industry professionals in implementing these programs. This paper aims to explore the prospects and challenges associated with apprenticeship training programs for vocational students from schools in India. It will also examine the strategies that can be adopted to overcome these challenges and provide recommendations for the successful implementation of apprenticeship training programs in India.

Method

Overview of Apprenticeship Training Programs for Vocational Students in India

Apprenticeship training programs are designed to provide practical, on-the-job training to students who are pursuing vocational courses in India. These programs are meant to enhance the skills and knowledge of vocational students by giving them hands-on experience in a real-life work setting (FICCI 2023). The goal of these training programs is to prepare students for their future careers by providing them with the necessary skills and knowledge to succeed in their chosen fields. In India, apprenticeship training programs are governed by the Apprentices Act, 1961, which provides a legal framework for the training of apprentices in various industries. Under this act, vocational students can undergo apprenticeship training in various industries such as engineering, manufacturing, construction, automotive, and hospitality, among others. Apprenticeship training programs in India are typically offered by government bodies, industry associations, and private companies. These programs vary in length, with some lasting for a few months, while others may last for several years. During the training, students are given the opportunity to work with experienced professionals and gain hands-on experience in their chosen field. Apprenticeship training programs in India are a valuable resource for vocational students looking to gain practical experience and enhance their employability. These programs provide students with the necessary skills and knowledge to succeed in their chosen careers, while also providing a direct connection between students and employers.

Result and Discussion

Apprenticeship Training in India

It is crucial for Indian youth to acquire skills that contribute to modernizing the country. The current outdated systems must be replaced with a nationwide network of skill acquisition. It is

important that when these individuals travel abroad, their skills are recognized and valued. The Ministry of Skill Development and Entrepreneurship, Government of India has created the Apprenticeship Training Portal (ATP 2023) which provides all the necessary information on this initiative. As of 2016-17 to 2022-23, there are 35,229 active establishments with 21,71,431 enrolled apprentices. There are currently 1,06,907 active opportunities available, with over 648 courses and 6,02,760 apprentices engaged for the year 2022-23. Fig.1 given below is a breakdown of state-wise enrollment figures (Source <https://www.apprenticeshipindia.gov.in/>).

The current state of education calls for a reimagining of its structure to incorporate employability skills. Without this, individuals may face unemployment, and the economy may suffer from lower productivity. The current education system produces a large number of students who lack the necessary skills to keep up with modern job market demands. India currently has only 0.5 million apprentices, who are employed in various sectors like Healthcare & Pharmaceuticals, ITeS, BFSI, and e-Commerce among others. This is a dismal number when in contrast, Germany has 1.3 million, UK 0.71 million, and USA 0.63 million which speak volumes about the tremendous potential this has in skilling the 10 million youth entering the workforce every year. This signifies the enormous potential that apprenticeships have in skilling the 10 million youth entering the workforce every year. It has been observed that almost a quarter of apprentices get employed full-time within the same company, leading to reduced staff turnover rates and an influx of workers ready for higher-level training and promotional positions. Many of the case studies demonstrated that investment in apprenticeships offers a multitude of benefits for employers, such as reduced recruitment costs, improved job satisfaction, and achieving corporate social responsibility (CSR) objectives.

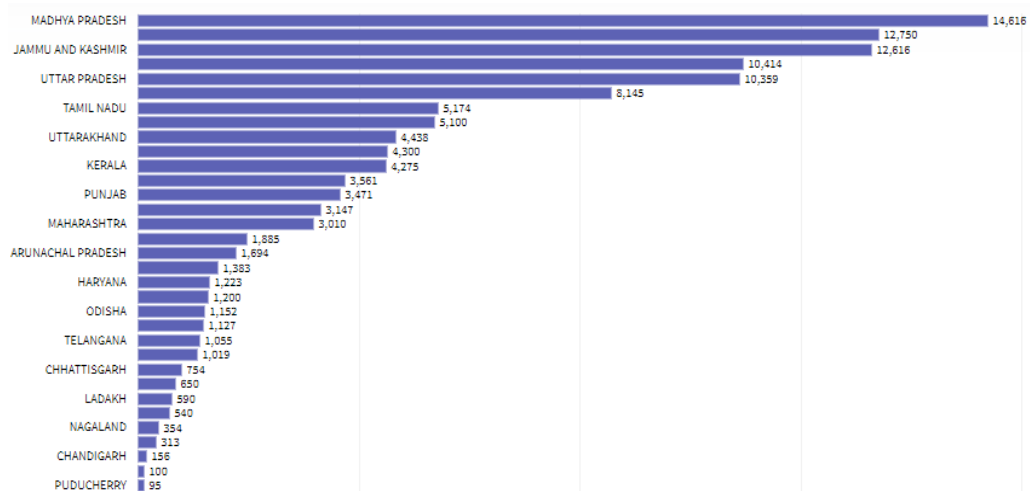


Fig 1: State wise student enrollment figure in Apprenticeship Training. (Source <https://www.apprenticeshipindia.gov.in/>)

Based on the description above, it can be concluded that there are several things that are important and need to be discussed. Namely, as follows:

Importance of Apprenticeship Training for Vocational Students in India

Apprenticeship training is an essential part of vocational education and training in India. It provides students with the opportunity to gain hands-on experience and practical skills, which are critical for success in the workplace (World Bank Report 2020). Here are some key reasons why apprenticeship training is important for vocational students in India:

- **Enhances employability:** Apprenticeship training equips students with industry-specific skills, making them more attractive to potential employers. It enhances the students' employability and enables them to secure better-paying jobs.
- **Bridges the skills gap:** Apprenticeship training helps bridge the gap between the skills required by industry and those possessed by students. It ensures that students have the skills and knowledge they need to succeed in the workplace.
- **Builds confidence:** Apprenticeship training provides students with the opportunity to apply their theoretical knowledge in a practical setting. This builds their confidence, helping them to become more self-assured and competent in their chosen field.
- **Increases productivity:** Apprenticeship training ensures that students are well-prepared to enter the workforce. It increases their productivity and efficiency, which can have a positive impact on the overall productivity of the industry.
- **Promotes lifelong learning:** Apprenticeship training is a continuous learning process that helps students to develop a thirst for lifelong learning. It helps them to stay updated with the latest trends and technologies, making them more adaptable and resilient in the face of changing job requirements.

Apprenticeship training is a critical component of vocational education and training in India. It provides students with practical skills, builds their confidence, and enhances their employability, making it an essential part of the educational landscape.

Prospects of Apprenticeship Training Programs for Vocational Students in India

The prospects of apprenticeship training programs for vocational students in India are significant. These programs can provide students with practical experience and industry-specific skills, making them more employable. Here are some of the prospects of apprenticeship training programs for vocational students in India (Naveen, H. M. 2022).

- **Increased employability:** Apprenticeship training programs provide students with hands-on experience in their chosen field, which makes them more attractive to employers.
- **Industry-specific skills:** Apprenticeship training programs are designed to provide students

with industry-specific skills and knowledge that cannot be gained from textbooks or classroom lectures.

- Career advancement: Apprenticeship training programs often lead to better-paying jobs and opportunities for career advancement.
- Reduced skill gap: Apprenticeship training programs help bridge the skill gap between what is taught in the classroom and what is required in the workplace.
- Industry collaborations: Apprenticeship training programs offer the opportunity for educational institutions and industries to collaborate, which can lead to the development of industry-specific training programs.
- Diverse job opportunities: Apprenticeship training programs offer a diverse range of job opportunities for students in various fields, such as manufacturing, construction, healthcare, and more.
- Entrepreneurial opportunities: Apprenticeship training programs also offer students the chance to develop entrepreneurial skills and start their own businesses.

Apprenticeship training programs have a positive outlook in India, and their prospects are likely to improve with increased government support and industry collaborations.

Challenges Faced in Implementing Apprenticeship Training Programs in India

- Perception and Attitude: One of the biggest challenges faced in implementing apprenticeship training programs in India is the negative perception and attitude towards vocational training. In India, vocational education is often seen as inferior to academic education, which discourages many students from pursuing such courses (Gupta, R., & Dharap, O. 2022).
- Lack of Industry-Academia Collaboration: Another major challenge is the lack of collaboration between industries and educational institutions. This makes it difficult for students to find suitable apprenticeship programs and for employers to find skilled workers.
- Limited Availability of Apprenticeship Opportunities: There is a limited availability of apprenticeship opportunities in India, particularly in rural areas. This limits the opportunities for vocational students to gain practical experience, and may result in a shortage of skilled workers in some industries.
- Insufficient Training Infrastructure: In many cases, vocational schools and training centres lack the necessary infrastructure to provide effective apprenticeship training. This includes access to modern equipment, technology, and resources that can simulate real-world work environments.
- Inadequate Funding: Another challenge is the inadequate funding for vocational education and apprenticeship training programs. Many educational institutions and training centres lack the

financial resources to provide quality training and support services to vocational students.

- **Quality Assurance:** The lack of quality assurance in vocational education and apprenticeship training programs is also a challenge. The absence of standardized curricula, assessment and certification mechanisms, and the accreditation of institutions leads to a lack of trust in the quality and relevance of vocational training.
- **Social and Cultural Barriers:** Social and cultural barriers such as gender discrimination, lack of awareness, and mobility issues are also significant challenges in implementing apprenticeship training programs in India. These factors may prevent many potential candidates from pursuing vocational education and apprenticeship training.

Government Initiatives and Policies to Promote Apprenticeship Training Programs in India

- **National Apprenticeship Promotion Scheme (NAPS):** The NAPS aim to promote apprenticeship training in the country by incentivizing employers to train apprentices in different trades. It provides financial support to both employers and apprentices, and also offers online registration and monitoring of apprenticeship programs (NAPS 2023).
- **Skill India Mission:** Launched by the Government of India, the Skill India Mission aims to train 400 million people in different skills by 2022. It focuses on promoting apprenticeship training in different sectors through various programs like Pradhan Mantri Kaushal Vikas Yojana (PMKVY) and Deen Dayal Upadhyaya Grameen Kaushalya Yojana (DDU-GKY).
- **Apprenticeship Act, 1961:** The Apprenticeship Act, 1961 is the primary legislation that governs the apprenticeship training in the country. It sets the framework for the engagement, training, and remuneration of apprentices and provides for the establishment of apprenticeship councils at the state and national levels.
- **National Skill Development Corporation (NSDC):** The NSDC is a public-private partnership that works towards promoting skill development in the country. It provides financial support to organizations to set up training centres and also offers support for the certification of skills acquired through apprenticeship training.
- **Ministry of Skill Development and Entrepreneurship (MSDE):** The MSDE is the nodal ministry responsible for the promotion of skill development in the country. It offers various schemes and programs to promote apprenticeship training and also works towards creating a conducive environment for the same.
- **Pradhan Mantri Kaushal Vikas Yojana (PMKVY):** The PMKVY is a flagship scheme of the Government of India that provides financial assistance to individuals for acquiring skills and certifications. It also supports the training of apprentices in different trades and sectors.
- **National Skill Certification and Monetary Reward Scheme (NSCMRS):** The NSCMRS provides

monetary incentives to individuals who acquire skills and certifications through apprenticeship training. It also provides support for the placement of certified individuals in different sectors.

Role of Educational Institutions in Promoting Apprenticeship Training Programs for Vocational Students

Educational institutions play a significant role in promoting apprenticeship training programs for vocational students in India (Naveen, H. M. 2022). Here are some of the key ways in which they can contribute:

- **Creating awareness:** Educational institutions can create awareness about the importance and benefits of apprenticeship training programs among vocational students. This can be done through workshops, seminars, and other forms of outreach.
- **Facilitating collaborations:** Educational institutions can collaborate with industry partners to facilitate the implementation of apprenticeship training programs. This can include identifying suitable employers, providing support in developing training curricula, and monitoring the progress of students.
- **Providing training facilities:** Educational institutions can provide training facilities and resources for apprenticeship programs, such as labs, workshops, and classrooms. This can help ensure that students receive high-quality training and that their learning is integrated with their academic studies.
- **Offering academic support:** Educational institutions can provide academic support to students participating in apprenticeship programs. This can include providing access to online resources, offering tutoring and mentoring services, and evaluating students' progress.
- **Monitoring and evaluation:** Educational institutions can play a critical role in monitoring and evaluating the effectiveness of apprenticeship programs. This can involve collecting feedback from students and employers, tracking the progress of students, and assessing the impact of the program on students' career prospects.

Educational institutions can act as a bridge between vocational students and employers, facilitating the development of a skilled workforce and contributing to the economic growth of India.

Benefits of Apprenticeship Training for Employers

Apprenticeship training programs offer a number of benefits to employers who participate in them (Gupta, R., & Dharap, O. (2022)). Some of the key benefits are:

- **Cost-effective:** Apprenticeship programs are cost-effective for employers as they provide them with a source of skilled labour at a lower cost than hiring skilled employees directly from the market.
- **Tailored training:** Apprenticeship training programs are designed to provide tailored training

to meet the specific needs of employers. Employers can provide on-the-job training to apprentices and train them according to their specific requirements.

- **Improved productivity:** Apprenticeship programs can help employers to improve the productivity of their workforce. Apprentices who are trained on-the-job can quickly acquire the necessary skills to become productive workers.
- **Increased loyalty and retention:** Apprenticeship programs can help employers to build loyalty and retention among their workforce. Apprentices who are trained on-the-job are more likely to stay with their employers for longer periods of time.
- **Reduced recruitment costs:** Employers can save on recruitment costs by hiring apprentices who have already been trained by them. This can help employers to reduce the cost and time involved in recruiting and training new employees.
- **Increased diversity:** Apprenticeship programs can help employers to increase diversity in their workforce. By providing training to people from diverse backgrounds, employers can build a more inclusive workplace culture.
- **Positive reputation:** Employers who participate in apprenticeship programs can benefit from a positive reputation. By investing in the training and development of their workforce, employers can build a reputation as a responsible and caring employer in the community.

The Role of ICT in Apprenticeship Training Programs in India

Information and Communication Technology (ICT) plays a crucial role in enhancing the quality and effectiveness of apprenticeship training programs in India. The use of ICT tools such as e-learning, virtual reality, and online platforms can facilitate the delivery of training content, improve learning outcomes, and promote student engagement (MoE 2023). These technologies can also support the provision of training in remote or rural areas, overcoming geographical barriers and enabling students to access training opportunities that may not be available locally. Furthermore, the use of ICT in monitoring and assessing student progress can provide real-time feedback to trainers, enabling them to tailor their training programs to meet individual learning needs. The integration of ICT in apprenticeship training programs can also help students acquire skills that are relevant to emerging industries and support India's transition to a digital economy. Therefore, it is crucial for educational institutions and policymakers to harness the potential of ICT to enhance the quality and accessibility of apprenticeship training programs in India.

Future Prospects of Apprenticeship Training Programs for Vocational Students in India

Apprenticeship training programs have the potential to play a critical role in the development of the Indian economy. With a young and growing workforce, there is a need to provide relevant and high-quality training to students, which can help them become skilled professionals and contribute

to the growth of various industries. In the future, apprenticeship training programs are expected to become more widespread and accessible, and the government is taking several measures to support their growth. The National Apprenticeship Promotion Scheme (NAPS) is one such initiative, which aims to provide financial incentives to employers who offer apprenticeship training to eligible candidates (NATS 2023). The adoption of new technologies is also expected to play a critical role in the growth of apprenticeship training programs. With the increasing use of digital platforms, it is possible to provide high-quality training to students irrespective of their location. This can help in overcoming the challenges of geographic barriers, and make apprenticeship training programs accessible to students across the country. Another area of growth for apprenticeship training programs is the emphasis on the skilling of women and other marginalized communities. With several initiatives in place to promote gender diversity and inclusivity, apprenticeship training programs can play a vital role in empowering women and helping them become financially independent. Apprenticeship training programs are poised to become a critical component of the Indian education system. With several initiatives in place to promote their growth, and the increasing adoption of new technologies, apprenticeship training programs have the potential to transform the Indian workforce and contribute significantly to the growth of the economy.

The Way Forward for Apprenticeship Training Programs in India

The apprenticeship training program is a crucial aspect of the vocational education system in India. To ensure its success and continued growth, there are several steps that can be taken (Gupta, R., & Dharap, O. 2022).

- Encouraging industry participation: Industries should be incentivized to participate in the apprenticeship training program. The government can provide tax incentives or subsidies to companies that hire apprentices.
- Increasing awareness: The general public, as well as students, need to be aware of the benefits of apprenticeship training. Educational institutions should make students aware of the opportunities available through such programs.
- Improving training quality: The quality of apprenticeship training should be improved, and it should be made more industry-relevant. There should be a greater emphasis on practical training and hands-on experience.
- Introducing apprenticeship training in new sectors: Apprenticeship training programs should be introduced in new sectors, such as healthcare, IT, and tourism, to name a few. This will provide students with more options and a greater range of opportunities.
- Emphasizing on-the-job training: Apprenticeship training programs should focus on on-the-job training. This will provide students with the practical skills they need to succeed in their chosen

fields.

- Partnerships with other countries: India should look to partner with other countries that have successful apprenticeship programs. This will help to exchange ideas and best practices, and further strengthen the vocational education system in India.

The apprenticeship training program is an important part of the vocational education system in India. By taking these steps, we can ensure that it continues to grow and develop, providing students with the skills they need to succeed in their careers, and helping to drive the economy forward.

Conclusion

Apprenticeship training programs for vocational students in India have immense potential to bridge the skills gap in the country and provide employment opportunities to the youth. However, several challenges need to be addressed to make these programs effective and sustainable. These challenges include inadequate infrastructure and resources, low awareness and participation from employers, and limited exposure to new technologies and innovations. To overcome these challenges, the government, educational institutions, and industry stakeholders must collaborate and invest in apprenticeship training programs. Moreover, these programs need to be designed and implemented in a manner that aligns with the evolving needs of the industry and ensures the employability of the apprentices. By doing so, India can create a robust and skilled workforce that can drive its economic growth and development.

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