

Challenges and Achievements in Implementing Skill Development Centres in Colleges: Evaluating Student Upskilling and Employability Outcomes

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This demand from graduates ready to enter the labour market has increased pressure on institutions of higher learning to focus on delivering skills-based education. Conventional academic programs tend to focus on theoretical learning, whereas modern labour markets require graduates with a set of technical, digital, and transferable skills. To address this dilemma, most institutions of higher learning have established institutional mechanisms to support competency development centres (SDCs) to improve students' employability rates and outcomes. This research paper examines the challenges and successes encountered in introducing skill development centres within higher learning institutions, and assesses their effectiveness in enhancing student upskilling and employability readiness.

The study employs a secondary data-based research design, grounded in peer-reviewed academic articles, institutional reports, and policy documents on graduate employability and skill development initiatives. The data were gathered through a systematic analysis of existing studies to identify the most important functions, results, and challenges of implementing skill development centres. These programs enhance career preparedness and facilitate the transition from education to work. Nevertheless, they still face several challenges, including resource scarcity, difficulty integrating the curriculum, gaps in faculty capabilities, and a lack of reliable industry partners.

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The study is important to the expanding research on higher education skills orientation as it offers a holistic paper to understand the role of skill development centres in the institution in closing the gap between higher education and labour market needs. **Keywords:** peacekeeping education; higher education strategy; DEMATEL; analytic network process; mixed methods; defence diplomacy; Indonesia

Keywords Skill Development Centres; Graduate Employability; Higher Education; Student

Introduction

The world has been undergoing significant changes in terms of higher education systems because of the high rate of technological development, globalisation, and the shift in the labour market. Historically, the main emphasis of universities was on the provision of theoretical knowledge and disciplinary skills but nowadays, the labour market requires graduates who are equipped with the skills of practical use, digital skills and transferable skills besides academic knowledge. This has led to graduate employability becoming a significant concern to governments, universities and policy frameworks interested in enhancing workforce readiness (Jackson, 2024; Tushar, 2023).

The skills are now crucial to the global economy based on knowledge as they are important to the economic productivity and innovation. Employers are placing a greater focus on a blend of technical, digital, and socio-emotional skills in the form of communication, teamwork, problem solving, and adaptability. The competencies are deemed critical to operate in complex professional settings and act efficiently in the environment of rapid technological change (Geng, 2025; Tushar, 2023).

Although there has been an immense growth in the number of people in the world who attain higher education, a lot of graduates still find it hard shifting between education and employment. A number of studies reveal that there has been a notable disparity between the skills gained in learning institutions and the demands of the employers in modern labour markets. The consequence of this skills mismatch is frequent underemployment, employment readiness, and professional career entry delays (Hartini et al., 2025; Awadhiya, 2025).

The digitalisation and the technological change have also enhanced the demand of new types of workforce competencies. Digital technologies, artificial intelligence, and automation are transforming employment patterns across industries, necessitating that graduates acquire high levels of digital literacy, analytical thinking, and lifelong learning skills. The studies show that the gaps in digital skills continue to be one of the significant issues in most countries, and education should be offered to include an organised programme of skills development which would meet the requirements of the new labour market (Cheng, 2025; Hartini et al., 2025).

To address these issues, institutions of higher learning have been campaigning with more institutional mechanisms that ensure that students have more chances of becoming employable. Out of these efforts, the introduction of Skill Development Centres (SDCs) has become one of the strategic ways of bringing practical skills training into the higher education systems. These centres are institutional platforms through which they offer structured training programs, professional certification, collaboration opportunities with industries and provide experiential learning programs to enhance the career readiness of students and their workforce readiness.

There are various roles played by skill development centres in institutions of higher learning. First, they offer the students the possibility to gain technical, digital, and professional skills that are added to the conventional academic study. Second, they enhance institutional partnership between universities and industry players to help in aligning curriculum with labour market demands. Third, these centres facilitate experiential learning with the help of internships, workshops,

simulations, and project-based training contributing to workplace preparedness in students (Scheuring, 2025; Farnese et al., 2024).

The empirical evidence indicates that involvement in organized skill development tools has a positive impact on the employability of students. Graduates who undergo practical training and internships and even work-integrated learning opportunities show both a better level of professional confidence, career adaptability, and job readiness than their colleagues who only use traditional classroom-based education (Jackson, 2024; Eimer, 2023).

Nevertheless, although they have become very important, the introduction of skill development centres in institutions of higher learning is usually marred by a number of institutional and structural issues. Limitations in resources such as inadequate funds, lack of adequate infrastructure and the lack of qualified instructors who are knowledgeable in the industry often compromise the smooth operation of such centres. Moreover, most tertiary institutions have challenges in connecting skill-based training in the traditional academic programs, which are often designed based on theoretical knowledge instead of practical skills (Geng, 2025).

The other important issue is that of sustainability of industry-academia partnerships. Even though cooperation with the industry is obligatory to have positive effects on the development of specific skills, such cooperations are usually not steady because of the variety of institutional interests and expectations. Moreover, it is still complicated to measure the results of skill development programs since employability is a multidimensional concept that encompasses skills acquisition, career adaptability, and long-term professional success (Cheng, 2025; Eimer, 2023).

Whilst the literature on the topic recognises the role of skill development initiatives in increasing graduate employability, little empirical research on the effectiveness of institutional skill development centres has been conducted. A

significant part of the available literature concerns employability models or policy frames, whereas comparatively little has been conducted in terms of systematic evaluation of the successes and difficulties related to the use of skill development centres at the institutional level. Specifically, there is little empirical research on the effects of such centres on quantifiable ratios of student upskilling, career preparation, and work opportunities.

In this regard, the current research seeks to investigate issues and successes related to the introduction of skill development centres in colleges, specifically how they have impacted student upskilling and employability outcomes. Through institutional experiences and outcomes of skill-development efforts, the study aims to provide insights that will enable policymakers, academic administrators, and learning institutions to develop more viable, employability-focused higher-education approaches.

1.1 Research Objectives

The current research hypothesises that Skills Development Centres (SDCs) enhance students' skills development and employability in institutions of higher learning. The following are the specific objectives of the study:

- The study aims to investigate how skill development centres can be used to improve the technical and transferable skills of the students in institutions of higher learning.
- To examine the role of skill development programmes in enhancing graduate employability and career preparedness.
- To determine the significant milestones related to the introduction of the skill development centres in colleges.
- To examine the major issues that have been experienced by institutions of higher learning in establishing and running skill development centres.
- To determine the connection between the use of skills development programs and graduates' employability rates.

To offer policy and institutional suggestions on how to make skill development centres in higher learning institutions more effective.

2. Literature Review

This section reviews existing scholarly work on skill development in higher education, with particular emphasis on the implementation of skill development centres and their role in enhancing student employability. It synthesises empirical and theoretical contributions from recent literature (2010–2025) to identify key achievements, challenges, and research gaps.

2.1 Higher Education Transformation to Skill Orientation.

Ever since 2010, the global higher education systems have been changing inclination towards knowledge delivery to competency-based learning in an effort to respond to labour market needs. Such change is influenced by worldwide skills deficiency, technological shaking, and graduate workability concerns (OECD, 2019; World Bank, 2020). Higher education centres are presently anticipated to produce workable graduates who will have not only technical skills but also transferable skills in addition to the mere academic knowledge.

Higher education is pegged on skill development initiatives based on the idea of human capital formation, in which education improves productivity and economic performance. However, recent studies focus on employability as a multidimensional construct that encompasses professional identity, social capital,

and career adaptability (Tomlinson, 2017; Clarke, 2018). Due to this, the emergence of Skill Development Centres (SDCs) within institutions has grown in a way that aims to provide structured delivery of practical training, experiential learning and competencies relevant to the industry.

This change has also been reinforced by policy frameworks. Indicatively, education policies in most nations, such as the National Education Policy (2020) of India focus on workforce readiness, i.e., vocational integration, industry association and flexible skill pathways.

2.2 Skill Development and Graduate Employability.

Graduate employability has risen to become a key performance indicator of higher education institutions. The ability to gain, sustain, and advance in employment by applying the applicable skills and competencies is often considered to be employability (Yorke, 2010). Empirical studies continue to indicate that regulated skills training has a major positive impact on career readiness and labour market performance.

Work-integrated learning, internships, and practical training settings have been shown to improve students' ability to leave education and enter the employment sector (Jackson, 2015). Empirical research proves that involvement in skill improvement training programs enhances professional confidence, career management skills, and job search skills (Bridgstock, 2011; Donald et al., 2019).

Furthermore, employability is highly reliant not just on technical skills but also on soft skills (communication, teamwork, problem-solving). Research indicates that employers place significant importance in regard to such transferable skills when making hiring decisions (Succi & Canovi, 2020). Therefore, successful skill development centres will take a holistic training methodology that lends technical training, behavioural and professional skill training.

2.3 Skill Development Centres Institutional Role.

Skill development centres are institutional practices that bridge the gap between education in academies and labour market needs. They offer systematic training courses, certification facilities and activities in the industry aimed at increasing workforce preparedness.

Skill centres have been found to enhance industry-academia partnership through facilitating curriculum alignment, professional mentoring, and real-world exposure (Jackson, 2016). Such alliances lessen the disparity among education results and employer anticipation which is broadly recognized as the key cause of graduate joblessness.

Experiential learning models are also supported in skill centres, and they focus on learning through a reflection of practical engagement. These methods utilize practical knowledge and advance performance in the workplace (Kolb, 2015). Also, skill centres are used in various institutions to facilitate entrepreneurship through innovation support, incubation services as well as training on business.

2.4 Rearranging Abilities in the Digital Economy.

According to the recent labour market research, it is important to note that the skill requirements are changing fast because of automation, artificial intelligence and digital transformation. Employers are starting to focus on digital literacy, critical thinking, and flexibility (World Economic Forum, 2023).

These developments have increased the strain on tertiary institutions to reform the curriculum and offer more flexible systems of training skills. Modular certification programs and micro-credentials are becoming significant instruments to certify a particular competency and facilitate lifelong learning (Wheelahan and Moodie, 2021). Digital change has then increased the scope of the skill development centres to include online learning platforms, simulation-based learning,

and competence-based certification, besides the traditional vocational training.

2.5 Skill Development Centre Achievements.

According to the empirical studies, there are a number of positive impacts that come as a result of the establishment of the skill development centres in the institutions of higher learning.

To begin with, they increase graduate employability by raising technical competencies and professional preparedness (Donald et al., 2019). Students who undergo systematic training in skills show better labour market performance and increased career confidence.

Second, the centres of skills enhance industry presence, which enhances the relevance of the curriculum and increases the likelihood of employment (Jackson, 2016).

Third, they facilitate lifelong learning, whereby they allow people to upgrade their skills continuously as a response to labour market changes (OECD, 2021).

Fourth, skill development programmes lead to career sustainability through improving adaptability and professional resilience to dynamic work environments (Clarke, 2018).

2.6 Implementation Problems of Skill Development Centres.

Even with these advantages, there are numerous structural and institutional problems with regard to the implementation of skill development centres.

Resource limitation is one of the primary obstacles, and it may be the lack of funding, infrastructure, and training equipment (World Bank, 2020). Most of the institutions cannot afford to sustain a high quality of practical training environments.

There are also challenges with curriculum integration wherein the traditional academic structures are usually hard and slow to change. Training of skills is often regarded as an addition to degree programs instead of being the primary one (Cabral & Dhar, 2019).

Another important problem is faculty ability. Competency-based education will demand the use of instructors who have real experience in the industry and most of the institutions do not have this.

Collaboration in the industry, despite being a necessity, is not constant as there are mismatched expectations between employer and academic institutions (Tomlison, 2018). Lastly, measurements of results of skill development are difficult. There are no unified systems of competency acquisition and long-term employability measurement that are commonly utilized in institutions (OECD, 2019).

2.7 Newer Trends in the research on Skill Development.

Recent literature points to a number of new directions in the research of skills development:

- digital and hybrid training system integration.
- scaling up of micro-credential programs.
- focus on sustainable employability.
- evidence-based assessment of skills learning.
- development of ecosystem at a policy level.

These trends indicate that skill development is changing to be not only single, isolated training programs but rather institutional and policy systems.

2.8 Research Gap

Although there is an increasing literature on graduate employability and skill development in higher learning and education, few studies have studied the institutional performance of Skill

Development Centres towards the systematic improvement of quantifiable student upskilling and employability outcomes. The current literature is essentially on employability frameworks or policy debates but empirical assessment of institutional skill development projects is under-researched. More specifically, the study of the role of structured skill development centres in terms of assisting graduates in acquiring technical skills, being career ready, and preparing the graduates to enter the labour market is under-researched. Thus, the proposed research will fill this gap by investigating the barriers and successes linked to the introduction of Skill Development Centres in higher education institutions and assessing the individual contribution to enhancing the student upskilling and employability outcomes.

2.9 Conceptual Diagram

Figure 1 presents the conceptual framework of the skill development ecosystem that contributes to graduate employability outcomes. The model underscores the interrelationships among policy frameworks, educational institutions, industry partnerships, and structured skill-development functions in improving students' competencies and career readiness.

On the institutional level, educational institutions form the centre stage where the process of skill development is applied in terms of Skill Development Centres and curriculum integration. These centres are used to provide structured training programs to improve the practical skills and professional readiness of students.

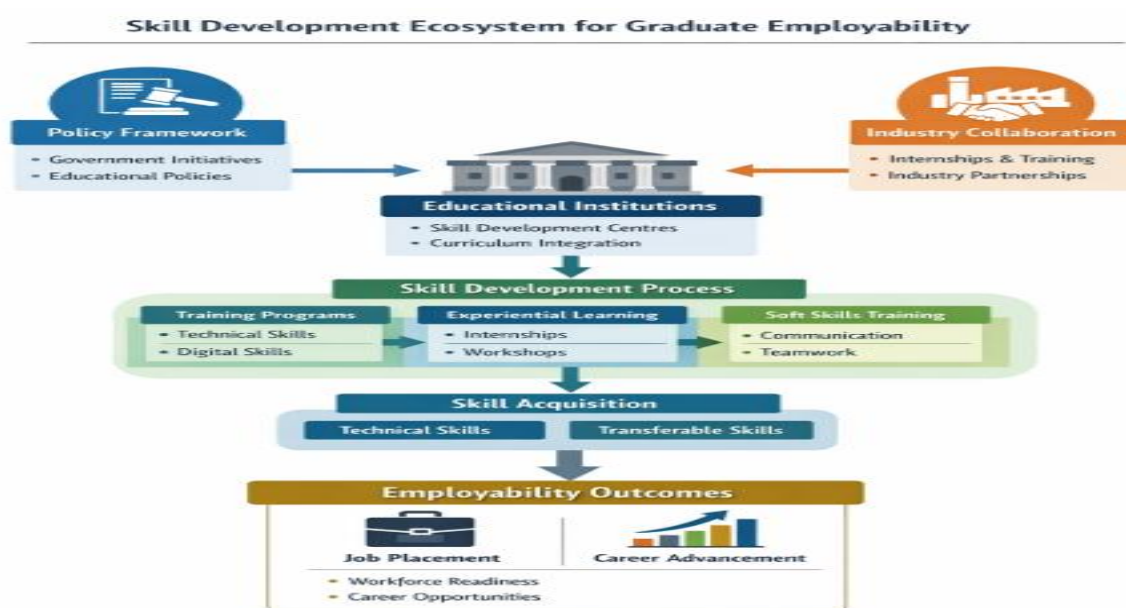


Figure 1: Conceptual Diagram

The framework also highlights the need to support policy and to collaborate with industry to enhance skill-development initiatives. Government policies and educational reforms encourage skill-based education, and industry-related partnerships provide opportunities for internships, professional training, and experiential learning. This kind of collaboration aligns skill development programs with labour market needs.

The process of skill development comprises several important components, including technical training, digital skills development, experiential learning opportunities, and soft skills training. These activities enable students to develop technical skills as well as transferable skills such as communication skills, team building skills and problem-solving skills.

The competencies gained eventually result in better outcomes of employability, such as employment opportunities, workforce preparedness, and career progression opportunities. As such, the framework shows how the synergies in action by policymakers, educational institutions, and industry stakeholders help in creating skilled graduates

that are more adequately prepared to operate in the demands of the contemporary labour markets.

3. Research Methodology

3.1 Research Design

The current research paper is based on a research design of secondary data to investigate the issues and successes that come with the introduction of Skill Development Centres (SDCs) in institutions of higher learning and to identify the role of Skill Development Centres in the outcomes of upskilling and employability of students. The analysis of secondary data is a well-developed methodological procedure in educational and policy research, especially when the task to be accomplished is the synthesis of the current evidence and the detection of the general tendencies in the institutions. Through examining already published research and policy reports as well as institutional reports, the researchers may gain a wholesome understanding of intricate processes like training, skills development and graduate employability.

The research project adheres to the descriptive and analytical research design. The descriptive

element addresses the recording of the structure, functions and implementation mechanisms of the skill development centres in the institutions of higher learning. This involves looking at the kind of training programs provided, the nature of industry partnerships, as well as approaches used by institutions in enhancing the professional competencies of the students. The analytical part aims at explaining the correlation between skill development projects and employability performance through critical analysis of the existing evidence on the matter as well as institutional evidence.

The design that is suitable in this study is the use of secondary data based design since the research purpose is not restricted to the analysis of a particular institution but the purpose is to comprehend wider institutional and policy processes related to skill development initiatives in higher education. The synthesis of the findings of numerous sources allows the study to give a global view of how the functions of the skill development centres as institutional mechanisms of improving the graduate employability work.

3.2 Data Sources and Data Selection Criteria.

The research will be based on the multiple secondary data sources to guarantee the credibility, validity, and completeness of the analysis. The peer-reviewed academic journal articles, policy reports, institutional documents, and international education and labour market publications containing the data were redirected at the skill development and employability in higher education.

A systematic literature selection was used to arrive at the sources that were considered relevant to the study. The articles utilized in the analysis were published mainly in journals in the sphere of higher education, employability, workforce development, as well as educational policy. To make the data relevant, the study paid primary attention to the literature that was published within the period of 2015 to 2025, which is in touch with the current trends of the

development of skills and the changes in the labour market.

Besides academic sources, policy documents and institutional reports on the skill development programs were also examined to gain information about the real course of such a program in educational institutions. These reports can be of great help in terms of understanding the organisation of the programs, models of training, strategies of the institutions, and the cooperation with industry partners.

The choice of secondary sources was made according to certain inclusion criteria. To ensure academic reliability, first, only scholarly publications peer-reviewed and credible policy reports have been taken into consideration. Second, the sources used in the analysis were required to present the empirical evidence or conceptual discourses concerning the skill development programs or employability skills, or workforce preparation in higher education. Third, there was a focus on the latest research that explores how the skills demanded by the modern labour markets change.

Reliance on various sources of secondary data enables the study to incorporate information on institutional and policy settings. This method makes the research strong as it allows evaluating the success and the difficulties connected with the introduction of the skill development centres in colleges in a complex way.

3.3 Data Analysis Techniques and Analytical Framework.

The conceptual framework used in the analysis of this study relates institutional skill development initiatives to graduate employability outcomes. In this context, the idea of skill development centres is developed as institutional processes that help acquire the necessary competencies which are demanded in the contemporary labour markets. These skills are technical, digital literacy, and professional communication skills among other transferable skills that increase the employment preparedness of students.

The study analytical framework is based on two major dimensions, which are skill development initiatives and employability outcomes.

The development of skills is known as institutional interventions carried out in the form of skill development centres; this includes skill development programmes, certification programs, industry workplaces, internships, and field work. Such programs are meant to provide the students with practical skills that will add to their theoretical knowledge.

The results of employability depict the visible effects of these types of initiatives on the career readiness and integration in the labour market on students. These are results such as development in technical and soft skills, development of professional confidence, development of workplace preparedness and better alignment of academic training and employer expectations.

In order to analyze these dimensions, the research paper uses a number of complementary methods of analysis.

First, the descriptive analysis is going to be employed in order to determine the structure and the nature of the operations of the skill development programs in the institutions of higher learning. This discussion aims at determining what kind of programs are provided by skill development centres as well as the institutional strategies applied in advancing the learning of skills.

Second, comparative analysis is carried out with the aim of assessing the variation in the implementation of the skill development initiatives in different institutional contexts. The analysis compares the evidence presented in various studies and institutional reports and brings to light the general trends both in the success and the shortcomings of skill development centres.

Third, a thematic analysis is utilised to draw knowledge about the reviewed literature and policy documents. With the help of thematic analysis, the common themes associated with skill

attainment, collaboration with the industry, institutional obstacles, and the results of employability are identified and interpreted systematically. This is done to enable the study to categorise qualitative evidence that is complex into meaningful analytical categories.

Lastly, trend analysis will be used to analyse the general trends in skill development programmes and graduate employability over time. This method will assist in determining the extent to which the educational institutions are changing their strategies to match the changes in the labour market.

The descriptive, comparative, thematic and trend analysis combines into a rigorous methodological framework to assess the effectiveness of skill development centres on improving student upskilling and employability outcomes. The approach of synthesizing the information presented by different secondary sources will result in the study becoming a coherent and analytically sound source of knowledge regarding the development of skills initiatives in the higher education systems.

4. Analysis and Discussion

4.1 The Skill Development Centre contribution to Student Upskilling.

The scope of the literature analysis, as well as institutional reports, shows that Skill Development Centres (SDCs) are significant in the context of enhancing the competencies of students and making them more equipped to work in professional settings. Such centres have increasingly become strategic tools by higher education institutions in their bid to close the widening gap between academic knowledge and those of the labour market. Conventional academic programs commonly focus on learning theory, but the skills development centres allow learning in a more practical manner through practical training and competency-focused learning. The findings indicate that internships and work-integrated learning represent the most dominant skill development activities, accounting

for approximately 35% of student participation. This suggests that experiential learning plays a central role in enhancing workplace preparedness among students. These results are consistent with previous studies highlighting the importance of work-integrated learning in improving graduate employability (Jackson, 2015; Bridgstock, 2011).

There is empirical evidence to indicate that engagement in organized skill development programs has a significant role to play in the development of technical and transferable skills in students. Discipline-specific professional skills, digital literacy, and technological proficiency make up technical competencies, and communication, teamwork, problem-solving ability, and adaptability make up transferable skills. They are the competencies that are commonly identified as the key conditions of graduate employability in the modern labour markets (Jackson, 2015; Succi & Canovi, 2020).

Moreover, skill development centres often implement the types of learning, where experiential learning is used permitting the students to get practical experience of the theoretical knowledge in practice. The activities which include internship, project-based learning, simulation and industry mentoring programs have been found to increase the professional competence of students and their preparedness to work. Experiential learning theory states that practical interaction together with reflective learning, can contribute to the acquisition of skills and application of knowledge significantly (Kolb, 2015).

Moreover, the digitalisation of workplaces that is rolling and rising has increased the extent to which skill development centres can facilitate digital skills. Information technology, digital communication and data analytics are some of the areas where training programs are offered so that the students are equipped with skills that are in tandem with the emerging demands of technologically oriented industries. Skill development centres, therefore, are significant institutional platforms for providing students

with the skills that they need in the contemporary labour market.

4.2 Attainments of the Skill Development Centres in the Higher Education Institutions.

The introduction of skill development centres has produced several positive impacts in the institutions of higher learning. Among the most outstanding ones is the increase of graduate employment possibilities. Students who have undergone skill training programs tend to be more competent professionally, better career prepared, and more confident as they venture into the labour market.

The studies prove that the organized skill development initiatives enhance knowledge of the students regarding workplace expectations and recruitment. Interview preparation, professional communication, and career planning training activities enable students to acquire the right skills needed to make a successful transition to employment (Donald et al., 2019). These initiatives do not only help the students improve their technical knowledge, but also their professional identity and career management.

The other notable success is associated with the enhancement of industry-academia partnership. The centres of skill development are often run in collaboration with industry organizations, which offer students training and mentorship as well as internship opportunities. Such associations aid in aligning the educational programs to the needs of the industry and give the students a good exposure to working life. As pointed out by previous research, the good interaction of learning institutions with the industry players has an enormous impact in increasing the relevance of the learning programs and the likelihood of the graduates securing employment (Jackson, 2016).

The development of the skill centres also helps in promotions of entrepreneurial competencies among the students. Entrepreneurship training, innovation workshops, and support of startup incubation are part of the skills development

efforts of many institutions. This type of programs motivate students to consider career opportunities as entrepreneurs and innovators and development in the economy.

In addition, these centres also promote the idea of lifelong learning which has taken on a greater significance in the fast-changing labour markets. The ability to upgrade skills continuously helps people adjust to the new demands of the job and the changing technologies, which can enhance the long-term sustainability of the career (Clarke, 2018).

4.3 Some Problems in the Operation of Skill Development Centres.

Though there may be advantages related to the skill development programmes, there are institutional and structural issues that influence the successful realisation of the skill development centres in the institutions of higher learning. The absence of sufficient financial and infrastructural resources can be regarded as one of the most commonly cited problems. To establish and operate skill development centres, there is a need to invest in facilities of training, technological equipment and professional instructors. Most institutions, however, have financial constraints which reduce their capability to offer a high-quality practical training environment.

The other significant issue is the need to incorporate skill development programs to the current academic programs. The programs related to the development of skills are considered as secondary programs in most universities but not as part of the academic systems. Such separation lowers the efficiency of these initiatives since students can view them as non-valued elements of their education instead of necessary ones (Cabral & Dhar, 2019).

Faculty proficiency is also a matter of serious concern. A good skill-based education must have an instructor possessing a good academic qualification and experience in the industry. Nonetheless, a lot of institutions of higher learning experience challenges in attracting

faculty members with good professional experience in the industry fields. Consequently, training programs provided in various institutions may have different quality and practical implications.

Moreover, sustainable industry relationships are a complicated issue to keep. Despite the need of collaboration with industry in terms of initiative to develop skills, such partnerships are usually not very successful because of the institutional disparities in terms of institutional priorities, expectations and operational structures. Long-term cooperation needs to be established through constant communication, coordination and commitment between the institutions of learning and the stakeholders in the industry.

The other difficulty is associated with the assessment of employability results. In contrast to the traditional academic results, employability results are multidimensional and presuppose the acquisition of skills, the ability to adapt to the career, and the proficiency throughout the professional experiences. Lack of standardised assessment systems also complicates the systematic measurement of the effectiveness of skill development programs by institutions (OECD, 2019).

4.4 Impact of Skill Development Centres on Graduate Employability

The synthesis of the secondary data implies that the skill development centres can be a great boost to the graduate employability if handled well. These centres resolve the skills differential that has frequently been between curriculum and labour market expectations by offering specialised training programs that are based on real-world competencies and career progression.

Students enrolled on the skill development programs are usually better prepared to enter the work environment and have a higher capacity to change between school and work. Internship programs and training in the industry provide students with hands-on experience and enable them to build their professional contacts and

know what to expect in the workplace. This matters since such exposure enhances their chances of being employable and easier into the labour market (Bridgstock, 2011).

The other significant effect of skill development centres is the establishment of career adaptability. In the fast-shifting labour markets, the same must be in terms of the capacity to learn continuously and upgrade with the new technological and professional demands. Skill development programs help students to take a lifelong learning orientation, which increases the effectiveness of

responding to changes in the labour market (Clarke, 2018).

In general, the analysis shows that skill development centres are a useful institutional approach to enhancing graduate employability outcomes. Their success, however, lies in their ability to integrate the curriculum, good collaboration with the industry, proper institutional resources and systematic evaluation mechanisms.

Global Skill Gap and Employability (Gallup Report)

Category	Percentage
Employers believe graduates are well prepared	11%
Employers believe graduates lack the necessary skills	89%

According to the Gallup workplace report, there is a tremendous disparity between higher education achievement and employer demands. The Gallup survey has provided only 11% of employers to think that graduates are sufficiently prepared to work in the labor market, and 89% of employers state that graduates do not have the necessary professional skills needed by contemporary working environments.

This is the gap, showing that academic curricula do not match labour market requirements. A good number of graduates have theoretical skills but have not acquired practical skills of

communication, problem-solving, teamwork, and digital skills. Employers hence stress on the need to have experiential learning opportunities, internships, and training programs that are associated with industries.

The results indicate that higher education institutions should intensify learning that is based on skills by means of organized programs like Skill Development Centres. These centres will be able to narrow the knowledge gap between education and employment by offering students practical training, industry exposure and professional skills.

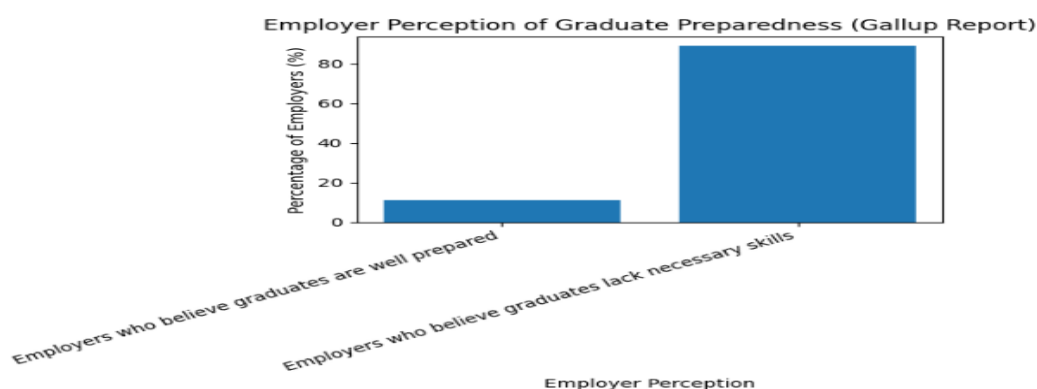


Figure 2: Gall report 2023

4.5 Student involvement in Skill Development Initiatives.

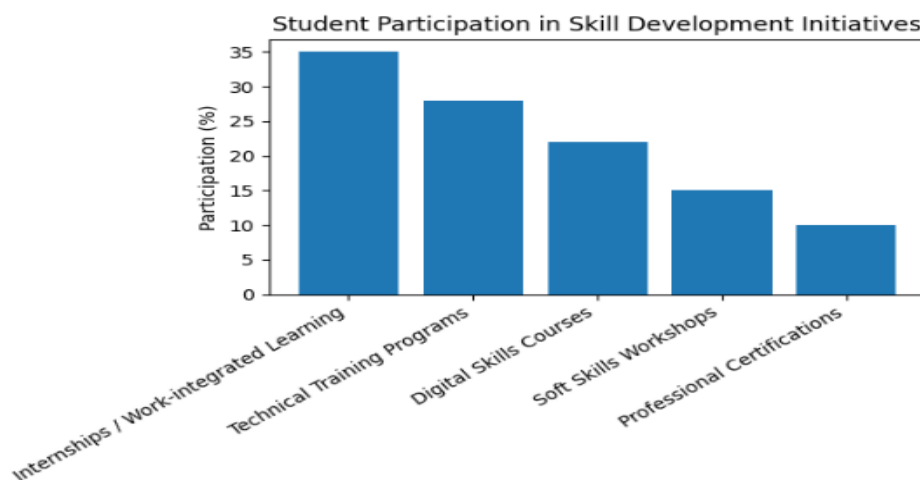


Figure 3: Students' Participation in Skill Development Initiatives

Figure 3 indicates how the students engage in different initiatives of skills building that is often used in institutions of higher learning. The data proves that internships and work-integrated learning programs are the most common type of skill development activity, which occupy about 35% of the participation.

Internships offer the students real life exposure to the professional work environment allowing them to put theoretical knowledge into practical use. It has been shown that work-integrated learning has a great impact in terms of increasing the workplace preparedness and professional skills of students.

Technical training programs (28%), including training in discipline-specific skills, such as engineering techniques, lab training, software tools and technical industry-specific certifications are the second largest category. These programs are aimed at developing technical skills of students and matching their knowledge with industry standards.

Digital skills courses explain the participation of about 22% of the population who have taken digital skills courses as the competency in the labour market continues to become more important. The areas considered in digital skill training usually entail programming, data

analytics, information technology, and digital communication.

The participation in soft skills workshops such as communication skills, training on leadership and teamwork development is about 15% of the participation. Even though these programs make a lesser proportion, employers are always finding soft skills as the main elements of graduate employability

Lastly, professional certification programs share the same participation at approximately 10 percent implying that there are students who are offering additional qualifications to enhance their professional qualifications and to better chances of employment.

These results prove that experiential learning and technical training are the most widespread types of skill development programs in institutions of higher education. These programs are also important in developing the competencies of the students as well as easing their transition from education to employment.

Policy Implications and Future Research, Conclusion.

5.1 Conclusion

The current paper has explored the issues and successes that revolve around the establishment of Skill Development Centres (SDCs) in institutions of higher learning with a special interest in how the latter have contributed to student upskilling and employability levels. The secondary data analysis and available academic literature reveal that skill development centres have become significant institutional processes used to convert the gap between academic education and labour market needs.

The results have shown that the centres of skill development play an important role in developing both the transferable and technical competencies in students. These centres increase the professional competencies of the students and their readiness to work through systematic training courses, certification courses, internships and learning opportunities. Specifically, the combination of applied training with the theoretical one allows students to gain the skills that are relevant to the workplace and are gradually expected by the current labour markets.

Also, the paper points out that skills development centres facilitate the cooperation between industry and academia that is critical towards matching the educational outputs to the demands of labour markets. Industry organizations can also offer students a great exposure to the working conditions in the industry and help them to develop industry-specific competencies. Such partnerships also make educational programs more relevant and increase the chances of graduates finding a job.

Nonetheless, the research also presents a number of institutional and structural issues that are

related to the establishment of skill development centres. Such issues involve the lack of financial and infrastructural resources, the challenges associated with incorporating the skill development programs into the dynamics of the conventional academic programs, the deficiency of the faculty members with industry experience, and the inconsistencies in the sustainability of the industry partnerships. Also, the absence of standardised structures to assess the outcomes of employability implies that institutions cannot check the effectiveness of skill development programs in a systematic manner.

In general, the research indicates that skill development centres are the areas that can greatly improve graduate employability, but their performance is highly conditioned by the institutional commitment, sufficient resources, high levels of co-operation with industry and the ability to be integrated into the higher education systems.

5.2 Policy and Institutional Implications.

The implications of the findings of this study are quite a few to policymakers, institutions of higher learning and stakeholders in the industry. To begin with, the educational policymakers ought to foster policies that will lead to systematic incorporation of skill development programs in higher education programs. Skill development activities should be incorporated in academic programs instead of being looked at as supplementary programs in order to make sure that every student undergoes the benefits of having practical training and learning based on competencies.

Second, institutions of higher learning must intensify the industry partnerships systems so that the skills development programmes are relevant in the changing labour market requirements. Long term collaboration with industry bodies could also help in providing internship programs, mentoring programs and joint training programs that will help the students get more practical training.

Third, universities and colleges ought to invest in training facilities and development of faculty members so as to enhance the quality of the skill development programs. Hiring faculty members as instructors who have prior experience in the industry and offering their members a chance to develop their skills professionally can be a great boost to the efficiency of skill-based education.

Fourth, organizations ought to come up with standardized systems of measuring employability performance. The systematic evaluation of skill mastery, career preparedness, and job placement outcomes would help the institutions to track the quality of the skills development programs and implement evidence-based changes to their programs.

Lastly, the policymakers ought to promote the growth of digital and technology-based competency training, especially in data analytics, artificial intelligence, and digital communication. Such skills are becoming crucial in labour markets that are technologically oriented and may greatly improve graduate employability.

5.3 Limitations of the Study

Although the study offers very useful information about the role of skill development centres in higher education, it is limited in some way. To begin with, the study relies on the secondary data, which restricts the possibility to attain the in-depth institutional experience and perspectives of students. Surveys or interviews as a type of primary data collection might help gain a better understanding of the success of skill development programs.

Second, the investigation does not concentrate on the particular institutional case studies but on the general tendencies and practices in terms of skill development centres. Consequently, the difference in the implementation plans in the various educational settings might not be well reflected.

References

Third, there are various factors that affect employability results and are not limited to skill development programs; labour market factors, economic factors, and individual preferences that affect career choices. This is because these wider contextual issues were not analyzed in detail as within the confines of the current research.

5.4 Future Research Recommendations.

The findings of this study can be extended to future studies through investigating a few key areas in line with the development of skills and employability in higher education. At the first level, primary data collection may be conducted to investigate the perceptions, experiences and results of students participating in program of skill development. Such research studies would give more information on how well these initiatives were successful at the institutional level.

Second, future studies may carry out comparative research between various institutions or countries of higher learning to find out the best practice during the implementation of skill development centres. A comparative study would assist in identifying institutional measures that can be most effective in enhancing the results of employability.

Third, future research might be the long-term career performance of graduates who undergo skill development programs. A longitudinal study of the progression of careers, job satisfaction, and professional mobility would give a more in-depth view of the effect of skill development programs.

Lastly, the study should also focus on how the development of digital skills and new technologies could influence the employability outcomes of higher education in the future. The question of how educational institutions can best prepare students to work in digital workplaces will be one of the key research areas as the phenomenon of technological transformation continues to transform the labour markets.

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