

# **Students' Career Prospect After Higher Education in Ghana: A Literature Review**

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## **Abstract**

This study evaluated how well Ghanaian higher education curriculum connects with the labor market. The study adopted the secondary data collection method to review the related literature. The study adopted scholastic tools like google scholar, scopus, and other global and African data sources to review empirical literature on Ghanaian high education curriculum and labor market. The findings indicate a significant discrepancy between what companies require and what students learn. Employers are increasingly seeking graduates with emotional intelligence, effective communication, and problem-solving abilities in addition to technical talents. The results also highlight the significant lack of hands-on training and exposure to real-world situations that prevent graduates from being truly prepared for the workforce. The study highlights the need for curriculum reform, which suggests that academic programs must incorporate both technical and soft skills. If this curriculum is to continue to be relevant to the demands of the modern labor market, there is a need for increased cooperation between academia and industry. In order to influence career preparedness programs, internships, and professional certifications, employers should be involved in curriculum design and offer their distinct perspectives. In order to better prepare our students for future success, these skill gaps should be filled through academic opportunities that incorporate experiential learning and strategic relationships in the academia. The study's limitations are described, including the challenges of obtaining up-to-date information and the irregularities in research methods of the literature reviewed, offering some indicators that require more investigation to address the problems. Longitudinal studies of graduate outcomes across time would be especially valuable for comprehending the long-term consequences of curricular change and interventions to increase employability.

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### **Abbreviation**

HEI	–	Higher Education Institution
TVET	–	Technical and Vocational Education and Training
LMD	–	Labour Market Demand
WIL	–	Work-Integrated Learning
CBET	–	Competency-Based Education and Training
ILO	–	International Labour Organization
STEM	–	Science, Technology, Engineering, and Mathematics

## **Chapter One**

### **Introduction**

#### **Background**

Higher education is seen as a critical social economic development foundation by the world, as a base for innovation, workforce development, and progress in countries (Dzisi & Odoom, 2017; Miranda et al., 2021). Countries everywhere have realized the importance of well-educated populations in catalyzing economic growth and contributing to the competitiveness of them in the ever more intertwined global economy (Rahiman & Kodikal, 2024). Higher education has been one of the key components of national development strategies to produce knowledge driven graduates who can adapt to the changing job market demand. This is true even in nations that have well established educational systems, where they cannot ensure that higher education is effectively preparing graduates for the workforce (Delucchi et al., 2024; Han et al., 2024).

In many places, including parts of Africa, there is a disconnection between higher education and employment outcomes (Tight, 2024). It is often cumbersome for graduates to shift to the world of work, and such a process is made worse by factors including economic instability, gap between skill and labour market needs, or lack of job (Ndayambaje et al., 2016). These challenges are particularly acute in countries where growth in higher education has been faster than the labor market or industry relevant training programs (Owusu-Mintah & Kissi, 2017). Asiedu et al. (2023) asserted that graduate underemployment and unemployment have found their places on the table of concern for educators, policymakers and employers.

The context of Ghana has progressed in expanding its higher education sector (Bans-Akutey et al., 2023). The number of higher education institutions in Ghana, public universities and private colleges, has risen over the past few decades (Winful et al., 2022).



This expansion has enabled many young Ghanaians to gain access to tertiary education, enabling them to take on academic and gain professional strides (Damoah et al., 2021). Major scholars in Ghana have conducted studies which have indicated that higher education in Ghana results in good career outcomes for its graduates (Ofosu, 2018).

Although the number of graduates keeps growing, many graduates face a challenge in getting employment which matches their academic qualifications (Ofosu-Boateng, 2018). Graduate employability has come under sharp focus among researchers and policymakers in Ghana as some graduates do not have the ability to attain economic security and there is direct implication to the nation's developmental process. Factors affecting the graduate career prospects in Ghana include relevance of academic programmes to the needs of the job market, provision and non-provision of practical aspects of training and, strength of partnerships between universities and industries.

Comprehensively, therefore, a systematic review of existing literature on career prospects of graduates after higher education in Ghana is necessary. This can help policy and institutional actors improve their alignment of educational outputs with labor market expectations by analyzing employment trends, barriers to job market entry, and effectiveness of policies and institutional practices. This review will add to an improved understanding of how higher education contributes to career trajectories in Ghana and how to imbue future graduates with greater employability.

## **Problem Statement**

Unemployment in Ghana remains a critical issue despite the significant expansion of higher education. As of 2023, Ghana's general unemployment rate stands at approximately 13.4%, with youth unemployment reaching a staggering 28.8%. On average, more than three-quarters (77.4%) of the total unemployed persons in the first three quarters of 2023 comprise the youth aged 15 to 35 years (1,374,329) (Ghana Statistical Service, 2023). Many graduates

struggle to secure employment that matches their qualifications, raising concerns about the effectiveness of the higher education system in preparing students for the labor market. This misalignment between academic attainment and career success undermines the potential benefits of higher education as a driver of economic development and social mobility (Poku et al., 2013).

The general unemployment situation in Ghana, exacerbated by high graduate unemployment rates, underscores the urgency of addressing this problem. Although global studies have extensively examined higher education and employment outcomes, specific gaps persist in understanding the transition from higher education to employment within the Ghanaian context. Bridging these gaps is crucial for comprehending the factors influencing graduates' career prospects and developing strategies to enhance their employability.

A significant gap exists in the alignment between the skills imparted by higher education institutions and those demanded by employers (Ofosuhene, 2023). While substantial research has explored these skills mismatch internationally, few studies focus specifically on Ghana. Detailed investigations into how well Ghanaian higher education curricula align with labour market demands are needed. For example, in 2022 the Association of Ghana Industries revealed that 50% of employers observed a disparity between job requirements and skills possessed by graduates and consequently, focused on the need for curricular reforms (Winful et al., 2023). Unemployment rate is so high in Ghana because of the high level of illiteracy which demotivates entrepreneurs to employ people.

While socio-economic factors are known to be important determinants of unemployment outcomes, there is a lack of similar findings in the current research agenda (Aboagye & Puoza, 2021a). More studies are required to investigate how socio-economic background affects access to networks, resources and placement opportunities. In Ghana, the unemployment rate for graduates from lower socio-economic backgrounds is 35% higher

than their counterparts from relatively affluent backgrounds (Ghana Statistical Service, 2023).

Breaking down and understanding those barriers can help illuminate the inequalities at play in job prospects and future policies to address those inequalities. The need for equity and inclusion in the higher education system has never been greater, and understanding these dynamics is critical to achieving this end. Also, despite a general consensus on the value of practical experience, very little research has been produced on the success of internship, mentoring and other employability schemes in Ghana. Only 20% of graduates undergo structured internships, according to the National Youth Authority (Ghana Statistical Service, 2023). Assessing the effect of these programs on employment outcomes will enable evidence-based recommendations for the scale-up of effective initiatives and their incorporation into higher education curricula. Programs such as these are critical to preparing students with the real-world skills and professional networks they need to be successful in the workforce. There is much discussion of the broader economic landscape in Ghana covering topics such as job creation rates and the saturation of the labor market, but little specific analysis of how these extend to graduates. This constitutional amendment will require more research to parse the relationship between the economy and employment outcomes for higher education graduates.

### **Objective of the Review**

The aim of this systematic literature review is to evaluate the extent to which higher education curricula in Ghana correspond to employment. This review examines how well current academic degree programs prepare students with the right skills, knowledge, and competencies that employers need. This is to gain an evidence-based insight into the degree

to which the programmes taught at Ghanaian higher education institutions meet the changing demands of different industries and to point out existing gaps.

### **Research Question**

1. What are the most common skill gaps reported by employers regarding new graduates?

## **Chapter Two**

### **Methodology**

#### **Research Design**

This systematic review is designed according to the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) guidelines (Pahlevan-Sharif et al., 2019). Using a systematic approach, the review enables the identification of patterns, trends, and gaps in the existing literature on the topic of graduate employability (Uttley et al., 2023). This type of design is well-suited to tackle the complexities between educational outcomes and labor market needs in order to incorporate multiple sources and methodological approaches (Pieper, & Rombey, 2022). So overall, the research design does not just add to the review's rigor but also offers rich insights to educators, policymakers, and stakeholders in higher education programs development and improvement (Pieper & Rombey, 2022).

#### **Data Sources**

A systematically searching across multiple electronic databases was used for collating relevant literature on higher education curricula and labor market demands in Ghana (Pollock & Berge, 2018). The key databases and repositories utilized included Google Scholar, which offered a diverse array of scholarly articles; JSTOR, recognized for its comprehensive archives of academic journals; and the Education Resources Information Center (ERIC), which specializes in educational research. Moreover, Scopus was used due to its coverage of the peer-reviewed literature across multiple disciplines while Web of Science was chosen for its extensive citation data and multidisciplinary research. In addition, AJOL database (African Journals Online) was used to collect region-specific studies and publications that will integrate well with the contextual part of Ghana.

## Search Strategy

This was to enable me to identify relevant literature on the problem of the conditions under which higher education curricula aligns with labor market demands in Ghana. First of all, predetermined keywords and search terms would be established (Yepes-Nuñez et al., 2021). Some key terms included:

"higher education in Ghana," "universities in Ghana," "tertiary education in Ghana," "academic programs in Ghana," "education curriculum in Ghana," "curriculum alignment," "graduate employability in Ghana," "labor market in Ghana," "job market trends in Ghana," "workforce needs in Ghana," "industry requirements in Ghana," "skills mismatch in Ghana," "competency gaps in graduates," "graduate skills readiness," "practical learning in higher education", "industry partnerships in education," "employer feedback on graduates in Ghana," "graduate outcomes in Ghana," "education policy in Ghana," "curriculum reform in Ghana," "employer expectations for graduates in Ghana," and "student perspectives on career preparation in Ghana."

Boolean operators (AND, OR) were used to narrow down the searches to ensure that the most relevant studies were identified (Canelón & Boland, 2020; Hiebl, 2023). Each database was searched systematically with the keywords. To ensure the openness and reproducibility of the search process, detailed records were kept that documented the search strings and strategies that were used for each of the several databases (Hiebl, 2023). The search was performed iteratively; it could be adjusted based on the preliminary results and the emerging areas in the literature (Pieper & Rombey, 2022). This enabled the identification of these additional relevant keywords/phrases to incrementally improve the comprehensiveness of the search results (Uttley et al., 2023).

Besides the database searches, the review also addressed the reference lists of all studies identified to locate more relevant literature (Abutabenjeh & Jaradat, 2018; Sidharth, 2023). Backwards citation chaining was then performed to identify any additional insights and key studies that may have been missed (Cash et al., 2022). Systematic database search, fine-tuning of search keywords and reference mining resulted in a rigorous search strategy, with the intent to identify the maximum relevant peer-reviewed literature available related to the study goals (Cronje, 2020; Sidharth, 2023; Tiruneh, 2019).

### **Inclusion and Exclusion Criteria**

These parameters are needed to ensure quality studies included for the review that focuses on the alignment of higher education curricula to labour market needs specifically among studies in Ghana (Gaus, 2017; Islamia, 2016).

### **Inclusion Criteria**

Studies were included in the review if they fulfilled the following criteria:

- The study focused on higher education curricula only, which were universities and colleges in Ghana.
- Graduate employability and skills alignment studies correlated labour market needs with academic programs.
- Only peer-reviewed scholarly papers, reports and related grey literature were included to ensure the findings were reliable and credible.
- I prioritized literature that had been published in the past 10 years, in order to capture contemporary trends and developments.
- To ensure consistency in interpretation and analysis, all selected studies were published in English.

## **Exclusion Criteria**

Studies were excluded from the review if they met the following criteria:

- Articles were excluded if they were not related to higher education research in Ghana or if they were based on primary or secondary education.
- Articles not related to the relationship between curricula and labour market demand were excluded as well as articles focusing only on theory with no empirical data.
- I excluded publications that did not undergo the peer review process, such as opinion pieces or nonacademic reports that did not involve some type of rigorous methodology.
- In order to guarantee transparency in the results synthesis, I did not consider studies published in a language other than academic English.

These criteria facilitated a comprehensive understanding of the extent to which higher education curricula in Ghana align with labor market needs, allowing the review to encompass a relevant and high-quality body of literature.

## **Data Extraction Process**

This literature review was performed in order to systematically extract relevant data from articles included in the review. A standard data extraction form was created to allow for consistent extraction of key information from each publication (Farrall, 2021). This tool allowed the systematic collection of key factors such as study characteristics, methods, key findings, reported skill gaps, and practical learning elements (Ranganathan, 2019).

Study characteristics were the first data extracted (e.g., authors, year of publication, type of study [qualitative, quantitative, or mixed- methods]). The research design, sample



size, and data collection methods were recorded in order to evaluate the rigor and reliability of the findings (Haque, 2022). The results extracted were findings that referred to the alignment of higher education curricula with the demands of the labor market and that highlighted some skills, competences and identified needs of the labor market according to employers. Skills gaps reported by employers, for example regarding new graduates, were also noted, revealing areas of concern and opportunity. The presence and effectiveness of such learning opportunities were tracked through documentation of any mentions of practical components such as internships and cooperative education programs.

The next step involved the grouping of the extracted data for ease of analysis and synthesis. The main categories included the context of the study, which described the customers and settings in which the customers were studied, with emphasis on describing if the study occurred in a public or private institution. The publication should also contain summaries of employers' feedback on graduate preparedness and the competencies sought by employers in the labor market. The process also collected notes regarding how curricula have evolved in response to shifting job market needs, identifying innovative practices and challenges faced within institutions.

This systematic approach to data extraction ensured comprehensive literature review, thereby capturing relevant findings as input for subsequent analysis (Sidharth, 2023). In the end, the structured approach increased the credibility of the conclusions of the review about the alignment between higher education curricula and labour market needs in Ghana (Reeves & Reeves 2023).

## Quality Assessment

Another essential part of this systematic review was the quality assessment of the selected studies, which would ensure that the identified findings would be robust, and reliable (Kumatongo & Muzata, 2021). Standard quality assessment tools were applied to assess the methodological quality and credibility of each study. In particular, Critical Appraisal Skills Program (CASP) checklists and Joanna Briggs Institute (JBI) assessment criteria were utilized to systematically assess the quality of the included research (Easterday et al., 2018).

Appendices were used to address specific issues, such as a list of criteria used in the assessment, such as clarity of a research question, appropriateness of methodology, and validity in data collection (Groenewald, 2004). Studies were assessed for sample size and sample selection to ascertain whether they reflected the general population. Furthermore, the instruments used for data collection were verified for their reliability, while analytical techniques were assessed for their appropriateness in order to draw conclusions (Chu et al., 2017).

A quality rating was assigned to each study (high, moderate, or low) based on these criteria. High-quality studies were defined as studies that demonstrated a rigorous methodological approach and provided sufficiently robust evidence to support its findings (Ansari et al, 2022). Studies of moderate quality were characterized by positive factors, but also had shortcomings that may influence the assessment of their findings. Methodological rigor was absent in low-quality studies, which would make their conclusions unreliable (Khan, 2023).

The quality assessment of each epidemiological study would facilitate the identification of reliable evidence and minimize the bias which could result from the review.

However, by looking at the quality of each study, the review was able to weigh the findings appropriately in order to build on a synthesis of the literature (Chege & Otieno, 2020) . The extension of rigorous quality assessment of included studies ultimately strengthened the activities of the systematic review and provided for more nuanced understanding of the consonance between higher education curricula and labor market demand in Ghana (Van Witteloostuijn et al., 2022).

### **Data Synthesis**

The process of extracting the insights from the selected studies and synthesizing them into the systematic review conclusions was used to understand the alignment between higher education curriculum and labor market demands in Ghana (Hiebl, 2023). For the purpose of qualitative synthesis, evidence has been examined for common themes, trends or topics in relation to curriculum effectiveness and curriculum-industrial need coherence (Munn et al., 2018). This included coding the data extracted and grouping similar concepts to represent similarities among studies (Pahlevan-Sharif et al., 2019). Charts formed the foundation of careful observation, and three emerging themes were formed: preparing practical skills, employer expectations, and embedding feedback from industry in the curriculum (Hiebl, 2023).

The review sought to integrate qualitative findings to theoretically summarize how Ghanaian higher education institutions are modifying their curricula to respond to labor market pressure. This process identified successes and areas for continued improvement, shedding light on the changing connection between education and jobs (Yepes-Nuñez et al., 2021).

Several limitations may have influenced the interpretation of the results of the systematic review (Rethlefsen et al., 2021). Identifying and addressing these limitations was key in maintaining the credibility of the review findings and trustworthiness of its conclusions. A key limitation is the heterogeneity of the studies included. The varying research designs, sample sizes, and methodologies may pose challenges for a direct comparison of findings (Pieper & Rombey, 2022). To overcome this, the review used a quality assessment process to determine the strengths and weaknesses of each study. That is, the synthesis qualitatively graded the quality of evidence to offer a balanced and contextualized interpretation of the findings.

Another limitation of the review is the dependence on English language article sources, which can limit the breadth of a review by potentially omitting pertinent studies published in other languages (Donato & Donato, 2019). This linguistic restriction may provide a limited perspective on the subject. Future studies might address this by widening the language criteria to include research written in local languages, offering broader insights into how higher education curricula correspond with workforce needs (Donato & Donato, 2019).

Also, although the review aimed to include perspectives from a variety of stakeholders from educators to employers it mainly examined published studies. This emphasis may neglect some perspectives, especially those of recent graduates and students, whose experiences are essential for understanding the practical products of higher education (Ahn & Kang, 2018).

The review followed the PRISMA guidelines to reduce biases and to enhance transparency and rigor in the methodology of systematic reviews (Ahmad et al., 2023). A comprehensive description of the methodology was documented, and the strategy of the

search clearly specified to guarantee reliability. Employing a structured and systematic approach throughout the review process helped mitigate potential biases. To complement these approaches, the review adopted a highly pragmatic approach, accompanied by considerable efforts to minimize bias and optimize comprehensiveness, in order to enhance the overall validity and reliability of the findings and ultimately to ensure the findings could help shed some light on the relationship between higher education curricula and demands in the labor market in Ghana (Uttley et al., 2023).

### **Ethical Considerations**

The quality of the systematic review process took ethical consideration as a significant guide to support ethical academic conduct. Given that this review involved analyzing previously published literature, as opposed to collecting primary data, several key ethical considerations were addressed.

First, the review was consistent with and embodied academic integrity principles by acknowledging and crediting the authors of the ideas and findings (Munn et al., 2023). All studies included were also heavily referenced in order to uphold intellectual property rights and avoid plagiarism. By transparently and accurately citing all relevant studies, this demonstrates ethical compliance as well as enhances the credibility and reliability of the review process (Pahlevan-Sharif et al., 2019).

The review considered ethical considerations related to the use of grey literature and unpublished reports, where relevant, permissions were obtained (Hiebl, 2023). This content was created using data from sources that were accessed legally, and proprietary content used was done so in strict accordance with the provisions of copyright law. The review followed

copyright laws and accepted ethical principles in research and thus respected original content providers' rights and adhered to high standards of ethical principles (Rethlefsen et al., 2021).

Moreover, implications of the findings for relevant stakeholders such as educators, policy holders, and students were discussed (Pieper & Rombey, 2022). This review therefore sought to contribute constructively to discourses on educational reform in Ghana by synthesizing evidence on the extent to which higher education curricula are aligned with labour market demands. Since the results have the potential to impact policy choices and changes to curricula, the research was conducted with a priority to social responsibility, to ensure that the research promoted positive educational outcomes and advantages to a larger part of the society.

Further, although the review did not entail interaction with human subjects, consideration of graduate, student, and employer perspectives within the analysis of literature was maintained. Blending these different perspectives resulted in a somewhat fair view of whatever was being talked about. Such analysis could be complemented by future research that would involve the collection of qualitative data from these groups themselves, thereby ensuring that their voices are present in the debate surrounding alignment between education and employability (Yang et al., 2018).

## Chapter Three

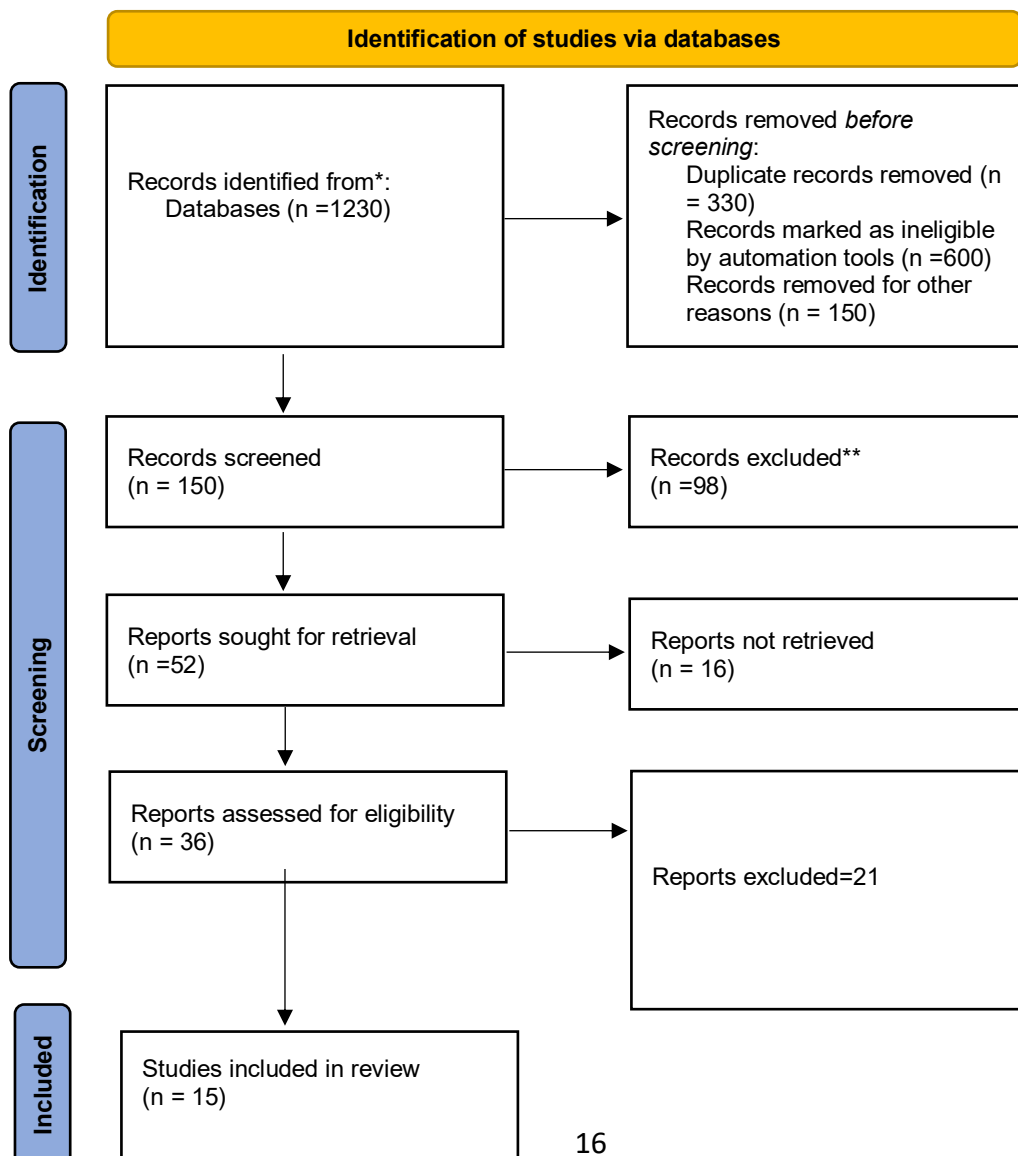
### Results

#### PRISMA Report

This systematic literature review sought to guarantee a thorough, open, and repeatable search and selection procedure by using the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) methodology, which is summed up in figure 3.1 below.

Overall, 15 studies met the inclusion criteria and were included in this review.

#### Identification of Studies Via Databases



***Figure 3.1: PRISMA Flow Diagram***

**Presentation of Selected Studies**

A total of 15 publications were selected for this review. Table 3.1 shows a detailed outline of the various papers.



SN	Title	Authors	Year	Aim/Objectives	Study Design	Sample Size	Findings	Conclusion	Strengths	Weaknesses/Limitations
1	Actions to Improve Current State of Student Employability Skills Development in Ghana's Public Universities	Bethel T. Ababio	2016	Assess employability skill development efforts of Geography departments.	Qualitative case study	65	Stakeholders suggested innovative approaches, curriculum reviews, and workshops for students and staff.	Geography departments must adopt innovative practices and improve curricula periodically.	Unique perspectives from stakeholders in Geography departments.	Limited to Geography departments, missing insights from other disciplines.

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2	Employability Skills and Job Performance of Graduate Students in Developing Countries	Felix K. Opoku, Dominic D. Arthur, et al.	2024	Investigate the influence of skill mismatch on employability and job performance.	Quantitative (PLS-SEM)	580	Skill mismatch significantly moderates employability skills and job performance.	Addressing skill mismatches is crucial for improving job performance.	Large and diverse sample size; strong focus on practical implications.	Did not consider longitudinal data; limited focus on industry-specific skills.
3	Usefulness of Problem Tree, Objective Tree, and Logical Framework Matrix	Irénée Ndayambaje, Philothère Ntawiha, et al.	2016	Provide a framework for addressing unemployment in Rwanda, Kenya, and Ghana.	Thematic analysis	Secondary data	Logical frameworks help analyze causes and propose solutions to graduate unemployment.	Logical frameworks guide effective interventions for unemployment issues.	Demonstrates a structured, practical approach.	Relies on secondary data; may not fully capture contemporary challenges.

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4	Higher Education and the Labour Market: A Logical Framework	Kwabia Boateng	2022	Explain the weak linkage between higher education output and labour market needs.	Analytical framework	N/A	Weak linkages lead to unemployment and reduced returns on educational investments.	Strengthening education-labor market linkages is critical for economic growth.	Comprehensive framework applicable across African countries.	Outdated data limits applicability to current contexts.
5	Demographic Characteristics and Employability Skills Among Tertiary Graduates in Ghana	Moses Segbenya, Nana Y. Oppong, et al.	2023	Examine how demographic characteristics influence employability skills.	Explanatory sequential	2,632	Gender and academic qualifications significantly affect employability skills.	Strengthening academia-industry collaboration is key to reducing skill mismatches.	Large sample size; diverse demographic insights.	Focus limited to Ghana; potential response biases.

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6	Institutional Strategies and Graduate Employability Development Skills	Esther Asiedu, Afia Nyarko Boakye, et al.	2023	Examine institutional strategies and their impact on employability .	Explanatory research design	1,280	Institutional strategies positively impact employability skills via graduate capital forms.	Institutional approaches can enhance graduate employability .	Robust sample size; strong analytical design.	Limited to business students; cross-sectional data only.
7	Employability of Mechanical Engineering Graduates from Sunyani Technical University	Bernard Aboagye, Julius Caesar Puoza	2021	Assess employment status and barriers for mechanical engineering graduates.	Stratified random sampling	131	84% employed; challenges include inadequate practical training and job-seeking skills.	Enhancing practical training and industry collaboration can improve employability .	Engineering-specific insights; practical recommendations.	Focus on one discipline; lacks longitudinal tracking.

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8	Impact of AI Usage on Postgraduate Employability Skills	M. Segbenya et al.	2023	Explore AI's role in postgraduate employability skills and challenges.	Mixed-methods study	294	Overuse of AI negatively impacts employability skills like problem-solving.	Proper AI training can mitigate its adverse effects on employability skills.	Integrated quantitative and qualitative methods.	Limited to postgraduates; findings not broadly generalizable.
9	Embedding Social Enterprise Skills Within Ghana's Higher Education Framework	Ernest Christian Winful et al.	2022	Investigate social enterprise skills to address graduate unemployment.	Concept mapping	N/A	Social enterprise education alleviates youth unemployment through skill-building.	Universities must integrate social enterprise education into curricula.	Demonstrates relevance of social enterprise in employment solutions.	Lacks empirical data on long-term impacts.

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10	Entrepreneurship Education on Wholesale? Considerations on Didactics and Pedagogy	Mavis Serwah Benneh Mensah	2023	Explore entrepreneurship education's role in addressing graduate unemployment.	Conceptual exploration	N/A	Entrepreneurship education is vital for reducing unemployment.	Aligning education policy with economic needs can enhance job creation.	Conceptual framework with clear policy implications.	Lacks empirical data; theoretical exploration only.
11	Employability of Higher Education Institutions Graduates	Katherine Fulgence	2015	Examine entrepreneurship education and skills programs' influence on employability.	Mixed-methods, triangulation	378	Programs enhance employability through skill development and competencies.	Skills programs and entrepreneurship education are critical for graduate employability.	Comprehensive analysis using mixed methods.	Limited to Tanzania; qualitative reliance may introduce bias.

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12	Exploring the Destinations of Higher National Diploma Graphic Design Graduates	Josephine Sarpong-Nyantakyi, Patrick Osei-Poku	2020	Investigate career pathways of Graphic Design graduates and assess curriculum.	Quantitative, tracer study	1,013	Most graduates pursue further education rather than enter the workforce.	Curriculum revision to a competency-based model is recommended.	Detailed analysis using transcripts; curriculum-specific insights.	Focuses only on Graphic Design graduates.
13	Ghanaian Tertiary Graduates' Perception of Entrepreneurship Education	Kofi Ashiboe-Mensah	2017	Assess entrepreneurship education's impact on employment opportunities.	Cross-sectional survey	325	84% of students believe entrepreneurship education fosters practical business skills.	Entrepreneurship education can reduce unemployment by fostering self-employment.	Clear focus on practical applications and policy implications.	Limited to one institution; findings may lack broader applicability.

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14	Quality Assurance and Employability of Graduates in a Ghanaian University	John Kwame Boateng, Akosua Eghan, Mavis Adu	2015	Explore quality assurance's impact on employability .	Survey-based research	230	84% employment; private sector dominant; key skills include communication.	Quality assurance fosters employability , though gaps in facilities and industry ties remain.	Practical focus on skills and employability gaps.	Limited industry collaboration; inadequate support services noted.
15	Evaluating Entrepreneurship Education as a Tool for Economic Growth	Gerald Dapaah Gyamfi	2014	Examine entrepreneurship education's role in economic growth through job creation.	Quantitative, descriptive statistics	100	Entrepreneurship equips graduates with business creation skills but remains theoretical.	Practical approaches needed to maximize entrepreneurs hip education's impact.	Highlights entrepreneurship's potential for job creation.	Limited focus on practical training; single institutional context.

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## **Chapter Four**

### **Synthesis of Findings**

#### **Curriculum Design and Relevance**

The design of curriculum and its relevance to the labor market is a crucial issue for higher education in economies like that of Ghana. There are also several studies that focus on the misfit between the skills graduates gain and the skills that employers demand. The urgency of updating curricula to better reflect changing needs in the job market is evidenced by frequent skill gaps. According to Ababio (2016), integrating competency-based training into academic programmes could bridge the gap to the knowledge requirements in industry and expectations from typical educational outcomes. According to Boateng et al. (2015), the educational curricula should be more responsive to the changing needs of both local and global job markets.

Although higher education institutions need to adapt their curricula to national labor market needs, a gap still persists. Employers say graduates lacked both technical and soft skills, lowering their employability (Ababio, 2016). Sector skills deficits are exacerbated by theoretical-heavy education in areas such as technology and healthcare. Skills gaps identified in employer surveys include skills in communication, critical thinking, and workplace adaptability (Mensah, 2020). Effective models, such as Germany's dual education system, combine industry collaboration with practical training. Universities need to overhaul curricula via experiential learning, industry partnerships, and competency-based education. The focus of this research is to help bridge this gap, thus improving both employability and economic development to guarantee that graduates possess the skills necessary for an ever-changing labor market (Ndayambaje et al., 2016)

Moreover, entrenchment of entrepreneurship education as a critical component in skill multiplication is seen as a panacea to matching skill shortages and also producing self-employment as a means of reducing unemployment especially in areas where formal employment opportunities are limited. According to Mensah (2020), entrepreneurship education provides a significant role to empower students into carrying knowledge and expertise critical for thought of starting up and administrating the businesses. Despite its significance, however, they are mostly unpractical in entrepreneurship courses which frequently do not provide proper training. According to Gyamfi (2014), there is a need for a more practical hands-on entrepreneurship education, specifically the development of business models and integration into real life application. In addition, Ashiboe-Mensah (2016) critiques this current state of entrepreneurship education by balancing the available theoretical knowledge with practical exposure to practical business environment. The gap in practical training limits the capacity of graduates to convert their entrepreneurial knowledge into practical business ventures which are keys to eventual self-employment.

### **Employability Skills Development**

Discussion of graduate readiness for the labor market often revolves around the theme of employability skills development. Many such studies pinpoint key core skills from a technical competence to an emotional intelligence, communication, and problem solving, as contributing factors toward graduate employability. Segbenya et al. (2023) states that gender and technical skills, as well as academic skills, greatly influence the acquisition of these employability skills, with a clear focus on boosting technical and emotional skills in the workplace. Similarly, Boateng et al. (2015) also highlight that communication and problem-solving skills are critical as they help to prepare graduates to be able to respond to the dynamic challenges they encounter in their professional life. For instance, Aboagye and Puoza (2021) analyze mechanical engineering graduates who observed technical competence

to be of great importance in securing employment but that job seeking mastery and practical training are additional requirements. Taken together, these studies indicate that if higher education institutions want to put more focus on balanced, essential, employability skills including technical and interpersonal skills, they need to integrate employability courses into curricula.

Institutional strategies for graduate employability are essential, for obvious reasons, other than individual skill development of graduates. In the paper of Asiedu et al. (2023), the authors investigate how their institutional approaches of incorporating social, cultural and psychological capital in employability training endeavor to project its impact on enhancing the career aspirations of graduates. How to enable universities to foster environments that develop these forms of capital and as such improve the employability of students? Likewise, Winful et al. (2022) maintain that the provision of social enterprise education within the higher education framework is a pragmatic approach toward addressing graduate unemployment. Such approaches, they say, provide students with skills beyond the technical ones that also prepare them with entrepreneurial mindset and social capital to successfully enter into the job market. In both studies it is indicated that employability does not depend merely on academic training but is contingent on the total institutional context and on graduate capital. Therefore, improved transitions from education to employment are probably a result of purposeful institutional actions that support these assets.

### **Challenges and Barriers**

Skill gaps and mismatches are seen as important barriers to employability for graduates. Many studies find that the mismatch between the skills students develop in higher education and the skills employers demand is a significant obstacle to securing employment. Opoku et al. (2023) particularly state that in developing countries, new constructs are needed

to align the skill gap between graduates and job requirements in an evolving job market, to better tailor our education system for the state of the economy. Similarly, Segbenya et al. (2023) mention that demographic variables (gender and educational background [level of education]) contribute to the ability of graduates to learn skills for employment. Boateng et al. (2015) similarly emphasize that without addressing these technical mismatches to their skills graduates can face increased rates of unemployment or under-employment. Both the labor market, soft skills, and other evidence collectively support the urgent need to transform the curricula offered by higher education.

In addition to the wider problem of skill mismatches, specific challenges within disciplines compound employability hurdles. The nature of certain academic disciplines, such as mechanical engineering and graphic design, requires an intermediary stage between formal education and finding employment, which can act as a barrier to transitioning into the workforce seamlessly. Insufficient practical training and incompetency in industry-specific skills are principal determinants impeding the employability of mechanical engineering graduates (Aboagye & Puoza, 2021). It serves as a great study for us to realize that practical skills like experience and job-seeking skills can directly affect an individual's employability. Sarpong-Nyantakyi et al. (2020) opens up to some of the problems that would eternally be faced by a lot of graphic design graduates in Ghana, especially with the disconnect between market needs and the curriculum offered in schools. They point out that a significant percentage of HND (Higher National Diploma) graduates would rather go on to further education than enter the job market, implying that the one received is not well suited for the jobs available. The findings suggest that career-focused disciplines should bridge the gaps in practical skills as well as curricular career support to provide smoother pathways into the workforce. Both these studies point to a greater need for collaboration between academia and

industries to ensure that graduates are better equipped with the right tools in their arsenal to take on their respective work domains.

### **Role of Stakeholders**

Industry–academia collaboration can be used to create graduate employability with stakeholders playing a crucial role. Ongoing research suggests collaboration of academia and industries can provide a huge boost to the employability of the young work force in different countries around the globe. According to Segbenya et al. (2023), academia–industry collaboration plays an important role in closing the gap between the skills taught in educational institutions and the skills employers require. Incorporation of industry expertise in curriculum can ensure that the passed out graduates are competent with applied industry competencies in job market. Similarly, Aboagye and Puoza (2021), and Dawure (2022), also add that industry partnerships underpin the employability of graduates as one of the practices that allows individuals to acquire practical knowledge in their jobs. In addition, alongside this Boateng et al. (2015) further supports that collaboration with the industry provides an opportunity to know about new trends and technologies which ensures that academic programs keep up to date and are responsive to what the labor market needs. Thus, it is both a responsibility and an opportunity to foster closer ties between academia and industry for the benefit of graduate outcomes.

Improving employability readiness also ties to critical roles for stakeholder input into curriculum design. According to Ababio (2016) curriculum development should involve diverse stakeholders such as the student, the employer, and the academic staff. These groups of people, working together, can bring more effectiveness to the curriculum to better meet labor market needs and those of students. Particularly, engaging employers allows higher education institutions to directly collect feedback as to which skills and knowledge employers

value most, and incorporate these into the relevant curriculum. Universities that receive feedback from academic stakeholders and industry stakeholders are best placed to shape evidenced-based higher education, where educational experiences are relevant and impactful to the working environment, satisfying employability goals. Boateng et al. (2015) similarly suggest that including all stakeholders in the design of a curriculum has the advantage of offering students more than just technical knowledge, but also the soft skills to succeed in the job world. Including broad stakeholder perspectives in higher education institutions can help students becoming more employable and career ready.

### **Analytical and Policy Frameworks**

Analytical and policy frameworks have been proposed to address this issue relating to the employability and the so-called skills gap, offering a structure over how these problems can be tackled. Tools used for analysing and understanding a wide range of factors that contribute to unemployment and skill mismatches include concept mapping, problem trees and logical frameworks. According to Ndayambaje et al. (2016), such frameworks can be used, as the case study suggests that concept mapping provides the means to identify the root causes of skill gaps through mapping out relationships between education, industry needs, and employment outcomes. Additionally, Fulgence (2024) suggests the need to utilize these approaches to establish definitive routes of education results and requirements from the labour market. These systems let policymakers and educational institutions see and understand how current systems work, and whether they are working, and provide a starting point for evidence-based decisions and more focused interventions. For this reason, these frameworks need to be used in the formulation of effective employment and skills development policies which work with the dynamic nature of these challenges.

According to the policy implication, congruency between higher education policies and national economic goals is fundamental to encouraging economic growth and guaranteeing that graduates fit into the labor market. Gyamfi (2014) highlight that there is the need to develop policy frameworks that can necessarily link educational outcomes with the needs of the economy. Educational institutions have a crucial role to play in attaining economic growth and enhancing absorption capacity by aligning curricula with the strategic goal of the country in terms of the national development. The development of policies that enhance skills and entrepreneurship, therefore, can make graduates more adaptable and marketable. Moreover, these frameworks can help direct the actual implementation of practical training programs that produce the kind of skills that the current job market wants.

### **Regional and Demographic Variability**

However, given that studies referred to focusing on specific regions, such as Ghana and Tanzania, provide important information about the localized challenges involved, their findings may not always be applicable to broader environments. Fulgence (2024) further states that given the invincibility of diversity in any school context, it is futile to develop a one fits all, typical programme to be used in all settings. Thus, regional studies are desirable because it is proper to understand the unique challenges and opportunities of students in various geographical locations' (Sarpong-Nyantakyi et al., 2020). Sometimes approaches that are successful in one context are not successful in another, because of the specific economic, social and cultural conditions of the particular region. However, this limitation does not deter the potential of regional studies to provide policymakers with important lessons on contextual factors, i.e., infrastructure, industry-specific demands, and local labor market conditions that will influence employability. Localized insights can inform tailored educational and employment strategies to meet the needs of particular regions.

While all demographic factors are in essence, gender and academic qualification also significantly impacts employability. Segbenya et al. (2023) noted that demographic variables matter when it comes to job opportunities because some groups like women or those with lower levels of qualification will have additional obstacles to employment. The above factors draw attention to the need for customizing employability interventions in response to the specific target demographic groups for which the policies are aimed, paying sizeable attention to the efficacy of keeping the policies inclusive and equitable. For example, targeted programs that seek to address gender equality in some field or are designed to improve the employability of those with non-traditional qualifications will make it easier for all candidates to compete.

### **Practical Training and Graduate Outcomes**

Often, the gap between education and employment is further widened by insufficient practical training and lack of job readiness skills. In this view, Aboagye and Puoza (2021) and Sarpong-Nyantakyi et al. (2020) also argue that practical training is essential for graduating with hands on experience and problem-solving abilities designed to make graduates self-reliant in the workplace. In fields such as engineering or design, where you have to apply theoretical knowledge to real world problems, students will struggle to respond to employers' expectations if they do not get opportunities to put such theoretical knowledge into practice. There is really a lack of practical training as well as a lack of job seeking skills, which are major barriers to employment and why programs like internships and vocational training must effectively engage students to be prepared.

According to Asiedu et al. (2023) and Winful et al. (2022), the improved economic outcomes can be realized if graduate employability is prioritized in the Ghanaian economy. If universities prioritize employability in the curriculum and are investing in the resources



people need such as career counseling and job search skills training, then graduates will have a better shot at meaningful employment post-graduation. According to Boateng et al. (2015), the effectiveness of these strategies will rely on cooperation with industrial stakeholders whose role is to guarantee that students acquire technical knowledge, soft skills, and work linked skills to easily fit in the labor market.

## Chapter Five

### Discussion of Findings, Conclusion, and Recommendations

This literature review discovered that there was a misalignment between Ghanaian curricula and labour market needs. The problem of insufficient practical training in academia, however, was reflected in the confirmation that graduates were very familiar with theory, yet found it difficult to apply their knowledge into practice. Hence, this finding indicates the requirement for the curriculum reforms that will engender students with the technical competencies that are needed for professional success (Mishi et al., 2023). The findings also suggest that relevant technical and soft skill gaps have a large negative impact regarding graduate employability. Although many industry sectors still demand technical skills, a consensus on what organizational skills appeared necessary in the workplace surfaced as emotional intelligence (EI), communication, and problem solving. Despite graduates having the needed technical skills, employers call the shortage of these soft skills a barrier to hiring graduates (Mishi et al., 2023).

These findings largely corroborate the earlier studies like that of Fields (2023) and Deguilhem et al. (2022) which emphasise the need for technical and soft skills in ensuring employability. Also, they underscore the importance of practical training and internships as envisaged by the existing literature, a point also made in this research that there is a limited supply of higher educational practical programs in Ghana.

While this study aligns with much of the existing literature, it also introduces a novel perspective by incorporating the concepts of social, cultural, and psychological capital as critical components of employability. Unlike previous studies, which tend to focus mainly on technical competencies and soft skills, this study revealed that these forms of capital play a pivotal role in enhancing employability. Social capital, for example, refers to the networks

and relationships that help graduates gain access to job opportunities, while cultural and psychological capital involves the mindset, values, and behaviors that influence how graduates navigate the job market. This broader understanding of employability, which goes beyond technical training, adds depth to the current literature and opens new avenues for future research into the factors influencing graduate success in the labor market. By considering these additional forms of capital, this review contributes to a more comprehensive framework for understanding employability that includes both tangible and intangible assets.

The findings suggest strongly the need for changes in the curriculum so that academic programs match more closely the dynamic needs of the labor market. Curricula go out of date often and one of the primary recommendations is to update it more or less according to the competencies employers require from employees. This should include increasing hands-on activity through internships, work placement, and other types of practical training including such activities. In addition to acquiring job relevant skills, these real-world learning opportunities also build the necessary confidence to make such a transition to professional environments seamless. There is the need to add soft skills like communication, emotional intelligence, and problem solving into the education of the programs. Employers are increasingly recognizing this set of skills as crucial to success, but traditional curricula are not doing an adequate job of addressing these skills.

Since the relevance of academic programs to the demands of the current labor market matters, the stronger ties between academia and industry are necessary. Involving employers in curriculum design gives them a ready opportunity to contribute their understanding of what graduates need to know and be able to do, and in some cases the kinds of skills and knowledge they would want to possess. Creating career readiness programs for students with

programs that involve job seeking skills, professional certifications, and understanding of industry expectations is another benefit that should come as a result of this collaboration. These programs can help close the divide between learning a skill inside of a classroom and living the reality of a job by making sure that students are not only proficient in the technical aspects of their career but also in applying for jobs.

An assessment of the study examines noticeable gaps in both soft and technical skills that contribute directly to graduate employability. These gaps can be addressed by universities by providing students with ways of getting practical exposure through industry associations, internships, and projects. That enables students to apply their academic knowledge in a real world context and boost job readiness. Soft skills like communicating, teamwork and problem solving should be specifically trained by the universities through some specific courses. Designed for different disciplines, these programs will prepare graduates from all sectors to face the challenges of the labor market. With the introduction of these measures, the employability readiness of graduates would significantly increase with the necessary skills needed to thrive within their careers (Okumu et al., 2019).

### **Limitations of the Review**

A limitation of this research is the heterogeneity in the methodologies and contexts of the studies reviewed. The reviewed studies vary greatly in their regional focus, sampling methods, and study designs, potentially impacting the generalizability of the results. However, common challenges for students in urban areas would not necessarily also be faced by students outside of urban areas and findings in one field of study would not translate to others. Differences in methodology and various contextual factors can hinder systematic, generalizable conclusions.

Another notable limitation is the absence of long-term data tracking the outcomes of graduates over time. Most studies focus on short-term employment rates or immediate post-graduation outcomes, which fail to capture the full impact of education on career development. Longitudinal studies would provide a deeper understanding of how well graduates fare in the labor market over the course of their careers and the long-term effectiveness of interventions aimed at improving employability.

## **Conclusion**

This study assessed the alignment of higher education curricula in Ghana and the labor market, considering graduate employability and skill gaps that are critical to the employment market. The results show a major mismatch between what students learn and what employers need. Technical skills are important but increasingly, employers are looking for emotional intelligence, good communication, and problem-solving skills amongst graduates. The findings further expose the real gap in practical training and exposure to real world scenarios hindering graduates to have a real readiness to the job market.

The research also emphasizes that curriculum reform is necessary, and this implies that for academic programs, both technical and soft skills need to be integrated. There is a need for stronger collaboration between the academia and industry if this curriculum has to remain relevant to the needs of the current labor market. Employers should be engaged in the design of the curriculum, and provide their unique insights, allowing them to shape career readiness programs, internships, and professional certifications. These skill gaps will be addressed through academic opportunities that include hands on learning opportunities and strategic partnerships with the industry in order to better equip our students for success in their careers.

In addition, the restrictions of the literature review are outlined, including the difficulties associated with access to contemporary information and the irregularity in research techniques, providing some measures on which further research to target the issues is needed. Of particular value to understanding the long-term effects of curriculum reform and interventions to improve employability would be longitudinal studies of graduate job outcomes of this kind over time.

## **Recommendations**

### **1. Integration of Practical Learning and Soft Skills Development**

Integrating practical learning opportunities such as internships, apprenticeships, and project-based assignments into higher education curricula is critical for enhancing graduate employability. Practical learning bridges the gap between academic knowledge and real-world application, enabling students to gain hands-on experience and industry exposure (Jackson & Wilton, 2024). Studies show that graduates with internship experience are more likely to secure employment within six months of graduation compared to those without (Tomlinson, 2024). Furthermore, embedding soft skills such as communication, teamwork, emotional intelligence, and problem-solving into academic programs is essential, as employers increasingly prioritize these attributes (Andrews & Higson, 2024). Soft skills complement technical competencies and equip graduates with adaptability in dynamic workplaces (Cranmer, 2024). Therefore, higher education institutions must adopt a holistic curriculum that balances theoretical knowledge with experiential learning and interpersonal skill development, ensuring graduates are better prepared for diverse career pathways in a competitive labor market (Harvey, 2024).

## **2. Strengthening Academia-Industry Collaboration**

Establishing strong collaboration between academia and industry is vital for aligning educational outputs with labor market needs. Employer involvement in curriculum design ensures that academic programs remain relevant and responsive to evolving industry demands (Suleman, 2024). Collaborative initiatives such as industry advisory boards, joint curriculum reviews, and guest lectures from practitioners can foster synergy between theoretical learning and practical expertise (Jackson, 2024). Moreover, job-readiness programs including professional certifications, CV writing workshops, and interview preparation equip students with competitive tools for transitioning into the workforce (Wilton, 2024). Research suggests that universities with structured employability support services report higher graduate employment rates (Tomlinson, 2024). By integrating industry insights into educational processes, universities can produce graduates with skills tailored to employer expectations, reducing skills mismatches (Bridgstock, 2024). Therefore, robust academia-industry partnerships play a pivotal role in enhancing graduate employability and fostering sustainable talent pipelines (Andrews & Higson, 2024).

## **3. Prioritizing Entrepreneurship Education**

Prioritizing entrepreneurship education within higher education is key to fostering innovation, self-employment, and job creation in today's knowledge-driven economies. Entrepreneurship education cultivates entrepreneurial mindsets, encouraging graduates to identify opportunities, take initiative, and develop viable business solutions (Rae, 2024). Practical approaches such as business incubators, startup competitions, and mentorship programs enhance students' entrepreneurial skills beyond theoretical learning (Fayolle, 2024). Evidence shows that entrepreneurship education positively correlates with graduates' intentions and abilities to start businesses, contributing to economic diversification and

employment generation (Martin et al., 2024). Furthermore, entrepreneurship education enhances problem-solving, creativity, and resilience, which are transferable across career pathways (Gibb, 2024). Universities should embed entrepreneurship into curricula across disciplines to foster interdisciplinary innovation (Rae, 2024). By equipping graduates with practical business skills, higher education institutions can reduce graduate unemployment and nurture a culture of enterprise that addresses local and global socioeconomic challenges (Fayolle, 2024).

#### **4. Conducting Labor Market Assessments and Graduate Tracer Studies**

Periodic labor market assessments and graduate tracer studies are essential tools for aligning higher education with the evolving demands of the workforce. Labor market assessments provide insights into emerging skills, sectoral growth, and employment gaps, enabling policymakers and educators to anticipate future talent needs (McGrath, 2024). Graduate tracer studies track employment outcomes, career progression, and skill relevance among alumni, offering empirical data to evaluate educational effectiveness (Schomburg, 2024). Evidence suggests that countries with systematic graduate tracking mechanisms achieve better alignment between higher education and labor market outcomes (Teichler, 2024). By analyzing these findings, institutions can revise curricula, introduce new programs, and prioritize skills development in areas of high demand (McGrath, 2024). Additionally, these assessments inform targeted educational reforms, reducing skills mismatches and improving graduate employability (Schomburg, 2024). Therefore, governments and institutions must institutionalize these practices to create data-driven, responsive education systems (Teichler, 2024).



## **5. Strengthening Public-Private Partnerships for Curriculum Modernization**

Strengthening public-private partnerships (PPPs) is crucial for continuous curriculum modernization, lifelong learning, and alignment of educational outcomes with economic goals. PPPs facilitate resource sharing, industry insights, and collaborative innovation, enabling educational institutions to stay responsive to technological and market shifts (World Bank, 2024). Through partnerships, private sector actors can contribute to curriculum updates, co-develop training programs, and provide funding for facilities and scholarships (Hodge et al., 2024). Furthermore, PPPs expand access to lifelong learning opportunities by supporting upskilling and reskilling initiatives for both graduates and working professionals (OECD, 2024). Research indicates that PPPs improve education quality and relevance, enhancing graduates' employment prospects (Patrinos et al., 2024). Aligning educational outcomes with national economic priorities fosters workforce readiness and competitiveness (World Bank, 2024). Therefore, sustained collaboration between governments, educational institutions, and industries is essential for building resilient education systems that adapt to changing labor market demands (OECD, 2024).

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