

# Adopting the BTEC Framework in Vocational Education: A Pathway to Elevating Employability Skills and Meeting Labor Market Needs

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## ABSTRACT

This study examines the role of vocational education in enhancing employability skills and aligning educational outcomes with labor market needs, focusing on the integration of the Business and Technology Education Council (BTEC) framework. Drawing from an extensive literature review, the study identifies key themes, including transition challenges for vocational students entering higher education, the impact of educational reforms on standardization and inclusivity, the economic value of vocational qualifications, and the importance of aligning curricula with labor market demands. It highlights the transformative potential of vocational education in widening access for disadvantaged groups while underscoring systemic challenges such as societal stigmas, educator readiness, and resource constraints. The findings emphasize the need for balanced reforms that preserve the distinctiveness of vocational qualifications while addressing academic and employability gaps. For Jordan, the study offers actionable recommendations, including bridging programs, industry collaboration, and investments in teacher training. It concludes with a call for region-specific research and a focus on inclusive, evidence-based policy-making to ensure vocational education contributes effectively to workforce development and economic growth.

## الملخص:

هدفت هذه الدراسة الى التعرف على دور التعليم المهني في تعزيز مهارات التوظيف ومواءمة مخرجات التعليم مع احتياجات سوق العمل، مع التركيز على دمج إطار عمل مجلس التعليم في الأعمال والتكنولوجيا (بيتيك). تستند الدراسة إلى مراجعة شاملة للأدبيات لتحديد موضوعات رئيسية، بما في ذلك التحديات التي تواجه الطلاب المهنيين عند الانتقال إلى التعليم العالي، وتأثير الإصلاحات التعليمية على معايير التعليم وشموليته، والقيمة الاقتصادية للشهادات المهنية، وأهمية مواءمة المناهج الدراسية مع متطلبات سوق العمل. تسلط النتائج الضوء على الإمكانيات التحويلية للتعليم المهني في

## الكلمات المفتاحية:

التعليم المهني، بيتيك، سوق العمل، مهارات قابلية التوظيف، الإصلاح التعليمي، التعليم العملي، التعلم القائم على الكفاءة، الخريجين المستعدين

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للصناعة، تنمية القوى العاملة،  
تقليص فجوة المهارات.

توسيع الوصول للفئات المحرومة، مع تسليط الضوء على التحديات النظامية مثل الوصمة الاجتماعية، واستعداد المعلمين، وقيود الموارد. تؤكد الدراسة على الحاجة إلى إصلاحات متوازنة تحافظ على تميز المؤهلات المهنية مع معالجة الفجوات الأكاديمية ومهارات التوظيف. بالنسبة للأردن، تقدم الدراسة توصيات عملية تشمل برامج انتقالية، وتعزيز التعاون مع الصناعة، والاستثمار في تدريب المعلمين. تختتم الدراسة بدعوة لإجراء أبحاث متخصصة إقليمياً والتركيز على سياسات شاملة وقائمة على الأدلة لضمان مساهمة التعليم المهني بفعالية في تنمية القوى العاملة والنمو الاقتصادي.

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## 1. Introduction

In the contemporary global economy, the alignment of educational systems with labor market demands has become a critical priority for policymakers and educators alike. Vocational education, in particular, has gained prominence as a mechanism to equip learners with the practical skills required to thrive in competitive job markets. However, traditional vocational education systems often struggle to address the evolving needs of industries, leading to a persistent skills gap and high unemployment rates among graduates (Myhill & Morgan, 2019; Banerjee, 2019). The adoption of the Business and Technology Education Council (BTEC) framework is emerging as a transformative solution to these challenges, emphasizing competency-based learning that bridges the gap between theoretical knowledge and practical application. The BTEC system is recognized for its industry-relevant curriculum, which is designed with significant input from employers and stakeholders. This ensures that students acquire skills that are not only practical but also directly aligned with the requirements of modern workplaces (Atkinson, 2024). In contrast to traditional vocational programs, which often emphasize rote learning and outdated practices, BTEC qualifications foster innovation and adaptability among students, preparing them for diverse roles in dynamic industries. Such an approach is particularly relevant in regions like Jordan, where unemployment among youth is high, and vocational education systems are often undervalued due to societal biases (Khare, 2023). By adopting the BTEC framework, Jordan has the potential to reshape its vocational education landscape and position its graduates as competitive participants in the global workforce.

Educational reform in Jordan has increasingly prioritized vocational pathways as a strategic response to labor market challenges. With a growing recognition that conventional academic routes do not suit all learners or align with economic demands, vocational education reform has become central to national development strategies (Elamir & Mousa, 2022). The integration of the BTEC system offers an opportunity to address systemic issues within Jordan's vocational education framework, such as outdated curricula, limited employer engagement, and a lack of practical training opportunities. By embedding real-world applications and industry partnerships into educational programs, the BTEC system could enhance the employability and productivity of Jordanian graduates. Despite its promise, the adoption of the BTEC framework is not without challenges. Institutional readiness, educator training, and cultural perceptions of vocational education remain significant barriers to its successful implementation (Hyde et al., 2024). Effective integration requires substantial investment in professional development for educators to ensure they can deliver competency-based programs effectively. Moreover, addressing societal stigmas around vocational education is critical to increasing enrollment in such programs and elevating their status to be on par with traditional academic pathways. Employers' perceptions of graduate competence also play a vital role in the success of vocational education reforms. Studies suggest that employers' value BTEC graduates for their practical skills and ability to contribute

immediately to workplace demands (Nazir, 2023). However, achieving widespread acceptance of BTEC qualifications in Jordan requires sustained efforts to build trust between educational institutions and industries. Collaborative initiatives, such as industry placements and employer-led curriculum design, are essential to demonstrating the relevance and quality of BTEC programs. However, adopting the BTEC framework in Jordan represents a critical opportunity to address labor market needs while enhancing the employability of vocational graduates. By fostering stronger connections between education and industry, the BTEC system can contribute to sustainable economic growth and workforce competitiveness. However, its success hinges on addressing institutional and cultural barriers, ensuring educator readiness, and cultivating partnerships with employers. This study critically examines the implications of integrating the BTEC system into vocational education in Jordan, offering insights that can inform strategies for enhancing employability and meeting labor market demands.

## 2. Literature Review

Vocational education plays a pivotal role in addressing the global demand for a skilled workforce, bridging gaps between education systems and labor market needs. As economies continue to evolve with technological advancements and shifting industry requirements, the integration of innovative educational frameworks becomes essential. Among these frameworks, the Business and Technology Education Council (BTEC) system has gained prominence for its competency-based approach, offering a blend of academic knowledge and practical skills tailored to industry standards. This system has demonstrated significant potential in preparing students for employment, particularly in fields requiring technical expertise and adaptability. In recent years, the growing emphasis on employability skills has placed vocational education at the forefront of policy discussions. Countries across the globe are reforming their educational systems to ensure that learners are equipped with the competencies necessary to thrive in competitive job markets. The Middle East, including Jordan, is no exception, where governments are actively seeking to enhance vocational education to address unemployment and meet the demands of emerging industries.

This literature review examines the integration of the BTEC framework within vocational education systems, with a particular focus on its implications for employability and labor market alignment. By synthesizing existing research, it explores key themes such as the effectiveness of vocational qualifications in improving employment outcomes, challenges in transitioning from vocational education to higher education, and the socio-economic factors influencing vocational pathways. Additionally, the review investigates the role of educator preparedness, institutional support, and societal perceptions in shaping the success of vocational reforms. Atkinson (2024) explores the complexities of decision-making support for Business and Technology Education Council (BTEC) students transitioning to higher education (HE) within further education (FE) colleges in England. Using the Theory of Practice Architectures framework, the study identifies structural and relational barriers that constrain effective HE choice-making. Inconsistent institutional support, reliance on local universities, and competing priorities within colleges are highlighted as significant challenges. This research underscores the importance of creating cohesive institutional strategies to address these limitations. The findings have broader implications for vocational education systems globally, including in Jordan, where institutional structures often mirror those of the UK FE system. Effective HE decision-making frameworks are essential for realizing the potential of BTEC qualifications to bridge educational and occupational aspirations, particularly in regions where vocational pathways are undervalued. Hyde et al. (2024) examine the challenges faced by students transitioning from Chinese high school laboratory programs to UK-style university laboratory courses, emphasizing the role of practical skills

development in transnational education (TNE). Their mixed-methods study reveals significant gaps in prior laboratory experience, language barriers, and the need for structured curriculum designs to scaffold students' learning. This research highlights the transformative potential of practical, competency-based learning environments, akin to those offered by BTEC programs. The study's insights are particularly relevant to vocational education reforms in Jordan, where gaps in practical training and language proficiency are also barriers to international employability. By integrating scaffolded curricula, as demonstrated in the TNE context, Jordanian institutions adopting the BTEC framework can enhance their graduates' readiness for global labor markets. Manian (2024) critically evaluates the effects of commercialization on stakeholders in higher education institutions in the UK. Through a qualitative case study approach, the research finds that profit-centric models of education negatively impact both staff and students, leading to demotivation and dissatisfaction. This study resonates with concerns about privatized and commodified education systems, where financial imperatives often overshadow pedagogical goals. The findings serve as a cautionary tale for vocational education systems, including those in Jordan, where the balance between revenue generation and educational quality remains a delicate challenge. Institutions integrating the BTEC framework must ensure that financial sustainability does not compromise ethical governance, student outcomes, or educator integrity.

Mitton and Hensby (2024) delve into the intersection of vocational qualifications, inclusivity, and racial equity in higher education. Their analysis reveals that BTEC entrants, particularly those from Black, Asian, and Minority Ethnic (BAME) backgrounds, face systemic disadvantages in HE environments that privilege A-level qualifications. The study critiques the stigmatization of vocational pathways as inferior and calls for their inclusion in universities' inclusivity agendas. These findings are pertinent to Jordan, where vocational education often suffers from societal stigma and limited recognition. Integrating BTEC qualifications into broader educational reform efforts requires addressing these biases to ensure equitable access to opportunities and to highlight the value of practical skills in diverse learning environments. The reviewed studies collectively underscore the transformative potential of BTEC qualifications in enhancing vocational education, improving employability, and addressing systemic inequities. Atkinson (2024) highlights the structural enablers and barriers to effective decision-making support for BTEC students, while Hyde, Wright, and Xie (2024) emphasize the need for structured curricula to bridge practical skill gaps in international contexts. Manian's (2024) critique of commercialization warns against allowing financial priorities to undermine educational goals, and Mitton and Hensby (2024) advocate for addressing the stigmatization of vocational qualifications to foster inclusivity.

For Jordan, these insights offer valuable lessons. Implementing the BTEC framework requires addressing institutional barriers, promoting inclusivity, and ensuring that financial sustainability does not compromise educational outcomes. By drawing on these global perspectives, Jordanian vocational education reform can enhance its alignment with labor market demands while fostering equitable and inclusive learning environments. Huddleston and Unwin (2024) provide a historical account of the evolution of the Further Education (FE) curriculum in England, highlighting persistent challenges driven by external demands from learners, employers, and policymakers. The continuous cycle of government-mandated qualification reforms has not only disrupted the curriculum but also placed financial strain on institutions. This policy "merry-go-round" mirrors broader tensions in vocational education globally, including in Jordan, where curriculum flexibility and stability are equally constrained by external pressures. The introduction of initiatives like the Advanced British Standard (ABS) underscores the difficulty of aligning technical and academic education without destabilizing existing systems. For Jordan, these insights highlight the importance of balancing curriculum responsiveness with institutional stability to avoid undermining educational quality and learner outcomes. Nazir (2024) explores the decision-making processes of British Pakistani students entering vocational courses, revealing

how structural inequities funnel ethnic minorities into "lower-tier" educational pathways. This study underscores the role of "ethnic capital" and "racial warehousing" in shaping vocational education choices, which often lead to weaker labor market positions. Such findings are critical for understanding vocational education in Jordan, where social stigmas surrounding vocational pathways also limit their appeal. The study suggests that promoting alternative, equitable vocational pathways is essential for countering systemic biases and ensuring that underrepresented groups have access to high-quality technical education with strong labor market outcomes.

Williams (2024) critically examines the concept of "skill" within Technical and Vocational Education and Training (TVET) in England, highlighting its ambiguous and inconsistent application across policy and practice. The study's use of Critical Discourse Analysis (CDA) reveals how neoliberal, human capital-driven notions of skill shape the curriculum, often marginalizing certain disciplines and perpetuating inequities in education and employment. This disconnect between policy rhetoric and practical implementation is particularly relevant for vocational education in Jordan, where the emphasis on aligning skills with labor market demands risks replicating similar challenges. Williams' findings suggest that a more coherent and inclusive discourse on skill is needed to ensure that vocational education fosters both individual empowerment and societal progress. In addition, Huddleston and Unwin (2024) emphasize the need for greater representation of FE colleges, teachers, and curriculum managers in shaping the vocational curriculum. The current regime of control, driven by funding criteria and regulatory bodies, often neglects the expertise of these key stakeholders. This parallels challenges in Jordan, where vocational education policies are frequently top-down, with limited input from educators and industry practitioners. The study raises critical questions about how to reconcile multiple, often competing, demands on vocational curricula while accommodating student aspirations and local labor market needs. For Jordan, these insights reinforce the importance of inclusive policymaking processes that prioritize both institutional autonomy and stakeholder engagement. Manian (2024) critiques the commercialization of higher education in the UK, finding that profit-centric models erode the quality of education and demotivate both staff and students. This phenomenon resonates with concerns about vocational education in Jordan, where financial imperatives often overshadow educational goals. The study warns against commodifying education delivery, suggesting that such practices undermine ethical considerations and weaken trust in vocational qualifications. For Jordan, this serves as a reminder to prioritize sustainable and ethical governance models that balance financial sustainability with educational integrity.

These studies collectively underscore the complex interplay between policy, discourse, and practice in vocational education. Huddleston and Unwin (2024) highlight the destabilizing effects of policy inconsistency, while Nazir (2024) and Williams (2024) reveal how systemic biases and discourse shape vocational pathways and skills training. Manian (2024) warns against the risks of commercialization, and the broader findings suggest that inclusive, coherent, and ethically grounded approaches are essential for effective vocational education reform. For Jordan, the integration of frameworks like the BTEC system provides an opportunity to address these challenges by fostering greater curriculum stability, inclusivity, and alignment with labor market needs. However, achieving this requires addressing systemic inequities, promoting stakeholder engagement, and ensuring that vocational education policies are both responsive and sustainable. These insights offer a critical foundation for rethinking vocational education strategies in Jordan, with the goal of enhancing equity, quality, and employability outcomes. Raven (2023) examines the educational disruptions caused by the COVID-19 pandemic, focusing on students from disadvantaged backgrounds and their prospects for higher-level study. The study highlights how the lockdowns and school closures exacerbated existing inequalities, further widening the participation gap. While schools have reopened, disadvantaged students face compounded challenges in accessing higher education. Insights from teachers in disadvantaged areas reveal that

educational ambitions have been deeply affected, with many students struggling to regain momentum after prolonged disruptions. For vocational education systems like those in Jordan, this research underscores the importance of tailored interventions to support students from marginalized backgrounds, particularly during transitional periods. The pandemic's effects have shown that maintaining equitable access to education requires robust support systems and adaptive strategies, even in post-crisis contexts. Vocational education providers must actively address these disparities to ensure all students have equal opportunities to progress in their educational journeys. Antonazzo, Stroud, and Weinel (2023) explore the implications of Industry 4.0 technologies for vocational education and training (VET), specifically within the European steel industry. The study highlights the transformative effects of digital technology on production and employment, emphasizing the need for VET systems to adapt to emerging skill requirements. Through the lens of institutional theory, the authors analyze how institutional architectures shape the responsiveness of initial vocational education and training (IVET) systems to technological changes.

The findings have significant relevance for Jordan, where preparing a workforce for digital transformation is critical to meeting global labor market demands. As the BTEC framework is introduced, integrating industry-specific digital skills into curricula is essential to align vocational education with technological advancements. This research reinforces the need for institutional collaboration to ensure VET systems are proactive rather than reactive in addressing the challenges of Industry 4.0. Gregory (2023) investigates the transition from secondary school to further education (FE) in England, with a particular focus on how this process influences learner identity. The findings suggest that while transitions can be fraught with anxiety over academic and social changes, they also offer opportunities for personal growth and the development of a more authentic identity. Importantly, the study reveals that perceptions of academic and vocational qualifications shape students' narratives, with vocational qualifications often viewed as less prestigious but increasingly recognized as valuable pathways to higher education. For Jordan, where vocational education is often stigmatized, these insights are critical. Gregory's research underscores the need for systems that not only support students during educational transitions but also actively challenge negative perceptions of vocational qualifications. By fostering a more positive narrative around vocational pathways, Jordan can encourage broader participation and demonstrate that vocational education is a viable route to academic and professional success.

The reviewed studies collectively highlight the need for vocational education systems to adapt to emerging challenges while fostering equity, responsiveness, and positive transitions. Raven's (2023) findings emphasize the importance of addressing the compounded effects of crises on disadvantaged students, a concern that is equally relevant in Jordan's efforts to promote equitable access to education. Antonazzo et al. (2023) provide a roadmap for aligning vocational education with Industry 4.0, demonstrating the importance of proactive institutional collaboration and the integration of digital skills. Meanwhile, Gregory's (2023) study on learner transitions and identity highlights the value of challenging stigmas around vocational education and creating supportive environments that empower students to thrive. For Jordan, these insights offer a foundation for rethinking vocational education strategies, ensuring they are inclusive, forward-looking, and capable of meeting both local and global demands. By addressing educational inequities, preparing for technological transformations, and supporting learners through transitions, Jordan can strengthen its vocational education system and enhance its contribution to national development.

### **Vocational Education**

Orr and Terry (2023) delve into the multifaceted factors shaping the success of dual training programs, particularly in the context of T-level qualifications in England. Their findings emphasize the necessity of aligning regulatory frameworks, institutional structures, and curricular designs to facilitate cooperation between stakeholders. Furthermore, the study underscores the importance of trust and culturally informed communication in ensuring effective partnerships.

These conclusions are relevant globally but particularly resonate with Jordan's ambitions to implement dual training programs within its vocational education system. The authors caution against direct transplantation of training models across countries, as contextual differences significantly affect implementation success. For Jordan, this insight suggests the need for localized adaptations of frameworks like BTEC, emphasizing culturally relevant practices and robust stakeholder engagement to ensure efficacy. Etches (2021) examines the transition of students from vocational qualifications to higher education, highlighting systemic inequalities that create barriers for vocational students. The study critiques existing pathways for their limited capacity to address the unique needs of vocational learners, often marginalizing them in academic environments. These findings align with challenges faced in Jordan, where vocational qualifications are often perceived as inferior to academic routes. For Jordan to leverage the potential of frameworks like BTEC, concerted efforts are needed to integrate vocational pathways into higher education systems more effectively, fostering inclusivity and reducing stigma. Xu (2020) explores the role of entrepreneurship education (EE) in UK secondary schools, identifying both successes and challenges in integrating enterprise initiatives. The study highlights EE's potential to equip students with entrepreneurial skills that foster adaptability and innovation—key attributes in today's dynamic labor markets. However, the lack of consistent implementation and alignment with broader educational goals presents barriers to achieving its full potential. For Jordan, where fostering entrepreneurial thinking is critical for addressing youth unemployment, integrating EE into vocational education frameworks like BTEC could be transformative. Aligning entrepreneurship education with vocational training would help develop students' critical thinking and problem-solving skills, preparing them for diverse career paths. Baker (2020) critiques the impact of policy reforms on vocational education in England, particularly the shift from specialized skills training to generalized academic content. The study reveals tensions between the theoretical and practical components of vocational courses, with students and tutors expressing frustration over reduced emphasis on hands-on skills. Employers, too, voiced concerns about graduates lacking the specific competencies needed for the workforce. This critique is highly relevant to Jordan's vocational education reforms, where balancing theoretical knowledge and practical skill development remains a critical challenge. Baker's findings underscore the need for curricula that prioritize employability-focused skills while integrating academic elements in ways that resonate with both students and industry demands.

The reviewed studies collectively provide valuable insights into the challenges and opportunities within vocational education systems. Orr and Terry's (2023) emphasis on contextualized implementation highlights the importance of adapting frameworks like BTEC to Jordan's unique socio-economic and cultural conditions. Etches (2021) points to the need for inclusive pathways that elevate vocational qualifications to parity with academic ones, addressing systemic inequities. Xu's (2020) exploration of entrepreneurship education underscores its potential as a complement to vocational training, particularly in preparing students for a globalized economy. Finally, Baker's (2020) critique of skill erosion in vocational education serves as a cautionary note for Jordan, emphasizing the importance of maintaining a strong focus on practical skills. For Jordan to achieve its goals of workforce readiness and economic development, its vocational education reforms must prioritize stakeholder collaboration, curriculum adaptability, and equitable access to opportunities. By drawing on these global perspectives, Jordan can refine its approach to vocational education, ensuring that it not only meets local labor market demands but also empowers students to succeed in an increasingly interconnected world. Elamir and Mousa (2022) explore the interplay between higher education, technology, innovation, and labor market efficiency in the Middle East, highlighting the positive effects of high-quality education and training. Their findings emphasize that improvements in the quality of higher education directly enhance innovation and labor market efficiency, underscoring the significance of technology readiness as a complementary factor. This

model is particularly relevant to Jordan, where the alignment of higher education with labor market needs remains a critical challenge. By focusing on improving education quality and technology integration, Jordan can address the skills gap and foster a more competitive workforce. The study's methodological rigor using partial least squares analysis further provides a robust framework for evaluating similar relationships in other regional contexts. Togoh (2021) investigates stressors affecting learning among BTEC Level 3 learners in an FE college in England, categorizing these into academic, personal, and social stressors. The findings reveal that students utilize a combination of internal and external coping mechanisms to manage these challenges. The study also highlights the importance of learner-focused and holistic pedagogical approaches to alleviate stress and enhance educational outcomes. For vocational education in Jordan, where students often face similar challenges due to academic pressures and socio-economic factors, these insights underline the need for robust support systems and adaptive teaching strategies. The emphasis on humanistic teaching approaches resonates with ongoing efforts to improve student engagement and well-being in vocational settings. Al Barwani and Azam (2023) evaluate the factors influencing OJT quality and their impact on student satisfaction in Oman, identifying critical elements such as trainer quality, effective assessment, and active learning. The study reveals that 70% of these factors significantly affect satisfaction, emphasizing the importance of structured and relevant training programs in enhancing competence development. This research is highly relevant for Jordan's vocational education system, where on-the-job training is a vital component of skill development. By adopting evidence-based frameworks like SERVQUAL and TQM, Jordan can improve OJT programs to ensure they align with industry requirements and student expectations. The study's statistical robustness, supported by Cronbach's Alpha and goodness-of-fit measures, offers a validated model for assessing and improving OJT quality.

These studies collectively underscore the importance of integrating quality education, effective training, and supportive learning environments into vocational education systems. Elamir and Mousa's (2022) findings on the role of higher education quality and technology highlight the need for innovation-driven educational reforms in Jordan. Togoh's (2021) analysis of stressors suggests that addressing student well-being through holistic teaching practices can improve learning outcomes in vocational settings. Meanwhile, Al Barwani and Azam's (2023) evaluation of OJT quality factors offers actionable insights for designing effective workplace training programs that meet both student and industry needs. For Jordan, these insights provide a roadmap for enhancing vocational education through targeted reforms. By prioritizing quality, aligning curricula with labor market demands, and fostering supportive learning environments, the country can strengthen its vocational education system, ensuring that students are well-prepared for a competitive and dynamic workforce. Nazir (2023) critically examines the vocational education pathways of British Pakistani students, revealing how systemic inequities funnel ethnic minority students into "lower-tier" educational trajectories. The study highlights the interplay of "ethnic capital" and "racial warehousing," which shapes decision-making and limits access to more prestigious academic pathways. This insight sheds light on the broader challenges of ensuring equitable access to vocational education globally, including in Jordan. For Jordan, where societal perceptions and structural barriers also stigmatize vocational pathways, Nazir's findings underscore the need to promote alternative pathways that challenge these biases. Emphasizing the value of vocational qualifications and creating inclusive progression routes into higher education could mitigate the systemic marginalization of vocational students and improve their labor market outcomes. Al Barwani and Azam (2023) evaluate OJT quality factors and their impact on TVET students' satisfaction in Oman, offering a comprehensive model to measure the relevance of training programs. The study identifies trainer quality, effective assessment, active learning, and competence development as critical components of student satisfaction. The findings reinforce the importance of aligning training with student needs and labor market demands, supported by frameworks like SERVQUAL and TQM. For Jordan, where on-the-job training plays a pivotal role in vocational education, this research provides a roadmap for enhancing the quality of OJT programs. By focusing on trainer quality, resource allocation, and the relevance of training, Jordan can create a more effective pathway for students to transition from education to employment while meeting industry requirements.

### **Teaching Digital Skills in Further Education**

Allison (2022) explores the challenges of delivering Level 3 digital skills courses in colleges in South West England, addressing the persistent "digital skills gap." The research highlights three main strategies for overcoming challenges: collaboration, pedagogical innovation, and continuous professional development (CPD). Allison's findings are particularly relevant for Jordan, where integrating digital skills into vocational



education is critical for workforce readiness. The study's proposed CPD framework offers actionable insights for training educators to deliver digital skills effectively while addressing gaps in curriculum planning and delivery. These findings emphasize the need for systematic curriculum decisions and policy alignment to ensure digital skills education meets both student and industry needs. These studies collectively highlight critical dimensions of vocational education reform: equity in access, training quality, and the integration of digital skills. Nazir's (2023) analysis of ethnic minority pathways underscores the importance of creating inclusive educational systems that value vocational qualifications. This is especially relevant for Jordan, where similar stigmas persist. Al Barwani and Azam's (2023) focus on OJT quality provides a blueprint for enhancing training programs to meet student and employer expectations. Allison's (2022) findings on digital skills highlight the necessity of equipping vocational students with competencies for the digital economy, a pressing need in Jordan's rapidly evolving labor market. To strengthen vocational education, Jordan must adopt a multifaceted approach:

**Promote Equity:** Address systemic biases against vocational education by elevating its status and providing clear pathways to higher education.

**Enhance Training Quality:** Implement evidence-based frameworks like SERVQUAL to improve OJT programs and align them with labor market needs.

**Integrate Digital Skills:** Develop robust CPD programs for educators and align curricula with industry standards to close the digital skills gap.

By incorporating these strategies, Jordan can ensure that its vocational education system not only meets local labor market demands but also equips students with the skills and opportunities to succeed in a competitive global economy. Baker (2020) examines the persistent inequalities between vocational (BTEC) and academic (A-level) pathways in higher education (HE) decision-making. Despite widening participation efforts, BTEC students remain disadvantaged in accessing prestigious HE institutions due to financial constraints and a lack of targeted outreach. This study reveals systemic barriers that limit vocational students' ability to establish a "sense of place" in HE. The findings are relevant for Jordan, where vocational education faces societal stigmatization and limited integration with HE pathways. Baker's study underscores the importance of policy interventions to create equitable opportunities for vocational students, particularly through financial support, tailored outreach, and institutional alignment. Gaad (2019) highlights the UAE's progress in implementing inclusive education for learners with special needs and disabilities (SEND), emphasizing recent reforms and innovations. The UAE's government has recognized the importance of inclusive education in mainstream schools, addressing both challenges and opportunities associated with such systemic transformations. For Jordan, which shares similar ambitions for inclusive education, Gaad's work serves as a blueprint for embedding inclusivity in vocational education systems. By adopting innovative approaches and addressing anxieties around systemic change, Jordan can ensure that SEND learners are effectively supported within its vocational education framework, contributing to broader social equity.

Hossain (2018) provides an in-depth analysis of the problems and prospects of vocational education (VE) in Bangladesh, emphasizing low enrolment rates and societal stigma as key barriers. The study identifies infrastructural deficiencies, a lack of skilled teachers, and limited practical training as major challenges. Despite these barriers, VE is recognized as critical for reducing unemployment and fostering economic development. These findings resonate with vocational education challenges in Jordan, where similar issues of societal perception, inadequate infrastructure, and limited teacher capacity hinder VE's growth. Hossain's emphasis on increasing public awareness, enhancing teacher training, and integrating VE with higher education provides actionable insights for Jordan's vocational reform efforts. The reviewed studies collectively highlight the systemic barriers and opportunities in vocational education across different contexts. Baker's (2020) findings on the vocational/academic divide emphasize the need for equitable access to HE for vocational students, a challenge that is mirrored in Jordan. Gaad's (2019) insights on inclusive education underline the importance of systemic innovations to support SEND learners, offering lessons on how Jordan can build a more inclusive vocational system. Finally, Hossain's (2018) analysis of VE in Bangladesh highlights the need for structural reforms, such as improving teacher training, enhancing infrastructure, and addressing societal perceptions. To strengthen vocational education in Jordan, the following steps are critical:

**Promote Equity in Access:** Bridge the gap between vocational and academic pathways by aligning VE curricula with HE opportunities and addressing financial constraints.

**Foster Inclusivity:** Implement systemic reforms to support SEND learners in vocational settings, drawing on best practices from the UAE.

**Enhance Infrastructure and Training:** Invest in teacher training, practical learning resources, and infrastructure to ensure VE programs meet industry standards.

**Address Societal Perceptions:** Launch awareness campaigns to destigmatize VE and highlight its role in economic and social development.

By implementing these strategies, Jordan can create a robust and inclusive vocational education system that equips students with the skills needed for a dynamic labor market while fostering equitable opportunities for all learners. Braun (2019) investigates the readiness of engineering lecturers to adapt to the changing assessment framework for Level 3 BTEC qualifications, which now include external assessments such as exams. This shift represents a significant departure from the traditional teacher-led, criterion-referenced assessments that many educators were accustomed to. The study reveals that while lecturers generally align on the principles of assessment preparation, challenges persist in detailed planning, student motivation, and parental involvement. The findings highlight the need for targeted professional development to ensure teachers can effectively support students in navigating high-stakes exams. For Jordan, where BTEC frameworks are being adopted, these insights underline the importance of equipping educators with the necessary skills and strategies to balance internal and external assessments, ensuring that students are adequately prepared.

Gartland and Smith (2018) explore the transformative potential of BTEC courses in facilitating higher education (HE) access for disadvantaged students. Using a Bourdieusian lens and the concept of “possible selves,” the study highlights how BTEC courses cultivate social and cultural capital, empowering students to envision themselves as university students despite initial doubts. The findings emphasize the critical role of supportive pedagogies and practices in shaping students' aspirations and preparing them for HE. However, the study critiques the increasing standardization of vocational education, which risks undermining the unique contributions of BTEC pedagogies. In Jordan, where vocational education faces similar challenges of standardization and stigma, the findings reinforce the value of nurturing personalized and supportive learning environments that foster students' confidence and aspirations for further education. Coldrey (2018) examines the ideological drivers behind recent reforms to Level 2 vocational and academic qualifications in England, particularly in physical education. The study highlights the “academization” of vocational qualifications, reflecting a broader political agenda to elevate academic rigor at the expense of vocational distinctiveness. This shift reinforces the disparity between academic and vocational qualifications, perpetuating the perception of vocational education as inferior. The findings reveal that such reforms, driven by political ideology, have pedagogical implications that may narrow the scope of vocational learning, making it less appealing to students. For Jordan, where vocational education is often stigmatized, Coldrey's analysis serves as a cautionary tale against reforms that prioritize academic metrics over the practical, skill-based focus that defines vocational education. These studies collectively address key challenges and opportunities in vocational education, offering insights that are highly relevant to Jordan's ongoing reforms. Braun (2019) emphasizes the importance of preparing educators for assessment changes, which is crucial for the successful adoption of frameworks like BTEC. Gartland and Smith (2018) highlight the transformative potential of vocational education in providing pathways to HE for disadvantaged students, advocating for pedagogies that build social and cultural capital. Coldrey (2018) warns against reforms that undermine the distinctiveness of vocational education, urging policymakers to preserve its practical and skill-oriented focus. To strengthen its vocational education system, Jordan can draw on these insights to:

**Prepare Educators for Change:** Invest in professional development to ensure teachers are equipped to handle shifts in assessment practices, blending internal and external evaluations effectively.

**Support Student Progression:** Design curricula and teaching practices that build confidence and aspirations for HE among vocational students, particularly those from disadvantaged backgrounds.

**Preserve Vocational Identity:** Avoid reforms that prioritize academic benchmarks at the expense of vocational distinctiveness, maintaining a focus on practical, labor market-relevant skills.

By addressing these priorities, Jordan can enhance the quality and perception of vocational education, positioning it as a viable and respected pathway for students to achieve academic and professional success. Peake (2018) highlights the significant challenges faced by students transitioning from BTEC qualifications to higher education (HE), particularly in achieving high degree classifications. The study reveals that less than half of BTEC entrants achieved a 2:1 or first-class degree compared to over 90% of their A-level

counterparts. This disparity underscores the structural and academic skills gaps that hinder BTEC students in adapting to the demands of HE. To address these challenges, Peake developed a toolkit aimed at raising aspirations, enhancing self-esteem, and improving academic outcomes. For Jordan, where BTEC frameworks are being integrated into vocational education, these findings emphasize the need for targeted support mechanisms to ensure students' successful transition to HE. Providing preparatory programs and fostering a culture of academic confidence can help BTEC students meet the expectations of higher education. Kelly (2017) examines the role of BTECs in widening participation in HE while highlighting vulnerabilities associated with the qualification. Although BTECs provide a vital "middle option" for students who prefer applied learning, their acceptance in selective universities remains limited. Kelly critiques the Sainsbury Review's binary vision of academic versus technical education, warning against reforms that might marginalize BTECs and reverse progress in HE accessibility. For Jordan, these insights underscore the importance of maintaining the distinctiveness of vocational pathways while ensuring alignment with HE expectations. Policymakers should focus on building pathways that bridge vocational and academic qualifications, ensuring that BTEC graduates are well-prepared and valued in both HE and the labor market. Patrignani, Battiston, and Conlon (2019) analyze labor market outcomes for students progressing from BTEC qualifications to first-degree qualifications, finding positive earnings and employment differentials for this group. The study demonstrates that BTEC graduates, particularly those with combined BTEC and A-level qualifications, achieve comparable outcomes in certain fields like architecture, engineering, and medicine. However, the substantial differences in characteristics between BTEC and A-level students complicate direct comparisons. These findings underscore the economic value of BTEC qualifications, particularly in applied and technical disciplines. For Jordan, this reinforces the importance of integrating vocational qualifications into national education strategies to enhance employability and align with labor market demands. Promoting BTEC pathways in high-demand sectors can help foster a skilled workforce that contributes to economic development. The studies reviewed highlight critical challenges and opportunities in the integration and progression of vocational education pathways:

**Addressing Transition Challenges:** Peake's (2018) findings emphasize the importance of equipping BTEC students with the academic skills and confidence needed for HE success. In Jordan, this calls for tailored bridging programs and support initiatives.

**Preserving the Distinctiveness of BTEC:** Kelly's (2017) work highlights the need for policies that protect the unique role of BTEC qualifications in widening access to HE while addressing gaps in institutional acceptance and preparedness.

**Maximizing Labor Market Outcomes:** Patrignani et al.'s (2019) analysis demonstrates the economic benefits of BTEC pathways, particularly in applied disciplines. Jordan should align vocational education with industry needs to enhance employment opportunities for graduates.

By implementing these strategies, Jordan can ensure that its vocational education reforms foster equitable access to HE, support labor market integration, and strengthen the country's workforce for a dynamic economy.

### 3. Methodology

The methodology adopted for this literature review aims to critically analyze and synthesize research addressing the challenges, reforms, and outcomes of vocational education, particularly the Business and Technology Education Council (BTEC) qualifications. The focus is on exploring their role in widening participation, enhancing employability, and transitioning students to higher education (HE) and the labor market. The methodological approach reflects a structured and critical engagement with existing literature, identifying gaps, and highlighting best practices relevant to vocational education reforms in Jordan.

#### *Literature Selection Process*

The literature selection process was designed to ensure a comprehensive and diverse range of studies, drawing from peer-reviewed journals, policy reports, and seminal texts in the field of vocational education. Key inclusion criteria included relevance to BTEC qualifications, vocational education pathways, and their implications for HE and labor market outcomes. Studies were prioritized based on their focus on systemic challenges, transition experiences, and innovative practices in vocational education.

For instance, studies such as Peake (2018) were selected for their detailed exploration of transition challenges faced by BTEC students, while Kelly (2017) provided critical insights into the systemic reforms

affecting BTECs. The inclusion of Patrignani, Battiston, and Conlon (2019) offered empirical evidence of labor market outcomes for BTEC graduates, enriching the analysis with quantitative perspectives.

### *Theoretical Frameworks and Analytical Lens*

This review adopts a multi-dimensional analytical lens, drawing on theoretical frameworks such as Bourdieusian concepts of cultural and social capital (as seen in Gartland & Smith, 2018), educational equity frameworks, and labor market alignment theories. These frameworks facilitate a nuanced understanding of the socio-economic, institutional, and pedagogical factors influencing vocational education. The review also critically engages with methodological approaches employed by the reviewed studies. For instance, Braun's (2019) pilot study exemplifies the use of comparative analysis in understanding educator readiness, while Peake's (2018) longitudinal inquiry offers insights into the lived experiences of BTEC students transitioning to HE. This diversity of methods underscores the need for mixed-methods approaches in studying vocational education reforms.

### *Methodological Gaps and Limitations*

A critical aspect of this review is identifying methodological gaps in existing literature. Many studies, such as those by Peake (2018) and Kelly (2017), focus predominantly on UK contexts, with limited exploration of how similar challenges and reforms might manifest in other educational systems, including those in the Middle East. Furthermore, while quantitative studies like Patrignani et al. (2019) provide valuable labor market data, they often lack qualitative insights into the lived experiences of vocational students and educators. The review also highlights the limitations of narrow methodological scopes. For example, while Braun (2019) offers preliminary findings on educator readiness for BTEC assessment changes, the small sample size and single-institution focus limit the generalizability of conclusions. Addressing these gaps through comparative, cross-national research could provide a more holistic understanding of vocational education dynamics.

### *Reflections on Methodological Choices*

The methodology for this review balances breadth and depth by integrating empirical, theoretical, and policy-oriented studies. By critically engaging with diverse research methods, the review captures a comprehensive picture of BTEC qualifications' role in education and employment. This approach ensures the identification of actionable insights while acknowledging the contextual and systemic factors influencing vocational education outcomes. The findings from this literature review methodology emphasize the importance of multi-stakeholder engagement, longitudinal research designs, and comparative analyses in understanding the challenges and opportunities in vocational education. For Jordan, these methodological reflections underscore the need for robust research frameworks to inform policy and practice, ensuring that vocational education reforms are evidence-based and contextually relevant.

## **4. Results**

The literature review methodology provided a comprehensive framework for analyzing the challenges, reforms, and outcomes associated with vocational education, particularly focusing on the BTEC qualification. The results derived from the review reveal significant themes that inform both the potential and limitations of vocational education systems. These findings have important implications for education policymakers, practitioners, and stakeholders, particularly in Jordan, as the country seeks to reform its vocational education landscape.

### *Theme 1: Transition Challenges from Vocational to Higher Education*

One of the most striking findings, highlighted in Peake (2018), is the disparity in academic performance between BTEC and A-level students upon entering higher education (HE). Less than half of BTEC entrants achieved upper-class degrees, compared to over 90% of A-level students. This discrepancy underscores significant challenges in adapting to the academic rigor of HE, such as gaps in theoretical knowledge and study skills. The introduction of targeted support mechanisms, such as Peake's transition toolkit, has shown promise in raising aspirations and improving outcomes for BTEC students. These findings are particularly relevant for Jordan, where vocational education reforms must prioritize bridging academic gaps through preparatory programs and academic support.

### *Theme 2: Reforms and Standardization in Vocational Education*

Kelly (2017) critiques the increasing emphasis on standardization in vocational education, arguing that while reforms aim to enhance academic rigor, they risk undermining the applied learning strengths of BTEC qualifications. The "middle option" offered by BTEC has been instrumental in widening participation in

HE, especially among disadvantaged groups. However, reforms inspired by the Sainsbury Review, which push for a binary divide between academic and technical education, could marginalize qualifications like BTECs. This has implications for Jordan, where vocational reforms must balance standardization with maintaining the distinctiveness of applied qualifications. Protecting the unique pedagogical approach of vocational education is essential for ensuring its continued success in both education and labor markets.

### *Theme 3: Labor Market Outcomes for Vocational Graduates*

Patrignani, Battiston, and Conlon (2019) provide valuable insights into the labor market outcomes of BTEC graduates, demonstrating positive earnings and employment differentials for those progressing to higher education. BTEC graduates in applied fields like architecture, engineering, and medicine achieved comparable earnings to their A-level counterparts, highlighting the economic value of vocational qualifications in certain disciplines. For Jordan, this reinforces the importance of aligning vocational education pathways with high-demand sectors in the labor market. Strategic integration of BTEC frameworks with national employment policies can ensure that graduates are equipped with skills that meet both local and global labor market needs.

### *Theme 4: Socioeconomic and Cultural Dimensions*

Gartland and Smith (2018) underscore the transformative potential of BTEC qualifications in fostering higher education aspirations among disadvantaged students. Through supportive pedagogies and practices, BTEC courses build students' cultural and social capital, enabling them to envision and achieve HE goals. However, the stratification of the education system often reinforces existing inequalities, limiting opportunities for upward mobility. This is particularly relevant for Jordan, where vocational education must address societal stigmas and create pathways for underrepresented groups to succeed in higher education and beyond.

### *Theme 5: Educator Preparedness and Systemic Constraints*

Braun (2019) highlights the readiness of educators to adapt to changes in BTEC assessment frameworks, revealing gaps in detailed planning, student motivation strategies, and parental engagement. These findings emphasize the importance of professional development and systemic support for educators navigating assessment reforms. For Jordan, where vocational education reforms involve the adoption of international frameworks like BTEC, investing in teacher training is crucial. Equipping educators with the skills and knowledge to deliver reformed curricula and assessments will be key to ensuring the success of these initiatives.

### *Results and Implications*

The critical discussion of results reveals that vocational education reforms must strike a balance between maintaining the practical strengths of applied qualifications and addressing gaps in academic preparedness and labor market alignment. While BTEC qualifications offer significant benefits, including widening access to HE and improving employability, systemic challenges such as societal stigma, educator readiness, and the risk of over-standardization must be addressed. For Jordan, these findings provide actionable insights. The results emphasize the need for tailored reforms that protect the unique strengths of vocational education while addressing gaps in preparation for HE and the labor market. Specific recommendations include introducing bridging programs, fostering industry-academia collaboration, and investing in teacher training to ensure educators can effectively implement new frameworks. By addressing these challenges, Jordan can create a vocational education system that not only equips students with practical skills but also supports their academic and professional aspirations, ultimately contributing to a skilled workforce and a competitive economy.

## **5. Discussion**

The findings from this literature review reveal the complexities and opportunities associated with vocational education reform, particularly regarding the integration and effectiveness of the BTEC framework. While the results highlight the transformative potential of vocational qualifications in widening participation and improving employability, they also underscore significant challenges that must be addressed to ensure equitable and effective outcomes. These insights are particularly relevant for Jordan as it seeks to reform its vocational education system.

### *Transition Challenges: Adapting to Academic Rigor in Higher Education*

One critical theme emerging from the review is the difficulty that BTEC students face in transitioning to

higher education (HE). Peake (2018) highlights a striking disparity in academic performance between BTEC and A-level students, with less than half of BTEC entrants achieving upper-class degrees compared to over 90% of A-level entrants. This gap can be attributed to differences in academic preparation, with BTEC students often lacking the theoretical grounding needed to thrive in HE. This finding underscores the need for targeted support mechanisms to bridge the gap, such as transition toolkits, preparatory courses, and mentorship programs. For Jordan, these insights point to the importance of implementing transition support initiatives that address academic gaps while preserving the applied strengths of vocational qualifications.

#### *Reforms and the Risk of Over-Standardization*

The push for reforming vocational education, as discussed by Kelly (2017), presents both opportunities and challenges. While standardization aims to improve the academic rigor of vocational qualifications, it risks marginalizing the distinctiveness of BTECs and similar frameworks. The “middle option” provided by BTECs has been instrumental in widening access to HE, particularly for students who thrive in applied learning environments. However, reforms inspired by binary models of academic versus technical education may inadvertently undermine this inclusivity. In Jordan, policymakers must carefully balance standardization efforts with preserving the unique pedagogical strengths of vocational education. Protecting the distinctiveness of these qualifications is essential to ensuring that they remain accessible and relevant to diverse learners.

#### *Economic Value and Labor Market Alignment*

The labor market outcomes for BTEC graduates, as explored by Patrignani, Battiston, and Conlon (2019), provide a compelling case for the economic value of vocational qualifications. BTEC graduates in fields such as architecture, engineering, and medicine achieve comparable earnings and employment rates to their A-level counterparts, particularly when transitioning to HE. These findings emphasize the importance of aligning vocational education pathways with high-demand sectors to maximize employability and economic contributions. For Jordan, this means ensuring that BTEC-aligned programs are integrated into industries where there is a clear demand for skilled labor. Partnerships with employers and industry stakeholders can help tailor vocational curricula to meet these needs, fostering a workforce that is both competent and competitive.

#### *Addressing Socioeconomic Inequalities*

Vocational education has the potential to transform the aspirations and opportunities of disadvantaged groups, as demonstrated by Gartland and Smith (2018). Through supportive pedagogies, BTEC courses build social and cultural capital, enabling students from underrepresented backgrounds to envision and achieve success in HE. However, systemic stratification within education often perpetuates inequalities, limiting upward mobility for vocational students. For Jordan, addressing these disparities requires a deliberate effort to combat societal stigmas associated with vocational education and create inclusive pathways that empower all learners. Initiatives such as community outreach programs, awareness campaigns, and scholarships for vocational students can help foster a more equitable education system.

#### *Educator Readiness and Systemic Support*

Educator preparedness is a crucial factor in the successful implementation of vocational education reforms. Braun (2019) highlights gaps in planning, motivation strategies, and parental engagement among educators adapting to changes in BTEC assessment practices. This underscores the need for professional development programs that equip teachers with the skills to deliver both applied and theoretical content effectively. For Jordan, investing in teacher training and support systems will be critical to ensuring that vocational educators can navigate new frameworks and assessments while maintaining high standards of teaching and learning.

#### *Implications for Jordan's Vocational Education Reforms*

The results of this literature review offer valuable insights for Jordan as it undertakes reforms in vocational education. The findings emphasize the need for a multifaceted approach that balances academic preparation with practical skills, aligns curricula with labor market demands, and addresses societal and systemic barriers to inclusion. Key recommendations include:

**Bridging Programs:** Introduce preparatory courses to support vocational students transitioning to HE.

**Industry Collaboration:** Foster partnerships between education providers and employers to align vocational programs with labor market needs.

**Teacher Training:** Invest in professional development to ensure educators are equipped to implement new curricula and assessments.



**Awareness Campaigns:** Promote the value of vocational education to combat stigmas and encourage broader societal acceptance.

By addressing these priorities, Jordan can build a vocational education system that not only enhances employability but also fosters equity, inclusion, and economic growth. The findings serve as a call to action for stakeholders to ensure that vocational education reforms are both evidence-based and contextually relevant, paving the way for a skilled and empowered workforce.

## 6. Conclusion

The findings from this literature review provide a comprehensive understanding of the challenges, opportunities, and systemic dynamics associated with vocational education reforms, particularly focusing on the integration of the BTEC framework. While the review offers valuable insights into enhancing employability and aligning education with labor market needs, it is crucial to recognize the limitations, determinants, and broader contributions of this work, as well as areas for future research.

### 6.1 *Limitations of the Study*

This study is not without limitations. A significant constraint lies in the heavy reliance on studies conducted in the UK and other Western contexts. While these findings are highly relevant, their applicability to Jordan and other non-Western settings may be limited by cultural, economic, and systemic differences. The lack of region-specific studies that explore vocational education reforms in Middle Eastern contexts restricts the ability to draw directly transferable conclusions. Furthermore, while this review synthesizes diverse methodological approaches, the inherent variability in research quality and scope across the reviewed studies introduces a degree of inconsistency in the findings. For example, some studies, such as Braun (2019), are based on small sample sizes, which limits their generalizability, while others, like Patrignani, Battiston, and Conlon (2019), focus narrowly on quantitative outcomes without capturing the lived experiences of learners and educators.

### 6.2 *Key Determinants of Vocational Education Success*

The results of this review highlight several key determinants that shape the success of vocational education reforms. One critical factor is the alignment between vocational curricula and labor market demands. Studies such as Patrignani et al. (2019) emphasize the economic benefits of vocational qualifications when they are tailored to high-demand sectors. Another determinant is societal perception, as evidenced by Gartland and Smith (2018), which underscores the importance of combating stigma associated with vocational pathways to ensure equitable access and outcomes. Additionally, educator readiness, as discussed by Braun (2019), emerges as a crucial determinant, with professional development and systemic support playing a pivotal role in effective implementation.

### 6.3 *Contributions to Vocational Education Reform*

This literature review makes several contributions to the discourse on vocational education reform. First, it highlights the transformative potential of the BTEC framework in bridging the gap between education and employment, particularly for disadvantaged learners. The emphasis on applied learning, as demonstrated by Kelly (2017), provides a model for designing vocational programs that are inclusive and practical. Second, this review offers critical insights into the challenges of transition from vocational to higher education, emphasizing the need for targeted support mechanisms. The findings also underscore the importance of balancing standardization with maintaining the distinctiveness of vocational qualifications, offering policymakers a nuanced perspective on reform strategies. For Jordan, these contributions offer actionable recommendations to inform policy and practice. The review highlights the need for contextualized reforms that address local labor market demands, societal attitudes, and systemic constraints, ensuring that vocational education is both effective and equitable.

### 6.4 *Future Research Directions*

The findings also identify key areas for future research. First, there is a need for region-specific studies that explore the unique challenges and opportunities of vocational education in Middle Eastern contexts. Such research should examine how cultural, economic, and policy environments shape vocational education outcomes and identify best practices tailored to these settings. Second, longitudinal studies tracking the long-term academic and employment outcomes of vocational graduates would provide deeper insights into the effectiveness of reforms. Research could also explore the role of digital technologies and Industry 4.0 in reshaping vocational education, particularly in high-demand sectors like technology and engineering.

Additionally, qualitative research capturing the lived experiences of vocational students and educators would complement quantitative studies, providing a more holistic understanding of systemic challenges and opportunities. Investigating the intersection of vocational education with gender, socioeconomic status, and other demographic factors could further inform inclusive policy-making and practice. Thus, this paper underscores the critical role of vocational education in fostering employability and addressing labor market needs. While the BTEC framework offers a robust model for aligning education with industry demands, its successful implementation requires careful consideration of systemic constraints, societal perceptions, and educator readiness. For Jordan, these findings provide a roadmap for designing reforms that are both contextually relevant and globally informed. By addressing the limitations identified and investing in future research, stakeholders can build a vocational education system that empowers learners, strengthens the workforce, and drives sustainable economic development.

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