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ADVANCING EMPLOYABILITY SKILLS AND WORKFORCE READINESS: A CONCEPTUAL FRAMEWORK FOR CONTEMPORARY LABOUR MARKETS

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Abstract

The transformation of contemporary labour markets, driven by rapid technological advancement, globalisation, and evolving work structures, has intensified the demand for a workforce equipped with multidimensional competencies. This paper provides a conceptual analysis of employability skills and workforce readiness, with particular attention to the challenges facing developing economies such as Nigeria. Drawing on interdisciplinary literature and integrating insights from human capital theory, social capital theory, and the capability approach, the study examines the persistent disconnect between formal education systems and labour market expectations. The paper identifies key gaps in existing scholarship, notably the fragmentation of employability research and the limited integration of individual, institutional, and policy dimensions. In response, it proposes an integrated conceptual framework that positions workforce readiness as an emergent outcome of dynamic interactions between skill domains (technical, soft, and digital skills), education and training systems, and contextual factors such as policy frameworks and industry partnerships. The framework advances a systems-based perspective, moving beyond linear and individual-centric interpretations of employability. The study contributes to the literature by synthesising diverse theoretical and empirical strands into a coherent model that captures the complexity of employability in contemporary labour markets. It further provides policy-relevant insights, emphasising the need for coordinated interventions across education, industry, and governance structures to enhance workforce readiness. The paper concludes by advocating a shift from credential-based approaches to competence-driven human capital development, particularly in contexts characterised by structural constraints and skills mismatches.

Keywords: Employability Skills, Workforce Readiness, Labour Market

Introduction

The contemporary global labour market is undergoing profound transformation driven by rapid technological advancement, digitalisation, automation, and shifting economic structures. These changes have significantly altered the nature of work, redefining the skills required for employment and rendering traditional qualifications increasingly insufficient as indicators of workforce competence. Across both developed and developing economies, employers now prioritise a broader spectrum of capabilities that combine technical expertise with cognitive, interpersonal, and adaptive skills (Heckman & Kautz, 2012; Organisation for Economic Co-operation and Development [OECD], 2013; van Laar et al., 2020).

In this evolving context, the concept of employability has gained prominence as a critical lens through which workforce readiness is understood. Employability extends beyond the possession of academic credentials to encompass a set of achievements, including skills, knowledge, and personal attributes that enhance an individual's capacity to secure and sustain meaningful employment (Yorke, 2006). Similarly, Fugate, Kinicki, and Ashforth (2004) conceptualise employability as a multidimensional construct integrating career identity, personal adaptability, and social and human capital. These perspectives underscore the growing recognition that workforce readiness is not merely an outcome of formal education but a dynamic process shaped by continuous learning and adaptation.

Despite this global shift, a persistent disconnect remains between formal education systems and labour market expectations. Graduates frequently emerge with strong theoretical knowledge but lack the practical competencies and transferable skills required in contemporary workplaces (Okolie et al., 2020). This disconnect has contributed

to rising levels of youth unemployment, underemployment, and skills mismatch, particularly in developing economies such as Nigeria, where demographic pressures and structural inefficiencies further exacerbate labour market challenges (International Labour Organization [ILO], 2022; World Bank, 2020). In Nigeria specifically, the dominance of informal employment, limited industry–academia collaboration, and insufficient investment in technical and vocational education continue to constrain workforce readiness.

Existing literature on employability and workforce readiness, while extensive, is often fragmented. Many studies focus on isolated dimensions such as skill acquisition, educational reform, or labour market dynamics without adequately integrating these elements into a coherent analytical framework. Moreover, within the Nigerian context, research has largely remained descriptive or empirical, with limited attention given to developing theory-driven models that capture the complex interplay between individual capabilities, institutional structures, and policy environments.

This paper addresses this gap by offering a conceptual synthesis of employability skills and workforce readiness within contemporary labour market contexts. Drawing on interdisciplinary literature, it critically examines the interconnections between skill acquisition, education and training systems, and broader structural factors such as policy frameworks and industry engagement. The paper advances an integrated conceptual framework that positions workforce readiness as the outcome of dynamic interactions between individual competencies and institutional mechanisms.

Specifically, the study aims to: (1) situate employability challenges within global transformations in work and skills demand; (2) examine key theoretical perspectives underpinning employability and workforce readiness; and (3) propose a contextually relevant model linking skill domains, training systems, and labour market outcomes within the Nigerian and broader developing economy context. By doing so, the paper contributes to ongoing debates by moving beyond descriptive accounts toward a more structured and policy-relevant understanding of employability in contemporary labour markets.

Conceptualising Employability Skills

Employability is a complex and multidimensional construct that extends beyond the acquisition of formal educational qualifications. It encompasses a dynamic combination of knowledge, skills, attributes, and dispositions that enable individuals to obtain, sustain, and progress in employment within evolving labour market contexts. Yorke (2006) defines employability as a set of achievements such as skills, understandings, and personal qualities that make graduates more likely to gain employment and succeed in their chosen occupations. Expanding this perspective, Fugate, Kinicki, and Ashforth (2004) conceptualise employability as a psycho-social construct comprising three interrelated dimensions which include career identity, personal adaptability, and social and human capital. Together, these perspectives highlight that employability is not a static outcome but a continuous process of development shaped by both individual agency and contextual opportunities.

A useful way of understanding employability is through its core skill domains. First, cognitive or higher-order thinking skills such as critical thinking, analytical reasoning, and problem-solving are essential for directing complex and uncertain work environments. These skills enable individuals to interpret information, make informed decisions, and generate innovative solutions to emerging challenges. Second, interpersonal or social skills which include communication, teamwork, collaboration, and emotional intelligence facilitate effective interaction within increasingly diverse and multidisciplinary workplaces. Third, intrapersonal attributes, such as resilience, adaptability, self-regulation, and motivation, underpin individuals' capacity to cope with change and sustain long-term career development. Empirical studies have consistently demonstrated that these non-cognitive skills are as important as, and in some cases more predictive than, technical expertise in determining labour market outcomes (Heckman & Kautz, 2012).

In addition to these domains, the growing centrality of digital technologies has elevated digital literacy as a core component of employability (Shuaib et al., 2023). Digital skills now encompass not only the ability to use information and communication technologies but also competencies in data handling, online collaboration, and the adaptation to emerging technologies such as artificial intelligence (Nuhu et al., 2026). As workplaces become increasingly digitised, the integration of technical, soft, and digital skills forms the foundation of what is often

described as “21st-century skills” (van Laar et al., 2020; OECD, 2013). Consequently, employability must be understood as an evolving construct that reflects broader technological and socio-economic transformations.

The literature further distinguishes employability skills from occupation-specific or technical skills. While technical skills are essential for performing specific job functions, employability skills are transferable across roles and sectors, enabling individuals to remain relevant in dynamic labour markets. Carnevale and Barrington (2006) emphasise that employers increasingly value such transferable competencies, particularly in contexts characterised by rapid organisational change and innovation. Similarly, Rosenberg, Heimler, and Morote (2012) describe employability skills as foundational capabilities that support both entry into employment and long-term career mobility.

Despite the widespread recognition of employability skills, their development remains uneven across educational systems, particularly in developing contexts. In Nigeria, for example, studies have identified persistent gaps in the acquisition of critical thinking, communication, and problem-solving skills among graduates, often attributed to pedagogical approaches that prioritise rote learning over experiential and competency-based education (Okolie, Igwe, & Elom, 2020; Ibrahim, 2016). Limited exposure to real-world work environments, weak integration of industry-based learning, and inadequate investment in technical and vocational education further constrain the development of these competencies.

Moreover, the conceptual ambiguity surrounding employability continues to pose challenges for both researchers and policymakers. Terms such as ‘generic skills,’ ‘transferable skills,’ and ‘work readiness skills’ are frequently used interchangeably, leading to inconsistencies in measurement and implementation (O’Neil, Allred, & Baker, 1997; Zinser, 2003). This lack of conceptual clarity contributes to fragmented policy responses and limits the effectiveness of interventions aimed at enhancing workforce readiness.

In light of these challenges, there is a need to reconceptualise employability as an integrative construct that captures the interaction between individual capabilities and systemic factors. Rather than viewing employability solely as a personal attribute, it should be understood as a product of continuous engagement between learners, educational institutions, and labour market systems. This perspective provides a foundation for developing more coherent strategies that align skill acquisition processes with the demands of contemporary work environments.

Understanding Workforce Readiness

Workforce readiness is a central concept in contemporary labour market discourse, reflecting the extent to which individuals possess the competencies required to effectively transition into and perform within the workplace. It extends beyond the acquisition of discrete skills to encompass a broader state of preparedness that integrates knowledge, abilities, attitudes, and behavioural dispositions. Akorede et al. (2021) and Caballero et al. (2011) conceptualise workforce readiness as a multidimensional construct that includes not only technical competence but also psychological preparedness, organisational awareness, and the capacity to adapt to workplace norms and expectations.

Closely related to employability, workforce readiness represents the operationalisation of employability skills within real-world contexts. While employability refers to the potential or capacity to gain and sustain employment, workforce readiness reflects the practical manifestation of this capacity in terms of job performance and workplace integration. In this sense, workforce readiness can be understood as the outcome of effective skill acquisition processes, shaped by both individual effort and systemic factors such as education, training, and labour market conditions.

A key feature of workforce readiness is its integrative nature. It encompasses several interrelated dimensions, including technical competence, cognitive ability, interpersonal effectiveness, and adaptive capacity. Technical competence refers to job-specific knowledge and skills required for particular occupations, while cognitive ability involves problem-solving, critical thinking, and decision-making capabilities. Interpersonal effectiveness includes communication, teamwork, and emotional intelligence, all of which are essential for functioning within collaborative work environments. Adaptive capacity, on the other hand, reflects the ability to respond to change, learn continuously, and navigate uncertain and evolving workplace conditions (O’Neil et al., 1997; Zinser, 2003).

In the digital age, workforce readiness increasingly incorporates digital literacy as a foundational requirement. Digital literacy extends beyond basic technological proficiency to include the ability to access, evaluate, and utilise information effectively in digitally mediated environments. van Laar et al. (2020) highlight that digital skills are now deeply embedded within broader 21st-century competencies, enabling individuals to participate in knowledge-based economies. Similarly, international frameworks emphasise digital competence as critical for employment, entrepreneurship, and social inclusion (Abdullahi et al., 2026; UNESCO, 2018; Ojokheta & Aderinoye, 2022). As such, workforce readiness must be understood within the context of digital transformation, where the ability to engage with emerging technologies is increasingly linked to employability outcomes.

Despite its importance, workforce readiness remains unevenly developed across different socio-economic contexts. In many developing economies, including Nigeria, structural constraints significantly hinder the effective preparation of individuals for the workforce. Weak linkages between educational institutions and industry, limited access to internships and experiential learning opportunities, and inadequate investment in technical and vocational education contribute to persistent gaps in workforce readiness (World Bank, 2020). These challenges are further compounded by rapid technological change, which continuously reshapes skill requirements and renders existing competencies obsolete.

Furthermore, workforce readiness is influenced by broader institutional and policy environments. Government policies, regulatory frameworks, and labour market structures play a crucial role in shaping the opportunities available for skill development and employment. In contexts where policy coordination is weak or fragmented, efforts to enhance workforce readiness often yield limited outcomes. For example, in Nigeria, various employment and youth development programmes have been implemented, yet their impact has been constrained by issues of sustainability, inadequate funding, and poor alignment with labour market needs (Adewumi & Mosaku, 2019).

Conceptually, workforce readiness should therefore be understood as a dynamic and context-dependent construct that emerges from the interaction between individual capabilities and systemic structures. It is not solely an attribute of individuals but a reflection of the effectiveness of education and training systems, the responsiveness of labour markets, and the enabling role of policy frameworks. This perspective aligns with the broader argument of this paper, which positions workforce readiness as the outcome of interconnected systems rather than isolated skill acquisition processes.

Challenges to Employability and Workforce Readiness

The persistent gap between education and employment outcomes is shaped by a complex relationship of individual, institutional, and structural factors. Understanding these challenges requires moving beyond simplistic explanations to a more nuanced analysis of how systemic inefficiencies and contextual constraints interact to undermine workforce readiness, particularly in developing economies.

At the institutional level, one of the most significant challenges lies in the misalignment between educational curricula and labour market demands. Many educational systems, especially within developing contexts, continue to prioritise theoretical knowledge over practical competencies, resulting in graduates who are inadequately prepared for the realities of contemporary workplaces. This disconnect is particularly evident in disciplines that require applied skills, where limited integration of experiential learning, internships, and industry-based training restricts students' ability to translate knowledge into practice (Okolie, Igwe, & Elom, 2020). Furthermore, weak collaboration between educational institutions and employers constrains opportunities for curriculum co-design and limits the responsiveness of training systems to emerging skill needs.

At the individual level, deficits in exposure, adaptability, and self-directed learning further contribute to employability challenges. Many graduates lack opportunities to engage in real-world work environments during their training, reducing their familiarity with workplace expectations and organisational cultures. In addition, the capacity for continuous learning, an essential requirement in rapidly evolving labour markets, is often underdeveloped. This limitation is particularly problematic in the context of digital transformation, where individuals are expected to update their skills continuously to remain relevant (van Laar et al., 2020). Socio-economic barriers, including poverty and unequal access to digital technologies, further exacerbate these challenges by constraining individuals' ability to acquire and apply critical skills.

Structural and policy-related factors also play a decisive role in shaping workforce readiness outcomes. In many developing economies, labour market structures are characterised by high levels of informality, underemployment, and limited job creation in the formal sector. In Nigeria, for example, while official unemployment rates may appear relatively low, the prevalence of informal employment and time-related underemployment reflects deeper issues of job quality and skills utilisation (World Bank, 2020). Policy responses to these challenges have often been fragmented and poorly coordinated, with multiple programmes targeting youth employment and skills development but lacking coherence, sustainability, and alignment with labour market needs (Adewumi & Mosaku, 2019).

Another critical challenge relates to the rapid pace of technological change, which continuously reshapes the demand for skills and renders existing competencies obsolete. Automation, artificial intelligence, and digital platforms are transforming the nature of work, creating new opportunities while simultaneously displacing traditional roles. This dynamic generates what has been described as a "skills obsolescence cycle," in which individuals must constantly update their competencies to remain employable (OECD, 2013). However, educational and training systems often struggle to keep pace with these changes, leading to persistent skills mismatches and widening gaps between supply and demand in the labour market. Additionally, conceptual and definitional ambiguities surrounding employability and workforce readiness present a less visible but equally significant challenge. The interchangeable use of terms such as "generic skills," "transferable skills," and "work readiness skills" creates inconsistencies in policy formulation, programme design, and measurement (O'Neil, Allred, & Baker, 1997; Zinser, 2003). This lack of clarity complicates efforts to develop standardised frameworks for assessing and enhancing employability, thereby limiting the effectiveness of interventions.

Taken together, these challenges highlight the inadequacy of approaches that treat employability as solely an individual responsibility. Rather, they point to the need for a systemic perspective that recognises the interdependence of educational systems, labour markets, and policy environments. Addressing workforce readiness therefore requires coordinated efforts across multiple levels, including curriculum reform, strengthened industry partnerships, inclusive access to skill development opportunities, and coherent policy frameworks that align education with labour market demands.

Thematic Review of Literature

A growing body of literature has examined employability skills and workforce readiness across different contexts. However, rather than presenting a unified body of knowledge, existing studies are often fragmented across thematic areas such as global skills demand, employability frameworks, digital competencies, and national labour market dynamics. This section synthesises these strands to provide a coherent analytical foundation for the conceptual framework proposed in this paper.

Global Trends in Skills Demand

Recent global analyses indicate a profound shift in the nature of skills required in contemporary labour markets. Technological advancement, particularly in artificial intelligence, automation, and digital platforms, has accelerated the demand for higher-order cognitive and digital skills. The World Economic Forum (2023) reports that analytical thinking, creativity, and technological literacy are among the most sought-after competencies, with nearly half of core job skills expected to change within a short time frame. Similarly, the Organisation for Economic Co-operation and Development (OECD, 2023) emphasises the growing importance of '21st-century skills,' including adaptability, problem-solving, and lifelong learning, as economies transition toward knowledge-intensive production systems. These developments have significant implications for workforce readiness, as they require individuals to continuously update their competencies in response to evolving labour market conditions. The literature increasingly highlights lifelong learning as a central mechanism for sustaining employability, particularly in contexts characterised by rapid technological disruption (van Laar et al., 2020). However, access to continuous learning opportunities remains uneven, especially in developing economies, thereby reinforcing existing inequalities in labour market outcomes.

Conceptual and Theoretical Frameworks of Employability

Scholarly efforts to conceptualise employability have produced a range of frameworks that emphasise different dimensions of the construct. One of the most influential models is the USEM framework developed by Knight

and Yorke, which integrates understanding, skills, efficacy beliefs, and metacognition as key determinants of graduate employability. This model underscores the importance of both cognitive and affective components in shaping employment outcomes.

Other approaches, such as the career capital framework, conceptualise employability as a combination of human, social, and psychological capital, highlighting the role of networks, identity, and adaptability in career progression (Fugate et al., 2004). Similarly, social cognitive career theory emphasises the role of self-efficacy and outcome expectations in influencing career choices and employment trajectories.

While these frameworks provide valuable perceptions, they often focus predominantly on individual attributes, with limited attention to structural and institutional factors. This limitation is particularly evident in developing contexts, where labour market outcomes are significantly shaped by systemic constraints such as limited job opportunities, weak policy implementation, and inadequate training infrastructure. As a result, there is a need for integrative models that account for both individual capabilities and contextual influences.

Digital Literacy and Future Skills

The increasing digitisation of work has elevated digital literacy from a complementary skill to a core component of employability. Digital competence now encompasses a broad range of abilities, including information management, online communication, data analysis, and the use of emerging technologies. van Laar et al. (2020) argue that digital skills are deeply intertwined with other 21st-century competencies, enabling individuals to function effectively in technology-driven environments.

International organisations have also underscored the importance of digital skills in promoting inclusive economic participation. UNESCO (2018) identifies digital literacy as essential for employment, entrepreneurship, and social inclusion, particularly in developing economies. Similarly, the International Labour Organization (2022) highlights the role of digital skills in facilitating youth employment and reducing vulnerability in the labour market. Despite this recognition, significant digital skills gaps persist, particularly in low and middle-income countries. Limited access to digital infrastructure, inadequate training opportunities, and socio-economic inequalities constrain the acquisition of digital competencies, thereby limiting individuals' ability to participate in emerging labour market opportunities.

Labour Market Dynamics and Policy Context in Nigeria

The Nigerian labour market presents a complex landscape characterised by high levels of informality, underemployment, and skills mismatch. While official unemployment rates may appear relatively moderate, they often mask deeper structural challenges related to job quality and productivity (World Bank, 2020). A substantial proportion of the workforce is engaged in informal employment, which typically offers limited job security, low wages, and minimal opportunities for skill development. Policy responses to these challenges have included a range of initiatives aimed at promoting skills development and youth employment. Programmes implemented by agencies such as the National Directorate of Employment (NDE) and the Small and Medium Enterprises Development Agency of Nigeria (SMEDAN) have sought to enhance entrepreneurship and vocational skills. However, the effectiveness of these initiatives has been constrained by issues of coordination, sustainability, and alignment with labour market needs (Adewumi & Mosaku, 2019).

Recent policy efforts have increasingly emphasised the integration of digital skills and vocational training within the education system. Nevertheless, scholars argue that these reforms remain insufficient in addressing the structural disconnect between education and employment. In particular, limited industry participation in curriculum design and the persistence of theory-oriented pedagogical approaches continue to hinder the development of practical competencies among graduates (Okolie et al., 2020).

Synthesis and Implications for Conceptual Development

The reviewed literature reveals several important insights. First, employability is shaped by a combination of cognitive, interpersonal, and digital competencies, reflecting broader transformations in the nature of work. Second, existing theoretical frameworks, while valuable, tend to emphasise individual-level factors at the expense of systemic influences. Third, digital literacy has emerged as a critical determinant of workforce readiness, yet access to digital skills remains uneven. Finally, in contexts such as Nigeria, structural constraints, including weak

institutional linkages and policy fragmentation, continue to limit the effectiveness of employability interventions. These findings underscore the need for an integrative conceptual approach that captures the interaction between individual skills, education and training systems, and broader policy and labour market environments. The next section builds on this synthesis to propose a framework that addresses these interconnections and provides a more comprehensive understanding of workforce readiness in contemporary labour markets.

Theoretical Perspectives on Employability and Workforce Readiness

A robust understanding of employability and workforce readiness requires engagement with multiple theoretical perspectives that capture both individual capabilities and structural influences. No single theory sufficiently explains the complexity of labour market outcomes; rather, a synthesis of complementary frameworks provides a more comprehensive analytical lens. This paper draws primarily on human capital theory, social capital theory, and the capability approach to situate employability within a broader socio-economic and institutional context.

Human capital theory provides a foundational perspective for understanding employability. Rooted in the work of Becker (1993), the theory posits that investments in education, training, and skill development enhance individual productivity and, consequently, labour market outcomes. From this viewpoint, employability is largely determined by the accumulation of knowledge and competencies that increase an individual's economic value. This perspective has strongly influenced policy approaches globally, particularly in the emphasis on expanding access to education and promoting skills development as pathways to employment. However, while human capital theory effectively explains the role of education and training in enhancing workforce readiness, it has been criticised for its tendency to assume that labour markets function efficiently and that skills automatically translate into employment. In contexts characterised by structural constraints, such as limited job opportunities, informality, and institutional inefficiencies, this assumption does not hold, thereby limiting the explanatory power of the theory.

To address these limitations, social capital theory offers a complementary lens by emphasising the role of networks, relationships, and social connections in shaping employment opportunities. Bourdieu (1986) conceptualises social capital as the aggregate of actual or potential resources linked to durable networks of relationships. In labour market contexts, access to social networks can significantly influence job search processes, information flows, and employment outcomes. This is particularly relevant in developing economies, where informal networks often play a central role in facilitating access to jobs. Social capital thus extends the understanding of employability beyond individual competencies to include relational and contextual factors. Nevertheless, while social capital theory highlights the importance of networks, it may also reinforce existing inequalities, as access to valuable networks is unevenly distributed across socio-economic groups.

Further broadening the analytical scope, the capability approach, as advanced by Sen (1999), shifts attention from the possession of resources to individuals' actual ability to achieve valued outcomes. Within this framework, employability is not merely about having skills or qualifications but about having the real freedom and opportunity to utilise those capabilities in meaningful ways. The capability approach is particularly useful in highlighting the role of structural constraints, such as poverty, discrimination, and limited institutional support, that may prevent individuals from converting their skills into employment. It therefore introduces a normative dimension to the analysis, emphasising equity, inclusion, and the expansion of opportunities.

Taken together, these theoretical perspectives suggest that employability and workforce readiness are shaped by the interaction of three core dimensions which include individual capabilities (human capital), relational resources (social capital), and enabling conditions (capability structures). Human capital explains the acquisition of skills, social capital accounts for access to opportunities, and the capability approach highlights the broader socio-economic conditions that determine whether individuals can effectively utilise their competencies. This integrative perspective provides the theoretical foundation for the conceptual framework proposed in this paper.

Through these theoretical insights, the framework moves beyond reductionist interpretations of employability as either an individual or structural issue. Instead, it conceptualises workforce readiness as an emergent outcome of dynamic interactions between skills acquisition processes, education and training systems, labour market structures, and policy environments. In doing so, it aligns with contemporary calls for more holistic and context-sensitive approaches to understanding employability in rapidly changing labour markets.

An Integrated Conceptual Framework for Employability and Workforce Readiness

Building on the preceding theoretical and empirical discussions, this paper proposes an integrated conceptual framework that reconceptualises employability and workforce readiness as the outcome of dynamic interactions between individual capabilities and systemic structures. The framework departs from traditional linear models that treat employability as a direct product of skill acquisition and instead advances a systems-based perspective that incorporates education and training processes, institutional contexts, and policy environments.

The epicenter of the framework are three primary domains of employability skills, which are: technical skills, soft (interpersonal) skills, and digital skills. These skill domains represent the foundational inputs into the employability process and correspond to the human capital dimension articulated in human capital theory (Becker, 1993). Technical skills encompass occupation-specific knowledge and competencies required for particular roles, while soft skills include communication, teamwork, emotional intelligence, and problem-solving abilities that facilitate effective workplace interaction. Digital skills, increasingly central in contemporary labour markets, involve the capacity to use, adapt to, and innovate with digital technologies (van Laar et al., 2020; OECD, 2013). Together, these skill categories reflect the evolving nature of work and the multidimensional competencies required for workforce participation.

However, the framework posits that the possession of these skills alone is insufficient to guarantee workforce readiness. Instead, skills must be mediated through structured education and training systems, which function as the primary mechanisms for transforming individual capabilities into labour market competencies. These systems include formal education institutions, technical and vocational education and training (TVET) programmes, corporate training initiatives, and emerging learning platforms such as micro-credentials and online courses. Drawing on the capability approach (Sen, 1999), education and training systems can be understood as enabling structures that determine the extent to which individuals are able to convert their skills into meaningful employment outcomes.

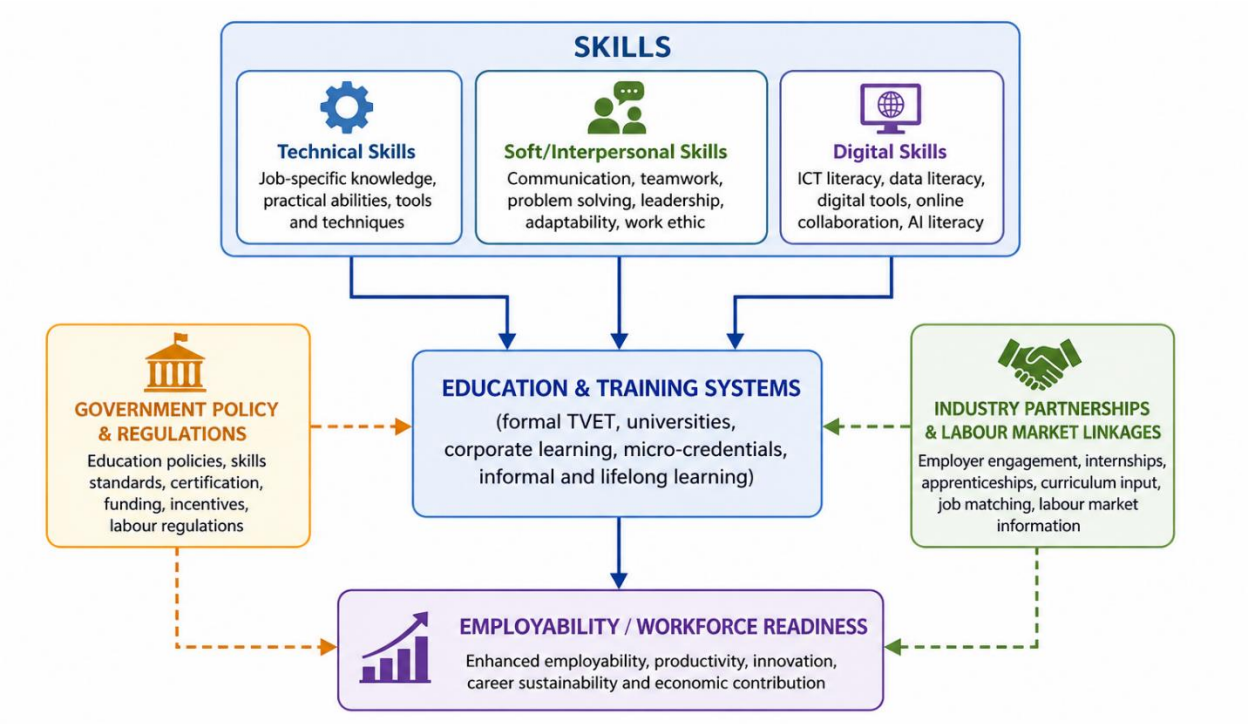


Figure 1: Conceptual Framework Linking Employability Skills, Education and Training Systems, and Contextual Factors to Workforce Readiness

Source: Author's conceptualisation.

Surrounding these core processes are two critical contextual moderators, which are: policy frameworks and industry partnerships. Policy frameworks, encompassing government regulations, education policies, and labour market strategies, play a crucial role in shaping the effectiveness of training systems and influencing labour market dynamics. For instance, policies that promote skills-based education, support vocational training, and incentivise

industry collaboration can enhance the alignment between education and employment. Conversely, fragmented or poorly implemented policies may hinder the translation of skills into employability outcomes.

Industry partnerships represent the relational dimension of the framework, reflecting the role of social capital in facilitating workforce readiness. Collaboration between educational institutions and employers enables the co-design of curricula, provision of internships and apprenticeships, and alignment of training programmes with current industry needs. Such partnerships enhance the relevance of education and provide individuals with opportunities to acquire practical experience and professional networks, thereby improving their employability prospects (Bourdieu, 1986).

The interaction between these elements ultimately produces workforce readiness, conceptualised as the outcome variable in the framework. Workforce readiness is thus not viewed as an isolated attribute of individuals but as an emergent property arising from the interplay between skills, institutional processes, and contextual conditions. This perspective aligns with the broader theoretical synthesis presented in this paper, integrating human capital (skills acquisition), social capital (networks and partnerships), and the capability approach (enabling conditions).

Importantly, the framework also recognises feedback mechanisms within the system. Labour market outcomes, such as employment rates and skill utilisation, provide signals that can influence policy decisions, educational reforms, and individual learning choices. This dynamic feedback loop underscores the non-linear nature of employability and highlights the need for continuous adaptation across all components of the system.

The proposed framework contributes to the literature in three key ways. First, it integrates previously fragmented strands of research into a coherent model that captures both individual and systemic dimensions of employability. Second, it provides a context-sensitive lens for understanding workforce readiness in developing economies, where structural constraints play a significant role. Third, it offers a practical tool for policymakers, educators, and industry stakeholders seeking to design interventions that enhance alignment between education systems and labour market demands.

Implications for Policy, Practice, and Research

The integrated conceptual framework proposed in this study has important implications for policy formulation, educational practice, industry engagement, and future research. By conceptualising workforce readiness as an outcome of interactions between skills, institutional processes, and contextual factors, the framework underscores the need for coordinated and systemic interventions rather than isolated, skill-focused approaches.

From a policy perspective, the findings highlight the importance of adopting a holistic and integrated approach to workforce development. Governments must move beyond fragmented employment and skills initiatives toward comprehensive strategies that align education systems with labour market demands. This includes strengthening technical and vocational education and training (TVET), embedding digital literacy and transferable skills within national curricula, and establishing clear national competency frameworks that prioritise skills over credentials. In addition, policies should incentivise collaboration between educational institutions and industry actors, thereby fostering more responsive and demand-driven training systems. Effective labour market intelligence systems are also essential for monitoring skills demand, identifying emerging trends, and informing policy decisions in real time.

For educational institutions, the framework emphasises the need to shift from traditional knowledge transmission models toward competence-based and experiential learning approaches. Universities and training providers must integrate technical, soft, and digital skills across curricula, ensuring that graduates are equipped not only with theoretical knowledge but also with practical competencies relevant to contemporary workplaces. This requires the adoption of innovative pedagogical strategies such as problem-based learning, internships, simulations, and industry-led training modules. Furthermore, institutions should strengthen career development services to support students in navigating complex labour markets and making informed career choices.

Industry stakeholders also play a critical role in enhancing workforce readiness. Employers should actively engage in curriculum design, provide opportunities for workplace-based learning, and invest in continuous professional development for employees. The increasing relevance of alternative credentialing systems, such as micro-credentials and professional certifications, suggests the need for more flexible and modular training pathways that

complement formal education. By participating in collaborative training ecosystems, industry actors can help ensure that skill development processes remain aligned with evolving labour market needs.

From a research perspective, the proposed framework offers a foundation for empirical investigation into the relationships between skills, training systems, and labour market outcomes. Future studies should seek to operationalise the framework by examining the relative influence of different skill domains on employability, as well as the mediating role of education and training systems. Longitudinal and comparative research designs would be particularly valuable in assessing how changes in policy and institutional arrangements affect workforce readiness over time. Additionally, further research is needed to explore the role of digital learning platforms and alternative education pathways in shaping employability in both developed and developing contexts.

Conclusion

Employability skills and workforce readiness have emerged as critical determinants of labour market participation in an era characterised by rapid technological change, economic uncertainty, and shifting patterns of work. This paper has critically examined these concepts, highlighting the limitations of approaches that treat employability as a purely individual attribute divorced from its broader institutional and structural context. Drawing on interdisciplinary theoretical perspectives and a synthesis of contemporary literature, the study has demonstrated that workforce readiness is best understood as a dynamic and context-dependent outcome arising from the interaction between individual competencies, education and training systems, and enabling policy and labour market environments. In doing so, the paper moves beyond fragmented and descriptive accounts to offer an integrated conceptual framework that captures the complexity of employability in contemporary labour markets.

The framework contributes to existing scholarship by bridging the gap between individual-level skill acquisition and systemic factors, thereby providing a more comprehensive understanding of how workforce readiness is produced. It also offers a contextually relevant lens for analysing employability challenges in developing economies such as Nigeria, where structural constraints, policy fragmentation, and skills mismatches continue to hinder effective labour market integration. Ultimately, the paper argues for a shift from credential-based approaches to competence-driven models of human capital development. Such a shift requires coordinated action across policy, education, and industry domains, as well as a commitment to continuous learning and adaptation in response to evolving labour market demands. Conclusively, this study provides a foundation for more coherent and effective strategies aimed at enhancing workforce readiness and promoting inclusive economic development.

Disclaimer: The pictorial image of the conceptual model (Figure 1), though designed with advanced AI tool, is an original idea of the authors. The authors reserve the copyright.

References

Abdullahi, H. A., Abubakar, I., & Oba, A. I. (2026). Assessment of entrepreneurship skills expectations of agricultural education undergraduates in Ahmadu Bello University, Zaria, Nigeria. *Bauchi International Journal of Multi-Disciplinary Studies, 2*(1), 133–140.

Abu, P. B., & Akinkunmi, F. A. (2020). Dynamics of human capital development and training in the 21st century. In K. O. Kester, P. B. Abu, I. A. Abiona, & J. E. Oghenekohwo (Eds.), *Human and social development investments (Festschrift for Professor Mathew Oladepo Akintayo)*. John Archers Publishers.

ACTE. (2013). *ACTE CTA Today!*. https://www.acteonline.org/

Adewumi, O., & Mosaku, T. (2019). Youth unemployment in Nigeria: Causes and policy solutions. *Journal of Social Policy Studies, 7*(2), 45–60.

Akorede, S. N., Ajayi, A., Toyin, A., & Uwadia, G. (2021). Influence of COVID-19 on the psychological wellbeing of tertiary institution students in Nigeria. *Tanzania Journal of Science, 47*(1), 70–79.

Andrews, J., & Higson, H. (2008). Graduate employability, 'soft skills' versus 'hard' business knowledge: A European study. *Higher Education in Europe, 33*(4), 411–422. https://doi.org/10.1080/03797720802522627

Becker, G. S. (1993). *Human capital: A theoretical and empirical analysis, with special reference to education* (3rd ed.). University of Chicago Press.

Bourdieu, P. (1986). The forms of capital. In J. Richardson (Ed.), *Handbook of theory and research for the sociology of education* (pp. 241–258). Greenwood.

Caballero, C. L., Walker, A., & Fuller-Tyszkiewicz, M. (2011). The work readiness scale (WRS): Developing a measure to assess work readiness in college graduates. *Journal of Teaching and Learning for Graduate Employability, 2*(2), 41–54.

Carnevale, A. P., & Barrington, L. (2006). *Are they really ready to work? Employers' perspectives on the basic knowledge and applied skills of new entrants to the 21st century U.S. workforce*. The Conference Board. http://www.p21.org/storage/documents/FINAL_REPORT_PDF09-29-06.pdf

Dreyfus, S. E. (2004). The five-stage model of adult skill acquisition. *Bulletin of Science, Technology & Society, 24*(3), 177–181. https://doi.org/10.1177/0270467604264992

Department for Education and Employment. (2007). *Labour market and skill trends, 1998–2009*. Business Strategies Ltd.

Fugate, M., Kinicki, A. J., & Ashforth, B. E. (2004). Employability: A psycho-social construct, its dimensions, and applications. *Journal of Vocational Behavior, 65*(1), 14–38. https://doi.org/10.1016/j.jvb.2003.10.005

Gillespie, J. (2014). Higher education and key skills. *The Higher Education Academy Journal, 12*(9), 345–352.

Harvey, L., Moon, S., & Geall, V. (2007). *Graduates' work: Organisational change and students' attributes*. Centre for Research into Quality.

Heckman, J. J., & Kautz, T. (2012). Hard evidence on soft skills. *Labour Economics, 19*(4), 451–464.

Hillage, J., & Pollard, E. (1998). *Employability: Developing a framework for policy analysis*. Department for Education and Employment.

Hogan, T. (2011). *An overview of the knowledge economy, with focus on Arizona*. Arizona State University.

Holmes, L. (2001). Reconsidering graduate employability: The 'graduate identity' approach. *Quality in Higher Education, 7*(2), 111–119. https://doi.org/10.1080/13538320120060006

Holzer, H. J. (2019). *Technology and workforce readiness: Implications for skills training and the economy*. Taylor & Francis.

Ibrahim, A. (2016). A nexus between skill development, employability and higher education in Nigeria. *African Journal of Higher Education Studies and Development, 4*(5), 17–36.

Ibrahim, A., & Olatunde, F. A. (2015). Teaching creativity and entrepreneurship in higher education: An evaluation of employability of university undergraduates in Nigeria. *Journal of Teaching and Teacher Education, 3*(1), 51–56.

International Labour Organisation. (2022). *Global employment trends for youth 2022*. ILO.

Kester, K. O., Olajide, M. F., & Ogidan, T. O. (2010). Influence of training on organisational commitment and job satisfaction among local government-based adult education officers in Oyo State, Nigeria. *International Journal of Continuing and Non-Formal Education, 7*(1), 54–69.

Makki, B. I., Salleh, R., Memon, M. A., & Harun, H. (2015). The relationship between work readiness skills, career self-efficacy and career exploration among engineering graduates: A proposed framework. *Research Journal of Applied Sciences, Engineering and Technology, 10*(9), 1007–1011.

Nayan, S. (2010). Employability awareness among Malaysian undergraduates. *International Journal of Business and Management, 5*(8).

National Committee of Inquiry into Higher Education. (2001). *Higher education in the learning society*. HMSO.

Nuhu, K. M., Oba, A. I., Alabi, O. A., Lawal, M. A., Adewuyi, A. S., & Olumorin, C. O. (2026). Effect of artificial intelligence tools on achievement in complex STEM concepts among senior secondary school students in Ilorin, Kwara State, Nigeria. *Federal University Gusau Faculty of Education Journal, 6*(3), 92–101. https://doi.org/10.64348/zije.2026383

Olawuni, A. O., & Noibi, T. O. (2020). Skills acquisition and entrepreneurship development for sustainable development. In K. O. Kester et al. (Eds.), *Human and social development investments*. John Archers Publishers.

Ojokheta, K. O., & Aderinoye, R. A. (2022). Upskilling workers with digital competencies for improved job efficiency in post-COVID-19 Nigeria. In K. O. Kester, A. M. Momoh, & A. A. Sarumi (Eds.), *Education and working-class advancement and wellness*.

Organisation for Economic Co-operation and Development. (2005). *The definition and selection of key competencies: Executive summary*. http://www.oecd.org/dataoecd/47/61/35070367.pdf

Organisation for Economic Co-operation and Development. (2013). *OECD skills outlook: First results from the survey of adult skills*. https://doi.org/10.1787/9789264204256-en

Okolie, U. C., Igwe, P. A., & Elom, E. N. (2020). Enhancing graduate employability: Why do higher education institutions struggle with teaching generic skills? *Policy Futures in Education, 18*(2), 294–313.

O'Neil, H. F., Allred, K., & Baker, E. L. (1997). Review of workforce readiness theoretical frameworks. In H. F. O'Neil (Ed.), *Workforce readiness competencies and assessment* (pp. 3–25). Lawrence Erlbaum.

Rosenberg, S., Heimler, R., & Morote, E. S. (2012). Basic employability skills: A triangular design approach. *Education + Training, 54*(1), 7–20. https://doi.org/10.1108/00400911211198869

Sen, A. (1999). *Development as freedom*. Oxford University Press.

Shuaib, S. B., Adesanya, E. O., Oba, A. I., Afolabi, K. O., & Jimoh, S. B. (2023). Assessing agricultural literacy among senior school students in Kwara, Nigeria: Implication for educational interventions. *Indonesian Journal of Curriculum and Educational Technology Studies, 11*(1), 1–8.

Shukla, D. (2012). Employability skills among professionals: A study of engineering graduates in Bhopal. *VSRD International Journal of Business & Management Research, 2*, 418–427.

Smith, E., & Krüger, J. (2011). A critical assessment of graduates' perceptions of their generic skills level. *South African Journal of Economic and Management Sciences, 11*(2), 121–138.

Thijssen, J. G., Van der Heijden, B. I., & Rocco, T. S. (2008). Toward the employability-link model. *Human Resource Development Review, 7*(2), 165–183. https://doi.org/10.1177/1534484308314955

van Laar, E., van Deursen, A. J., van Dijk, J. A., & de Haan, J. (2020). Determinants of 21st-century skills and digital skills for workers: A systematic literature review. *SAGE Open*. https://doi.org/10.1177/2158244019900176

Warn, J., & Tranter, P. (2001). Measuring quality in higher education: A competency approach. *Quality in Higher Education, 7*(3), 191–198. https://doi.org/10.1080/13538320120098008

World Bank. (2020). *Nigeria skills development report*. World Bank.

Yorke, M. (2006). *Employability in higher education: What it is, what it is not*. Higher Education Academy.

Zinser, R. (2003). Developing career and employability skills: A U.S. case study. *Education + Training, 45*(7), 402–410. https://doi.org/10.1108/00400910310499973