Competency Mapping for Career Readiness Among Business School Students: A Systematic Literature Review

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Abstract- The growing demand for industry-ready graduates has intensified the need for higher education institutions to ensure that students develop competencies required by modern workplaces. Business schools, in particular, are expected to prepare students with both technical and transferable skills that enhance career readiness. Competency mapping has emerged as an important tool for identifying and aligning student competencies with industry expectations. This study aims to systematically review existing literature on competency mapping and career readiness among business school students. A systematic literature review was conducted following PRISMA guidelines using Scopus and Web of Science databases. After applying inclusion and exclusion criteria, 39 relevant peer-reviewed articles published between 2010 and 2025 were selected for analysis. The findings reveal five major competency clusters necessary for career readiness: technical competencies, soft skills, cognitive competencies, digital competencies, and professional competencies. The review highlights significant gaps in integrating competency mapping frameworks within business education curricula. Based on the synthesis of the literature, a conceptual framework linking competency development with career readiness and employability outcomes is proposed. The findings contribute to higher education literature by consolidating fragmented research and providing insights for educators and policymakers seeking to enhance graduate employability.

Keywords: competency mapping, career readiness, employability skills, business education, systematic literature review

I. INTRODUCTION

The rapid transformation of global labor markets has increased the demand for graduates equipped with diverse competencies beyond academic knowledge. Employers increasingly expect graduates to demonstrate technical expertise, communication skills, critical thinking abilities, and adaptability in dynamic professional environments (Clarke, 2018). Consequently, higher education institutions are under pressure to ensure that graduates possess competencies aligned with industry expectations.

Business schools play a crucial role in preparing students for professional careers. However, several studies have highlighted a persistent gap between the competencies acquired during higher education and those required by employers (Andrews & Higson, 2008). This mismatch has raised concerns regarding the effectiveness of traditional curricula in developing career-ready graduates.

Competency mapping is widely recognized as a systematic process used to identify and assess the knowledge, skills, and behavioral attributes required for effective performance in specific roles (Boyatzis, 2008). Within the educational context, competency mapping enables institutions to evaluate students' competencies and align learning outcomes with industry requirements.

Career readiness refers to the preparedness of graduates to successfully transition from education to employment. It encompasses technical knowledge, interpersonal skills, professional attitudes, and digital literacy (Caballero et al., 2011). Despite the growing emphasis on competency-based education, research examining the role of competency mapping in enhancing career readiness among business school students remains fragmented.

Therefore, this study conducts a systematic literature review to synthesize existing research on competency

mapping and career readiness and proposes a conceptual framework linking competency development with employability outcomes.

II. LITERATURE REVIEW

Competency Mapping

Competency mapping refers to the identification and assessment of key competencies required for effective performance in a specific role or profession (Boyatzis, 2008). In educational settings, competency mapping helps align curriculum design with industry requirements and enables institutions to identify competency gaps among students.

Competency-based education models have gained prominence in higher education as they emphasize practical skill development and learning outcomes aligned with workplace expectations (Mulder, 2017).

Career Readiness

Career readiness represents the ability of graduates to transition successfully into professional careers. It involves a combination of academic knowledge, technical expertise, and transferable skills such as communication, teamwork, and problem-solving (Yorke, 2006).

Research indicates that employers increasingly value soft skills and cognitive competencies alongside technical knowledge (Robles, 2012).

Competencies Required for Business Graduates

Studies on graduate employability suggest that business graduates require a combination of competencies including analytical thinking, leadership, digital literacy, and adaptability (Jackson, 2015). The development of these competencies is influenced by curriculum design, industry exposure, and experiential learning opportunities.

Research Gap

Although numerous studies examine graduate employability and skill development, relatively few studies focus specifically on competency mapping as a strategic framework for enhancing career readiness among business school students. Moreover, existing research often examines individual competencies rather than integrated competency frameworks.

III. METHODOLOGY

Research Design

This study adopts a systematic literature review (SLR) approach to analyze existing research on competency mapping and career readiness.

Data Sources

The literature search was conducted using the following databases:

- Scopus
- Web of Science

Search Strategy

Search string used:

("competency mapping" OR "competency framework" OR "skills mapping") AND

("career readiness" OR "graduate employability") AND

("business students" OR "management students" OR "higher education")

Inclusion Criteria

- Peer-reviewed journal articles
- Published between 2010–2025
- English language
- Studies focusing on higher education or business students

Exclusion Criteria

- Conference papers
- Book chapters
- Non-academic articles

Table 1-PRISMA Summary Table

Stage	Number of Articles
Records identified	312
Duplicates removed	36
Records screened	276
Records excluded	144
Full-text articles assessed	132
Articles excluded	93
Final articles included	39

IV. RESULTS

Overview of Selected Studies

Following the PRISMA screening process, 39 peer-reviewed articles were selected for the final analysis.

The selected studies were published between 2010 and 2025, reflecting the increasing academic interest in competency development and graduate employability within higher education.

The majority of the studies were published after 2018, indicating a growing research focus on competency-based education and career readiness frameworks in response to evolving labor market demands.

In terms of geographical distribution, the studies were conducted across diverse regions including Europe, Asia, Australia, and North America, demonstrating the global relevance of competency development in higher education.

Thematic Classification of Competencies

A thematic analysis of the selected studies revealed five major competency clusters that contribute to career readiness among business school students.

1. Technical Competencies

Technical competencies refer to domain-specific knowledge and skills required for business-related roles. These include competencies in financial analysis, marketing strategy, data analytics, and management decision-making.

Approximately 72% of the reviewed studies emphasized the importance of technical competencies as a foundational requirement for career readiness.

2. Soft Skills

Soft skills emerged as one of the most frequently discussed competency categories in the literature. These include communication skills, teamwork, interpersonal effectiveness, and emotional intelligence. Nearly 85% of the reviewed studies highlighted soft skills as critical determinants of graduate employability.

3. Cognitive Competencies

Cognitive competencies involve higher-order thinking abilities such as critical thinking, analytical reasoning, and problem-solving.

Around 64% of the studies emphasized the role of cognitive competencies in enabling graduates to adapt to complex workplace environments.

4. Digital Competencies

With the increasing digitization of business operations, digital competencies have become an essential component of career readiness. These competencies include data literacy, digital communication, and technology adoption.

Approximately 58% of the reviewed studies identified digital competencies as an emerging requirement for business graduates.

5. Professional Competencies

Professional competencies include leadership, ethical decision-making, adaptability, and professionalism in workplace environments.

Nearly 69% of the studies emphasized the importance of professional competencies for long-term career success.

Table 2- Frequency Analysis of Competency Categories

Competency Category	Frequency of Studies	Percentage
Soft Skills	33	85%
Technical Competencies	28	72%
Professional Competencies	27	69%
Cognitive Competencies	25	64%
Digital Competencies	23	58%

The results indicate that soft skills represent the most widely discussed competency category, followed by technical competencies and professional competencies.

Evolution of Research Trends

The chronological analysis of the reviewed literature reveals three distinct phases of research development.

Phase 1: Foundational Employability Research (2010–2014)

Early studies primarily focused on identifying employability skills required for graduates entering the labor market.

Phase 2: Competency-Based Education Models (2015–2018)

During this phase, research began emphasizing competency-based curricula and experiential learning approaches such as internships and work-integrated learning.

Phase 3: Digital and Future Skills Focus (2019–2025)
Recent studies increasingly highlight digital competencies, data literacy, and adaptability as essential skills in the evolving digital economy.

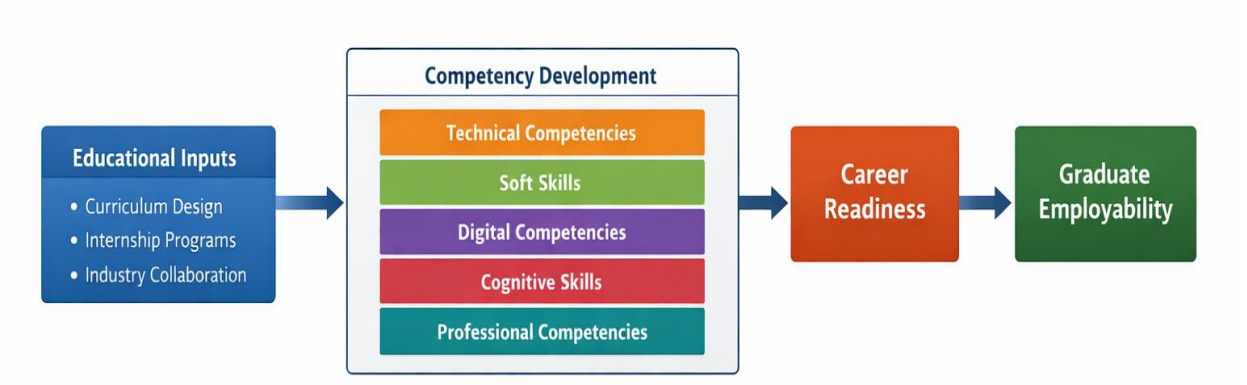
Integrated Competency Framework
The synthesis of the reviewed studies suggests that career readiness is influenced by the integration of multiple competency domains rather than individual competencies.

The findings indicate that effective competency development requires the alignment of:

- academic curriculum
- industry collaboration
- experiential learning opportunities

These elements collectively contribute to the development of competencies that enhance graduate employability.

V. CONCEPTUAL FRAMEWORK



This framework suggests that competency development acts as a mediating mechanism through which educational experiences enhance career readiness and employability outcomes.

VI. DISCUSSION

The purpose of this study was to synthesize existing literature on competency mapping and its role in enhancing career readiness among business school students. The findings reveal that career readiness is influenced by the development of multiple competency domains, including technical competencies, soft skills, cognitive competencies, digital competencies, and professional competencies. These results align with previous research emphasizing the multidimensional nature of employability and graduate readiness for the labor market (Clarke, 2018; Jackson, 2015).

One of the key findings of this review is the dominant role of soft skills in determining career readiness. The majority of the reviewed studies highlight competencies such as communication, teamwork, and interpersonal effectiveness as critical attributes required by employers. This finding is consistent with the work of Robles (2012), who reported that soft skills are often considered more important than technical skills by employers when evaluating job candidates.

Another important observation from the analysis is the growing emphasis on digital competencies in recent literature. The increasing digitalization of workplaces has created a demand for graduates who possess skills related to data analytics, digital communication, and technological adaptability. Studies published after 2019 frequently highlight the role of digital literacy and technological competence in improving employability outcomes.

The review also indicates that experiential learning environments, such as internships, industry projects, and work-integrated learning programs, play a significant role in competency development. These learning environments provide students with opportunities to apply theoretical knowledge in real-world contexts, thereby strengthening both technical and professional competencies.

From a theoretical perspective, the findings support the notion that competency development acts as a mediating mechanism between educational inputs and

employability outcomes. This suggests that curriculum design alone may not directly lead to employability unless it effectively facilitates competency development among students.

Furthermore, the review highlights the need for integrated competency mapping frameworks in business schools. Many existing studies examine individual competencies; however, fewer studies propose comprehensive models that link educational experiences with competency development and career readiness outcomes.

Overall, the findings emphasize the importance of competency-based education models that integrate academic learning, industry collaboration, and experiential learning opportunities to enhance graduate employability.

VII. CONCLUSION

This study systematically reviewed the existing literature on competency mapping and its role in enhancing career readiness among business school students. The findings reveal that career readiness is a multidimensional construct influenced by the development of various competencies, including technical competencies, soft skills, cognitive competencies, digital competencies, and professional competencies. Among these, soft skills and technical competencies emerged as the most frequently emphasized competencies in the reviewed literature, highlighting their critical role in preparing graduates for the evolving labor market.

The review also indicates that competency development is strongly influenced by educational inputs such as curriculum design, industry collaboration, and experiential learning opportunities including internships and work-integrated learning programs. These educational practices provide practical exposure and help bridge the gap between academic learning and industry expectations. Furthermore, the proposed conceptual framework suggests that competency development functions as a key mechanism through which educational experiences translate into career readiness and ultimately enhance graduate employability.

From a practical perspective, the findings underscore the importance for business schools to adopt competency-based education models that systematically map and assess student competencies in alignment with industry requirements. Institutions should integrate experiential learning, digital skill development, and soft skill training into their curricula to enhance students' career readiness.

Despite its contributions, this study is limited by its reliance on secondary data from existing literature. Future research should empirically test the proposed conceptual framework and explore the influence of institutional support, internship experience, and emerging digital competencies on career readiness. Such studies would provide deeper insights into how higher education institutions can effectively prepare graduates for the demands of the contemporary workforce.

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