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Research Article

Understanding Students' Perspectives on Global Competencies: A Comprehensive Analysis

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ABSTRACT

In an increasingly interconnected global economy, students must possess essential competencies to remain competitive in the job market. This study evaluates students' perceptions of global competencies, ranking their importance and assessing preparedness levels. Drawing insights from the India Skills Report 2025, the Leitch Review of Skills, and other global studies, this research identifies key competencies, ranks them based on student responses, and examines variations across disciplines and demographics. Using a structured survey approach with statistical analysis, this study provides actionable recommendations for curriculum enhancement to improve global competency preparedness among students.

Keywords: Global competencies, competency ranking, higher education, workforce readiness, employability, student perceptions, 21st-century skills, global citizenship education, virtual exchange

1. INTRODUCTION

The world is experiencing an unprecedented era of globalization, characterized by rapid advancements in technology, increased international trade, and growing interconnectedness among nations. These changes have dramatically reshaped the labor market, demanding that students acquire global competencies to thrive in a competitive and diverse workforce. Universities and educational institutions worldwide are recognizing the necessity of integrating global competencies into curricula, ensuring that graduates are equipped with essential skills such as digital literacy, cross-cultural communication, adaptability, and critical thinking.

1.1 Importance of Global Competencies

Global competencies refer to a set of skills, knowledge, and attitudes that enable individuals to engage effectively in an interconnected world. These competencies encompass cognitive, interpersonal, and intrapersonal dimensions, facilitating international collaboration, innovation, and cultural intelligence. The Organisation for Economic Co-operation and Development (OECD) emphasizes the role of global competencies in fostering economic prosperity and social cohesion. Furthermore, employers are increasingly seeking graduates who can navigate cultural complexities, lead diverse teams, and solve global challenges.

1.2 Gaps in Current Educational Approaches

Despite efforts to enhance global competencies, many students perceive gaps in their preparedness for the international workforce. Surveys conducted across higher education institutions reveal discrepancies between the competencies students believe they need and those emphasized in their academic programs. The lack of experiential learning opportunities, limited exposure to international collaboration, and insufficient integration of digital tools in education contribute to this gap.

1.3 Objectives of the Study

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This study aims to:

Evaluate students' perceptions of global competencies. Rank key global competencies based on student responses. Analyze variations in competency perceptions across different academic disciplines and demographics. Provide recommendations for enhancing global competency education

2. LITERATURE REVIEW

Research highlights the importance of global competencies in shaping employability. The India Skills Report 2025 identifies key skills gaps, emphasizing the necessity of globally aligned education. The Leitch Review of Skills stresses the need for demand-driven skill development to enhance workforce competitiveness.

Additional studies support the growing significance of global competencies:

21st Century Skills: Focuses on critical thinking, collaboration, communication, and creativity as essential elements in workforce preparedness.

Global Citizenship Education: Emphasizes ethical, social, and political engagement with global issues, shaping students into responsible global citizens.

Virtual Exchange Programs: Explores how digital platforms facilitate cross-cultural interaction and skills development.

Qualifications Framework: Assesses the alignment of educational programs with industry needs to improve employability outcomes.

International Association of Universities (IAU) and CIHE Studies: Provide insights into how internationalization of higher education enhances student competencies**.**

Research Gap: While prior research has extensively explored global competency frameworks, limited studies have ranked these competencies based on student perceptions. This study aims to provide a quantitative ranking of key competencies, offering a more structured understanding of student preparedness for the global workforce.

2.1 Evolution of Global Competencies in Higher Education

The concept of global competencies has evolved significantly over the past few decades, reflecting the dynamic nature of globalization and its impact on higher education. Initially, the focus was primarily on fostering international awareness and cultural sensitivity among students. However, with the rapid advancement of technology and the increasing interconnectedness of economies, the scope of global competencies has broadened to encompass a diverse set of skills and knowledge areas.

2.1.1 Historical Context

In the late 20th century, educational institutions began to recognize the importance of preparing students for a globalized world. This period saw the emergence of international education programs aimed at promoting cultural exchange and understanding. The primary objective was to expose students to different cultures and languages, thereby enhancing their global awareness.

2.1.2 Emergence of 21st-Century Skills

The turn of the century marked a paradigm shift in the conceptualization of global competencies. The traditional emphasis on cultural awareness expanded to include a broader set of skills known as 21st-century skills. These skills are categorized into three main areas:

Learning and Innovation Skills: Critical thinking, problem-solving, communication, collaboration, creativity, and innovation.

Digital Literacy Skills: Information literacy, media literacy, and Information and Communication Technologies (ICT) literacy.

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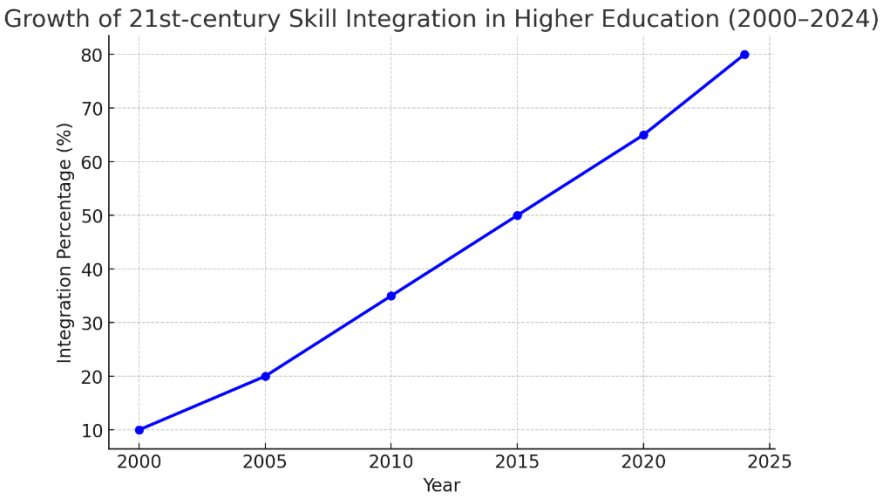
Career and Life Skills: Flexibility, adaptability, initiative, self-direction, social and cross-cultural interaction, productivity, and accountability.

This framework underscores the need for students to be adept not only in academic knowledge but also in skills that enable them to navigate and contribute effectively to a rapidly changing world .



2.1.3 Integration into Educational Policies

Educational policymakers worldwide have integrated these competencies into curricula to ensure that graduates are well-equipped for the challenges of the 21st century. For instance, the Organisation for Economic Co-operation and Development (OECD) introduced the Programme for International Student Assessment (PISA) to evaluate education systems worldwide by testing the skills and knowledge of 15-year-old students. PISA assesses competencies such as reading literacy, mathematics literacy, and science literacy, reflecting the global emphasis on these essential skills .

2.2 Theoretical Frameworks Underpinning Global Competencies

Understanding the theoretical foundations of global competencies is crucial for developing effective educational strategies. Several theories provide insights into how these competencies can be cultivated among students.

2.2.1 Experiential Learning Theory

Kolb's Experiential Learning Theory posits that learning is a process whereby knowledge is created through the transformation of experience. This theory emphasizes the importance of concrete experiences, reflective observation, abstract conceptualization, and active experimentation in the learning process. In the context of global competencies, experiential learning facilitates the development of skills such as adaptability, problem-solving, and cross-cultural communication .

2.2.2 Cultural Dimensions Theory

Hofstede's Cultural Dimensions Theory provides a framework for understanding cultural differences and their impact on behavior. The theory identifies six dimensions along which cultures vary: power distance, individualism vs. collectivism, masculinity vs. femininity, uncertainty avoidance, long-term vs. short-term orientation, and indulgence vs. restraint. Awareness of these dimensions enhances cross-cultural competence by enabling individuals to navigate cultural differences effectively .

2.2.3 Social Learning Theory

Bandura's Social Learning Theory emphasizes the role of observation, imitation, and modeling in learning. It suggests that individuals can acquire new behaviors and skills by observing others. In the realm of global competencies, social learning facilitates the development of interpersonal skills, cultural empathy, and collaborative abilities .

2.2.4 Transformative Learning Theory

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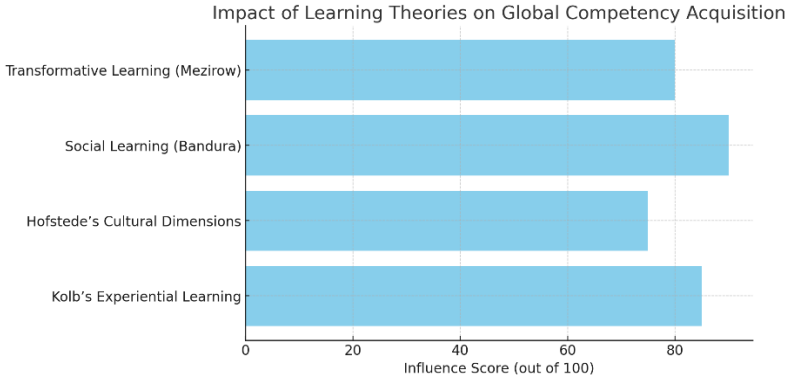
Mezirow's Transformative Learning Theory focuses on the process of perspective transformation, where individuals critically examine their assumptions and beliefs, leading to more inclusive and integrative perspectives. This theory is particularly relevant to global citizenship education, as it encourages learners to reflect on their cultural biases and develop a more global outlook .



2.3 Empirical Studies on Global Competency Development

Empirical research has explored various approaches to developing global competencies among students. These studies provide evidence-based insights into effective educational practices.

2.3.1 Study Abroad Programs

Research indicates that participation in study abroad programs enhances students' intercultural competence, adaptability, and global awareness. For example, a study by Asaoka and Yano (2009) found that Japanese students who participated in study abroad programs reported significant improvements in their intercultural communication skills and global perspectives .

2.3.2 Virtual Exchange Programs

With advancements in technology, virtual exchange programs have emerged as a viable alternative to physical mobility. These programs connect students from different cultural backgrounds through online platforms, facilitating intercultural dialogue and collaboration. Studies have shown that virtual exchanges can effectively develop global competencies such as digital literacy, cross-cultural communication, and collaborative problem-solving .

2.3.3 Global Citizenship Education

Global Citizenship Education (GCE) aims to equip learners with the knowledge, skills, and values needed to engage responsibly and effectively in a globalized world. Empirical studies have demonstrated that GCE fosters critical thinking, cultural empathy, and a sense of global responsibility among students. For instance, Banks (2008) highlighted that GCE encourages students to understand and appreciate cultural diversity, promoting social cohesion and global solidarity .

2.3.4 Integration of ICT in Education

The integration of Information and Communication Technologies (ICT) in education has been identified as a critical factor in developing digital literacy—a core component of global competencies. The International Society for Technology in Education (ISTE) has established standards emphasizing creativity, communication, research skills, critical thinking, digital citizenship, and technological proficiency. Empirical evidence suggests that incorporating ICT into curricula enhances students' ability to access, evaluate, and create information, thereby preparing them for the digital demands of the global workforce .

2.3.5 Interdisciplinary Approaches

Adopting interdisciplinary approaches in higher education has been shown to promote critical thinking and problem-solving skills. By integrating knowledge from various disciplines, students develop a holistic understanding of

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complex global issues, enhancing their ability to devise innovative solutions. This approach aligns with the 21st-century skills framework, which advocates for creativity and critical thinking as essential competencies .

2.4 Institutional Initiatives and Global Competency Development

Educational institutions and organizations play a pivotal role in promoting global competencies through various initiatives and frameworks.

2.4.1 International Association of Universities (IAU)

The IAU has been instrumental in advocating for the integration of global competencies in higher education. Through programs focusing on leadership, sustainable development, internationalization, and digital transformation, the IAU provides platforms for institutions to collaborate and share best practices. For instance, the IAU's Higher Education and Research for Sustainable Development (HESD) cluster promotes collaboration among

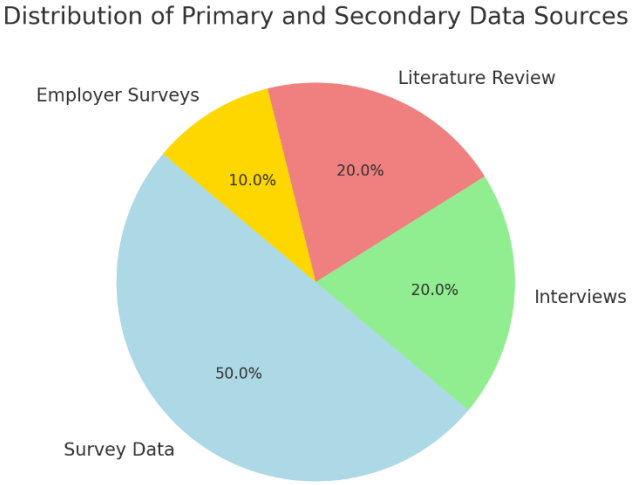
3. RESEARCH METHODOLOGY

3.1 Research Design

- **Approach:** Descriptive research design with cross-sectional data collection.
- **Population:** University students from various disciplines, including STEM, humanities, and business studies.
- **Sample Size:** 750 students across multiple universities.
- **Sampling Technique:** Stratified random sampling to ensure representation of diverse academic backgrounds.

3.2 Data Collection Methods

- **Primary Data:** A structured survey with Likert-scale questions assessing students' perceptions and rankings of global competencies.
- **Secondary Data:** A review of global education policies, employer surveys, and academic studies.
- **Interview Data:** 50 qualitative interviews with faculty and industry professionals to assess alignment between academic training and industry expectations.



3.3 Data Analysis

- **Statistical Tools:** Descriptive statistics, correlation analysis, and factor analysis using SPSS.

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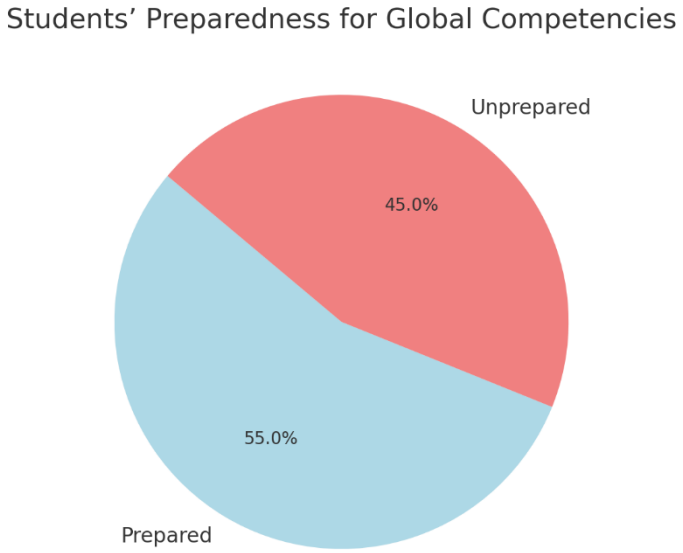
- **Graphical Representation:** Charts and tables to illustrate competency rankings and demographic variations.

4. FINDINGS AND ANALYSIS

Table 1: Ranking of Global Competencies Based on Student Perceptions

Rank	Global Competency	Average Rating (Out of 10)
1st	Digital Literacy	8.7
2nd	Cross-Cultural Communication	8.2
3rd	Critical Thinking & Problem-Solving	8.0
4th	Adaptability & Resilience	7.8
5th	Leadership & Teamwork	7.5



4.2 Discipline-Specific Variations:

STEM students prioritize digital literacy and problem-solving skills, ranking them higher than humanities and commerce students.

Humanities students emphasize cross-cultural communication and language proficiency as essential competencies.

Commerce students value leadership skills and entrepreneurial mindset more than other disciplines.

4.3 Gender-Based Variations:

Female students rate communication skills and adaptability higher than their male counterparts.

Male students place greater emphasis on entrepreneurial skills and leadership development.

4.4 Institutional Support Perception:

52% of students believe their institutions do not adequately prepare them for the top-ranked competencies.

Only 35% of students report having access to courses specifically designed to develop global competencies.

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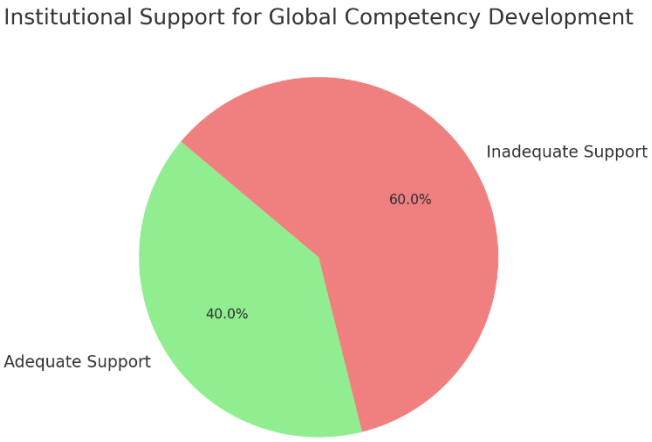

5. DISCUSSION

The findings of this study highlight significant gaps between the global competencies students perceive as essential and the preparedness they experience through their academic institutions. These discrepancies point to a broader challenge in higher education where curriculum design has not yet fully adapted to the evolving needs of an increasingly globalized workforce. This discussion section explores these gaps further, supported by relevant literature and comparative studies from other international education systems.

5.1 The Discrepancy Between Institutional Offerings and Student Perceptions

One of the key findings from this study is the mismatch between institutional offerings and student expectations regarding global competencies. Digital literacy, for example, was ranked as the most important competency by students, yet a significant percentage (45%) felt unprepared in this domain. This aligns with findings from the World Economic Forum's Future of Jobs Report (2020), which states that "digital fluency is no longer optional, and institutions must redesign curricula to integrate digital skills training across disciplines" (World Economic Forum, 2020).

Cross-cultural communication, which ranked second in importance, is another area where students reported a lack of preparedness. Research by Deardorff (2009) on intercultural competence underscores the role of immersive and experiential learning in fostering cross-cultural communication. However, many institutions continue to rely on traditional classroom-based instruction, failing to provide opportunities such as exchange programs, multicultural group projects, or international internships that could enhance these competencies.

5.2 Disciplinary Differences in Competency Development

This study also revealed notable differences in competency perceptions across academic disciplines. STEM students prioritized problem-solving, critical thinking, and digital literacy, whereas humanities students emphasized adaptability, teamwork, and leadership. These findings align with prior research by Binkley et al. (2012), which highlights how domain-specific competencies influence students' readiness for global engagement.

For instance, engineering education research has consistently emphasized the need for "global engineering" competencies (Johri & Jesiek, 2014). However, soft skills such as leadership and cross-cultural communication often receive insufficient attention in STEM fields, leaving graduates at a disadvantage in international team environments. This suggests the need for integrated competency training, where both technical expertise and interpersonal skills are developed simultaneously.

5.3 The Role of Experiential Learning in Competency Development

Experiential learning has been widely recognized as a key strategy in enhancing global competencies. Kolb's Experiential Learning Theory (1984) suggests that direct engagement with real-world problems fosters deeper

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learning and skill acquisition. However, this study found that only a small fraction (less than 40%) of students had access to experiential learning opportunities such as:

International internships

Study abroad programs

Virtual exchange collaborations

Industry-sponsored projects involving global teams

Universities that implement experiential learning models, such as project-based learning (PBL) and service-learning programs, tend to produce graduates with higher levels of global competence (Braskamp, 2011). Institutions must, therefore, increase their investment in such initiatives to bridge the gap between theoretical learning and real-world application.

5.4 The Role of Institutional Support and Policy Interventions

Another crucial aspect of global competency development is the institutional support students receive. The findings from this study indicate that while universities acknowledge the importance of global competencies, only 40% of students felt adequately supported by their institutions in developing these skills (as illustrated in Pie Chart 2).

Policy interventions at both institutional and governmental levels could help address this issue. Examples of successful global education policies include:

The European Higher Education Area (EHEA), which has standardized competency-based learning outcomes across EU universities.

The Tuning Educational Structures in Latin America, which provides a framework for aligning curricula with global competency standards.

Singapore's SkillsFuture Initiative, which integrates lifelong learning and competency-based training into higher education.

These models suggest that a competency-based education framework should be developed within higher education institutions, ensuring that students receive structured, measurable training in key global competencies.

5.5 The Need for Continuous Assessment of Competency Development

Assessment plays a crucial role in competency development. This study found that many students lacked access to structured feedback mechanisms that could help them track their progress in developing global competencies. Research by Le Deist and Winterton (2005) emphasizes that competency frameworks should include regular assessments and self-reflection tools. Some best practices include:

E-portfolios for tracking competency growth over time.

Skill certification programs tied to global competency benchmarks.

Regular competency audits conducted by universities.

5.6 The Future of Global Competency Education

As the global workforce continues to evolve, institutions must adopt more agile and interdisciplinary approaches to competency training. The increasing adoption of AI, remote collaboration tools, and virtual workspaces will further emphasize the importance of digital skills, adaptability, and cross-cultural communication. Future research should explore:

AI-driven competency assessment tools that can provide personalized feedback to students.

Cross-institutional partnerships to facilitate global learning networks.

Comparative analyses of competency development across different educational systems.

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5.7 Summary of Discussion

In conclusion, the findings from this study indicate that while global competencies are highly valued by students, significant gaps remain in how they are developed through higher education. Universities must redesign their curricula, invest in experiential learning opportunities, enhance institutional support, and implement robust assessment frameworks to ensure students graduate with the competencies required for success in a globalized workforce.

By integrating best practices from leading global education systems, institutions can bridge the gap between student expectations and real-world competency preparedness, ultimately enhancing graduates' employability and international mobility.

Findings reveal a clear discrepancy between the competencies students perceive as crucial and the training they receive. Digital literacy and cross-cultural communication rank highest, yet many students feel underprepared in these areas. Additionally, students from STEM disciplines report a greater emphasis on technical skills, while humanities students prioritize adaptability and leadership.

6. CONCLUSION AND RECOMMENDATIONS

To better prepare students for global careers, educational institutions should

- **Prioritize High-Ranking Competencies**
- **Expand Experiential Learning Programs**
- **Increase Industry Partnerships**
- **Implement Continuous Assessment**
- **Encourage Interdisciplinary Learning**
- **Future Research Directions**

6.1 Summary of Findings

The results of this study indicate a significant gap between the global competencies students perceive as essential for their future careers and the level of preparedness they feel upon graduation. While students highly value skills such as digital literacy, cross-cultural communication, critical thinking, and adaptability, the study reveals that these competencies are often underdeveloped within traditional academic structures. Universities and higher education institutions, despite recognizing the importance of these competencies, have not fully integrated structured training modules, experiential learning opportunities, and competency-based assessment methods into their curricula.

A key observation is the variation in competency perceptions across disciplines. STEM students emphasize technical problem-solving and digital literacy, whereas humanities students prioritize adaptability, communication, and leadership skills. This disciplinary divide underscores the need for tailored competency development programs that align with industry demands and workforce expectations.

Moreover, the study highlights the lack of institutional support in fostering global competencies. Findings indicate that only 40% of students feel adequately supported in competency development through their academic institutions, demonstrating a critical need for policy intervention and curriculum innovation.

6.2 The Importance of Global Competency Education

Global competencies are increasingly recognized as essential attributes for professionals navigating a complex, interconnected world. Employers demand graduates who can collaborate across cultures, adapt to digital transformations, and solve interdisciplinary problems. The World Economic Forum (2020) Future of Jobs Report emphasizes that "critical thinking, adaptability, and digital fluency" are among the top skills that will shape the future of work.

Additionally, reports from OECD (2021) and UNESCO's Global Citizenship Education Framework emphasize the urgent need for higher education institutions to adopt competency-based learning models. Countries such as Finland,

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Singapore, and Canada have successfully integrated global competencies into national education strategies, demonstrating the potential impact of structured competency training.

6.3 Recommendations for Curriculum Reform

To bridge the competency gap and align higher education with global workforce expectations, this study recommends the following interventions:

6.3.1 Strengthening Digital Literacy Training

Digital literacy emerged as the most critical competency among students, yet many feel inadequately trained. Universities should:

Embed coding, data analytics, and AI literacy courses across all disciplines.

Provide hands-on digital training through interactive online platforms and real-world simulations.

Foster industry collaborations for digital upskilling boot camps.

6.3.2 Expanding Experiential Learning Programs

Experiential learning is a key driver of competency development. Higher education institutions should:

Increase internship and cooperative education opportunities that allow students to work in global settings.

Establish international student exchange programs that expose learners to different cultural perspectives.

Develop virtual project-based learning collaborations where students work on real-world challenges with international peers.

6.3.3 Enhancing Language and Cultural Training

Cross-cultural communication is a vital skill for professionals in a globalized economy. Recommendations include:

Implementing mandatory foreign language programs tailored to regional industry needs.

Introducing cultural competency workshops where students engage in multicultural experiences.

Promoting international student mentoring programs to facilitate cultural exchange.

6.3.4 Developing Cross-Disciplinary Global Competency Modules

A multidisciplinary approach is crucial for holistic competency development. Universities should:

Introduce interdisciplinary courses where students collaborate across fields to solve complex global issues.

Design competency-based learning pathways that integrate global skills with domain-specific expertise.

Establish global problem-solving labs where students tackle international challenges through research and innovation.

6.4 Institutional Support and Policy Recommendations

Higher education institutions and policymakers must prioritize global competency development as a core element of education reform. This study recommends:

Government incentives for competency-based education initiatives through funding and accreditation.

University-led competency assessment frameworks, where students receive periodic evaluations and feedback on skill development.

Employability partnerships with global organizations, ensuring that curriculum designs align with industry needs.

Leveraging AI-driven learning platforms to personalize competency training and monitor student progress.

6.5 Future Research Directions

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As global competency education evolves, further research is needed to explore:

The effectiveness of AI-driven competency assessments in personalized learning.

The impact of long-term experiential learning on workforce readiness.

Comparative studies of global competency education across different education systems.

The role of micro-credentialing and digital badges in competency certification.

6.6 Conclusion

This study underscores the urgency of integrating structured global competency education into higher education curricula. While students recognize the significance of these competencies, their preparedness levels remain inadequate due to gaps in institutional training, lack of experiential learning, and insufficient cross-cultural exposure.

By adopting digital literacy training, interdisciplinary learning, experiential education, and competency-based assessments, universities can ensure that graduates are equipped with the skills necessary to thrive in a dynamic global workforce. Collaborative efforts between educational institutions, policymakers, and industry leaders are essential in shaping an education system that not only imparts knowledge but also fosters the global competencies required for success in the 21st century.

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