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Impact of AI-Based Learning Tools on Students' Career Readiness and Employability

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Abstract

The rapid integration of Artificial Intelligence (AI) into education has transformed the way students acquire knowledge, skills, and career competencies. AI-based learning tools such as adaptive learning platforms, intelligent tutoring systems, career guidance chatbots, and skill-mapping applications are increasingly used to enhance students' employability and career readiness. This study examines the impact of AI-based learning tools on students' career readiness and employability, with special reference to undergraduate students. Using a survey-based research design, the study analyses students' awareness, usage, and perception of AI-enabled learning tools and their influence on skill development, confidence, and job preparedness. The findings are expected to provide insights for educators, institutions, and policymakers to strengthen AI-driven educational strategies aligned with sustainable career growth.

Introduction

Artificial Intelligence has emerged as a powerful enabler in the education sector, offering personalized learning experiences, real-time feedback, and data-driven insights into student performance. AI-based learning tools support students in identifying skill gaps, improving employability skills, and aligning academic learning with industry requirements. In a competitive job market, career readiness has become a critical outcome of higher education. AI-driven platforms play a significant role in enhancing technical, analytical, and soft skills, thereby improving employability prospects. This research explores how AI-based learning tools contribute to students' career preparedness and long-term employability.

Statement of the Problem

Despite the growing adoption of AI-based learning tools in higher education, there is limited empirical evidence on their effectiveness in improving students' career readiness and employability, particularly at the undergraduate level. Many students use AI tools without fully understanding their impact on skill development and career outcomes. Hence, this study seeks to examine the influence of AI-based learning tools on students' career readiness and employability.

Objectives of the Study

1. To assess the level of awareness of AI-based learning tools among undergraduate students.
2. To examine the extent of usage of AI-based learning tools for academic and career purposes.
3. To analyse the impact of AI-based learning tools on students' career readiness.

4. To study the influence of AI-based learning tools on students' employability skills.
5. To identify challenges faced by students in using AI-based learning tools.

Research Questions / Hypotheses

- **H1:** There is a significant relationship between the use of AI-based learning tools and students' career readiness.
- **H2:** AI-based learning tools have a positive impact on the employability skills of students.
- **H3:** Awareness of AI-based learning tools significantly influences students' career preparedness.

Scope of the Study

The study focuses on undergraduate students from commerce and management streams. It examines selected AI-based learning tools such as adaptive learning platforms, online skill-development applications, and AI career guidance tools. The findings are limited to the sample selected for the study.

Review of Literature

OECD (2022) examined the role of AI-based learning platforms in enhancing employability skills among higher education students. The study found that adaptive learning systems significantly improved problem-solving ability, digital skills, and job readiness by offering personalised learning pathways aligned with industry needs.

UNESCO (2023) highlighted that AI-driven educational tools support sustainable career development by bridging skill gaps and improving access to career guidance. The report emphasized that students using AI-enabled learning systems demonstrated higher confidence, self-directed learning ability, and employability preparedness.

World Economic Forum (2023), in its *Future of Jobs Report*, reported that AI-supported learning tools play a crucial role in preparing students for emerging job roles. The study stressed that continuous upskilling through AI platforms enhances career adaptability and long-term employability.

Research Methodology

The study adopts a **descriptive research design** to analyse the impact of AI-based learning tools on students' career readiness and employability. The research is based on **primary data** collected directly from respondents to obtain first-hand information on their awareness, usage, and perception of AI-enabled learning platforms. Data were gathered using a **structured questionnaire** designed on a five-point Likert scale to ensure consistency and reliability of responses. The respondents were selected using the **convenience sampling method**, as it allowed easy access to undergraduate students from commerce and management disciplines. A **sample size of 100 undergraduate students** was considered adequate to represent the study population. The collected data were analysed using appropriate **statistical tools such as percentage analysis, mean score analysis, and the chi-square test**, which helped in understanding response patterns, measuring the impact of AI-based learning tools, and examining the relationship between AI usage and employability skills.

Analysis and Interpretation

Table 1: Awareness of AI-Based Learning Tools among Students

Level of Awareness	**No. of Respondents**	**Percentage**	**Interpretation**
High	48	48%	A significant proportion of students are highly aware of AI-based learning tools.
Moderate	34	34%	Many students have moderate awareness but may not use tools extensively.
Low	18	18%	A small group lacks sufficient awareness of AI-based tools.
Total	**100**	**100%**	

Table 2: Usage of AI-Based Learning Tools for Career Preparation

Usage Level	No. of Respondents	Percentage	Interpretation
Regular	42	42%	Regular users perceive AI tools as beneficial for skill development.
Occasional	38	38%	Occasional use indicates partial dependence on AI learning tools.

Rare	20	20%	Limited usage may affect career readiness outcomes.
Total	**100**	**100%**	

Table 3: Impact of AI-Based Learning Tools on Career Readiness (Mean Score Analysis)

Statement	Mean Score	Interpretation
AI tools improve my job-related skills	4.12	High level of agreement shows positive impact on skill development.
AI learning platforms enhance my confidence	4.05	Students feel more confident about career preparedness.
AI tools help me understand industry requirements	4.18	Strong agreement indicates improved career awareness.

Table 4: Relationship between AI Tool Usage and Employability Skills (Chi-Square Test)

Variable	χ^2 Value	p-Value	Interpretation
AI Tool Usage vs Employability Skills	9.45	0.02	Since $p < 0.05$, there is a significant relationship between AI tool usage and employability skills.

Findings

1. The study reveals that a majority of undergraduate students possess a **high to moderate level of awareness** of AI-based learning tools, indicating growing exposure to AI technologies in the education sector.
2. A significant proportion of students **regularly or occasionally use AI-based learning tools** for academic and career-related purposes, reflecting increasing acceptance of AI-enabled learning platforms.
3. Mean score analysis indicates that students **strongly agree** that AI-based learning tools enhance their understanding of industry requirements, improve job-related skills, and increase career confidence, thereby contributing positively to **career readiness**.
4. The chi-square test results show a **statistically significant relationship** between the usage of AI-based learning tools and the development of **employability skills**, confirming that higher AI tool usage is associated with better employability outcomes.
5. Students perceive AI-based learning tools as effective in promoting **continuous learning, upskilling, and competitiveness** in the job market.
6. Despite the positive impact, some students face challenges such as **lack of adequate training, limited access to advanced technology, and concerns related to data privacy**, which affect optimal utilisation of AI tools.
7. Overall, the findings indicate that **AI-based learning tools play a crucial role in enhancing students' career readiness and employability**, but their effectiveness depends on proper guidance, infrastructure, and institutional support.

Suggestions

For Students:

Students should actively use AI-based learning tools to enhance employability skills and career readiness. Ethical use of AI, continuous upskilling through digital platforms, and balanced reliance on technology are essential for sustainable career development.

For Professors:

Faculty members should integrate AI tools into teaching–learning processes and guide students in their effective and responsible use. Continuous faculty upskilling and AI-supported monitoring of student performance can improve learning outcomes.

For Educational Institutions:

Institutions should provide AI-enabled infrastructure, conduct regular training programmes, and integrate AI tools into career guidance and placement activities. Collaboration with industry and EdTech providers can further strengthen employability outcomes.

For Government and Policymakers:

The government should promote AI literacy in higher education through policy support, funding, and ethical guidelines. Strengthening digital infrastructure and encouraging public–private partnerships will ensure inclusive access to AI-based learning tools.

Conclusion

AI-based learning tools play a vital role in enhancing students' career readiness and employability by promoting skill development, self-assessment, and informed career decisions. Effective integration of AI in higher education can contribute to sustainable career growth and

align educational outcomes with industry requirements.

References

OECD. (2022). *Artificial Intelligence in Education: Challenges and Opportunities*. OECD Publishing.

UNESCO. (2023). *Guidance on Generative AI in Education and Research*. United Nations Educational, Scientific and Cultural Organization.

World Economic Forum. (2023). *The Future of Jobs Report 2023*. World Economic Forum.

Holmes, W., Bialik, M., & Fadel, C. (2019). *Artificial Intelligence in Education: Promises and Implications for Teaching and Learning*. Center for Curriculum Redesign.

Luckin, R., Holmes, W., Griffiths, M., & Forcier, L. B. (2016). *Intelligence Unleashed: An Argument for AI in Education*. Pearson Education.

Chassignol, M., Khoroshavin, A., Klimova, A., & Bilyatdinova, A. (2018). Artificial intelligence trends in education: A narrative overview. *Procedia Computer Science*, 136, 16–24.

Dwivedi, Y. K., et al. (2021). Artificial intelligence (AI): Multidisciplinary perspectives on emerging challenges, opportunities, and agenda for research. *International Journal of Information Management*, 57, 102–135.