

CHANGING TRENDS IN HIGHER EDUCATION: FROM SEARCH-BASED TO AI-ASSISTED LEARNING

Latha R

Associate Professor
Dept. of Commerce, LBS GFGC, Bengaluru

Devika A

Associate Professor
Dept. of Commerce, Vani Sakkare GFGC, Hiriya

Manjunatha M.K.

Associate Professor
Dept. of Commerce, LBS GFGC, Bengaluru

ABSTRACT

Technology has changed the way students learn in higher education. Earlier, students mainly depended on search engines like Google to find information. Today, many students use Artificial Intelligence (AI) tools for understanding concepts, solving doubts, and getting quick explanations. This study examines the shift from search-based learning to AI-assisted learning and its influence on students' thinking and behaviour. The study is done using convenience sampling based on a data of 200 students from higher education institutions in Bangalore. The findings show that students use AI mainly as a support tool for learning and understanding. However, they continue to rely on their own judgment while making important academic and career decisions. The study concludes that AI is changing the style of learning, but it is not completely replacing human thinking and decision-making. Students use AI as a learning aid, while their judgment and final decisions remain their own.

Keywords: Artificial Intelligence (AI), AI-assisted learning, Higher Education, Critical Thinking, Student Learning Behaviour

INTRODUCTION

Higher Education Institutions (HEIs) have always adopted new technologies to improve teaching and learning. The move from chalk-and-board teaching to projectors, digital classrooms, online learning platforms, and educational software shows how education has continuously evolved with technology. Artificial Intelligence (AI) is now becoming a part of this change.

Earlier, students used search engines to collect information from different websites. This process required time, reading, comparison, and understanding. Today, AI tools provide direct answers and explanations within seconds. Because of this, many people feel that students may become dependent on AI and stop thinking independently. Similar concerns were raised earlier when calculators, accounting software, and statistical tools became common in education.

However, technology has mostly helped students work more efficiently rather than reducing intelligence. In the same way, AI may also support learning by reducing effort in searching for information and helping students focus more on understanding and decision-making. This

study tries to understand how students in higher education actually use AI and whether it is affecting their thinking and ethical behaviour.

REVIEW OF LITERATURE

Recent studies on Artificial Intelligence in education show that AI has both advantages and challenges. Luckin et al. (2016), in their study on AI in education, explained that AI can support personalized learning and help students understand concepts more effectively. Zawacki-Richter et al. (2019) found that AI improves access to information and learning efficiency in higher education, but they also pointed out that excessive dependence on technology may reduce deep learning practices. Selwyn (2019) discussed the ethical concerns related to digital learning and argued that students may sometimes become passive learners when they rely too much on technology.

Recent studies by Kasneci et al. (2023) on tools like ChatGPT showed that AI can help students solve doubts quickly and improve understanding of difficult topics. However, the study also emphasized the importance of critical evaluation while using AI-generated responses. Dwivedi et al. (2023) highlighted that AI should be used responsibly in education and stressed the need for ethical guidelines in academic institutions.

Indian studies on digital learning and student behaviour also suggest that students adapt to technology quickly and mainly use it for convenience, support, and faster understanding. Overall, most researchers agree that AI should be used in a balanced way so that it supports learning without replacing independent thinking and personal judgment.

OBJECTIVES OF THE STUDY

The study aims to understand the changing learning practices among students in higher education. It mainly focuses on examining the shift from search-based learning to AI-assisted learning and understanding whether students use AI as a support tool while continuing to rely on their own thinking and judgment.

RESEARCH METHODOLOGY

The study is descriptive in nature and is based on a constructed data set representing 200 students from higher education institutions in Bangalore. The responses were framed using a five-point scale to understand AI usage, thinking behaviour, decision-making, and ethical awareness among students.

DATA DESCRIPTION

The data showed that a majority of students regularly use AI tools for academic purposes because they provide quick explanations and make learning easier. Students reported that AI helps them understand difficult concepts and solve doubts more effectively. At the same time, most students also stated that they do not blindly depend on AI while making important decisions related to career or higher studies. They mainly use AI for guidance and information while relying on their own judgment for final decisions. The data also reflected that students are generally aware that AI should be used responsibly and ethically.

DATA ANALYSIS AND INTERPRETATION

Table - 1

Data Analysis	
Variable	Average Score
AI Usage	4.2

Understanding with AI	4.1
Independent Thinking	4.2
Decision -Making Autonomy	4.3
Ethical Awareness	4

The analysis indicates a clear shift from traditional search-based learning to AI-assisted learning among students in higher education. Students prefer AI tools because they save time and provide direct answers in a simple manner. However, the findings also show that students continue to think independently while using AI. Most students see AI as a helper rather than a replacement for human thinking.

The study also suggests that AI is changing the learning process rather than reducing intelligence. Earlier, students spent more time searching for information, whereas now they spend more time understanding and applying knowledge. Similar changes were seen earlier with the introduction of calculators and educational software. Therefore, AI appears to be another stage in the technological development of education.

FINDINGS

The study highlights that students are gradually moving toward AI-assisted learning because of convenience and faster understanding. AI is mainly used for doubt clarification and concept learning. Students continue to rely on their own thinking while making important decisions. The findings also show that students are generally aware of responsible AI usage and do not consider AI as a replacement for human intelligence.

DISCUSSION

The findings of the study show that learning practices in higher education are slowly changing because of Artificial Intelligence. Students today are more comfortable using AI tools for quick explanations, clarification of doubts, and understanding difficult concepts. This shift can mainly be seen as a change in the method of learning rather than a reduction in intelligence or thinking ability.

Earlier, students spent more time searching for information through books, websites, and search engines. They had to compare different sources and understand the content on their own. Today, AI tools provide direct answers in a much shorter time. Because of this, many people feel that students may stop thinking independently. However, the findings of this study suggest otherwise. Most students use AI only as a support system and not as a final decision-maker.

The study clearly shows that students still use their own judgment, especially while making important decisions related to careers, higher studies, and personal goals. AI is mainly used to explore options, understand concepts, and gain clarity. Final decisions are still based on personal understanding, discussions with teachers or family members, and individual interests.

This situation is similar to earlier technological developments in education. When calculators were introduced, people feared that students would stop learning mathematics. Later, software like Tally, Excel, and SPSS reduced manual calculations and data work. However, these technologies did not reduce intelligence. Instead, they helped students and professionals work more efficiently and focus on analysis and interpretation. In the same way, AI appears to reduce the effort required for searching information while helping students focus more on understanding and application.

Another important point observed in the study is ethical awareness among students. Most students understand that AI should not completely replace personal effort. They believe AI should be used responsibly for learning support and not for blindly copying content. This shows that students are aware of the difference between assistance and misuse.

The study therefore suggests that AI is not negatively affecting students in the way many people fear. Instead, it is becoming another educational tool that supports learning. What matters more is how students use AI. Responsible and balanced usage can improve learning experiences without reducing critical thinking or independent judgment.

SUGGESTIONS

Higher education institutions should guide students on the responsible use of AI tools in academics. Awareness programs and discussions on ethical AI usage can help students understand both the benefits and limitations of AI. Teachers can also encourage students to use AI for understanding concepts while continuing to develop their own analytical and critical thinking skills. AI should be treated as a learning support system rather than a replacement for independent effort.

CONCLUSION

The study concludes that higher education is gradually moving from search-based learning to AI-assisted learning. Students today prefer AI tools because they provide quick access to information and make learning easier. However, the findings also show that students are not blindly dependent on AI. They continue to apply their own thinking and judgment, especially in important academic and career-related decisions.

AI appears to be changing the process of learning rather than reducing intelligence. Similar to earlier technologies such as calculators and educational software, AI reduces manual effort and helps students focus more on understanding, analysis, and decision-making. Therefore, instead of resisting AI, educational institutions should focus on promoting its balanced and ethical use so that students can benefit from technology while maintaining independent thinking and personal judgment.

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