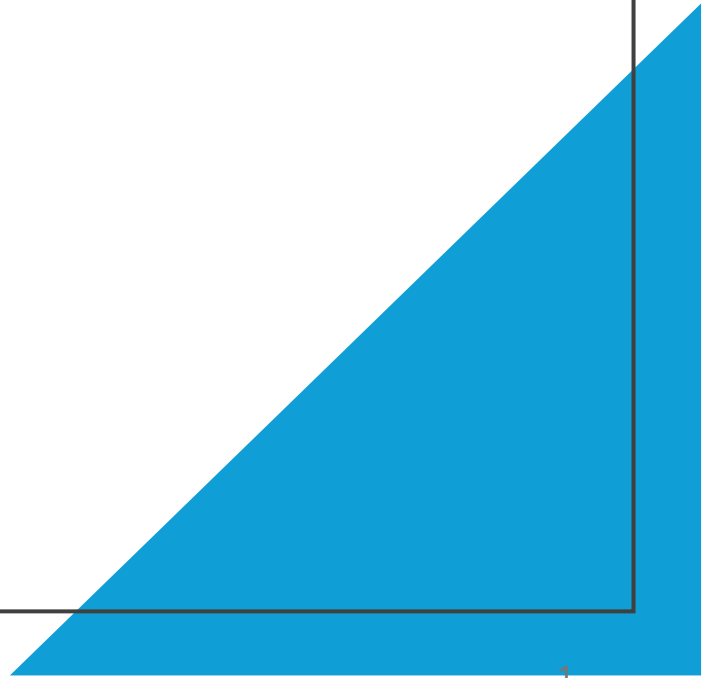


The Impact of Artificial Intelligence on Personalized Learning in Higher Education

A Study of SLIIT Students

Sri Lanka Institute of Information Technology

April 29, 2025



Our Team

M. Rajin (IT24100272)

S. Hithurshan (IT24100135)

N. Tharshana (IT24100488)

A. MaryShalini (IT24100683)

T. Nirubana (IT24100251)

M. Mathusan (IT24100704)

Contents



Introduction

- AI is transforming higher education by enabling personalized learning.
- Personalized learning tailors content, pace, and support to individual student needs.
- Focus: How SLIIT students perceive AI's impact on their learning experience.

Methodology



- Quantitative survey of 150 randomly selected SLIT students.



- 29-question Google Form (multiple-choice, Likert-scale, open-ended).



- Data collected over two weeks in March 2025.



- Analysis: Descriptive statistics and thematic analysis.

Research Objectives



- ASSESS THE EXTENT OF AI TOOL USAGE AMONG SLIIT STUDENTS.



- EVALUATE STUDENTS' PERCEPTIONS OF AI'S EFFECTIVENESS IN PERSONALIZED LEARNING.



- IDENTIFY OPPORTUNITIES AND BARRIERS FOR AI INTEGRATION IN HIGHER EDUCATION.

Data Analysis & Graphs

- 88% of students used AI tools
- Comfort level: 3.80/5, 66.66% rated 4 or 5
- Effectiveness: 3.87/5, 70.7% rated 4 or 5
- Study efficiency: 3.72/5, 63% rated 4 or 5

Positive & Negative Impacts

1. Positive:

- Tailored study materials: 58%
- Adaptive learning speed: 48.7%
- Engagement: 77.3% prefer AI materials

2. Negative:

- Data privacy concerns: 3.45/5
- Accuracy issues: 2.71/5



Challenges

- • Data privacy: 52.6% rated 4 or 5 (Q18)
- • Accuracy issues: 39.3% rated 3 (Q22)
- • Ethical concerns: 50.7% Yes, 30% Not Sure (Q20)
- • [Placeholder: Insert bar chart for privacy/accuracy; pie chart for ethics]



Future Expectations



- Personalized learning pathways (31.3%), virtual teaching assistants (24%) (Q26)



- Suggested improvements: Accuracy (20%), interactivity (15%) (Q29) • 62% support AI for automated grading (Q27)

Conclusion & Recommendations

- **1. Conclusion:**
 - • AI enhances learning: 88% usage, 3.87/5 effectiveness
 - • Benefits: Tailored materials, engagement
- **2. Recommendations:**
 - Enhance AI accuracy
 - Strengthen privacy/ethics
 - Integrate AI into curriculum



References

- Williams, C. (2009). Research Methods. Journal of Educational Research.
- Chu, H., et al. (2023). The Impact of AI on Personalized Learning. MDPI.
- Full references in report (Appendix)

Thank You!

Any questions?

