

Session - 20
Orientation Workshop for the Fresh Faculty Members

Artificial Intelligence in Academia: To be or Not to be



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Artificial Intelligence in Education: To be or Not to be

Should AI be integrated into academic settings?

Introduction to AI in Education

Defining the topic and its relevance

What is Artificial Intelligence?

Artificial Intelligence (AI) refers to computer systems capable of performing tasks that typically require human intelligence, such as learning, reasoning, problem-solving, and language understanding.

AI in Academic Settings

- Automated grading systems
- Personalised learning platforms
- AI-powered tutoring and support

Current Use of AI in Universities

Many universities utilise AI tools for plagiarism detection, adaptive learning, administrative tasks, and student engagement. These applications are rapidly expanding.

Potential Benefits of AI in Education

- Efficiency in administrative processes
- Enhanced personalised learning
- Data-driven decision-making

Examples of AI Tools in Education

Learning Platforms

- Coursera's adaptive quizzes
- Duolingo's language bots

Administrative Tools

- Turnitin plagiarism detection
- Chatbots for student queries

AI and Personalised Learning

AI analyses student performance and adapts content delivery, allowing for tailored instruction that meets individual needs and learning speeds.

AI for Academic Support

- 24/7 tutoring chatbots
- Essay feedback generators
- Language translation tools

Arguments Supporting AI in Academia

Why some advocate for AI integration

Key Arguments For AI

Efficiency

Automates repetitive tasks, freeing academic staff for higher-level work.

Accessibility

Supports students with disabilities and diverse backgrounds.

Scalability

Enables institutions to serve larger student populations.

Innovation

Encourages new teaching and learning methodologies.

AI and Educational Equity

AI can provide additional support to underrepresented and disadvantaged students, offering resources and personalised feedback regardless of location or background.

Enhancing Research with AI

- Faster data analysis
- Literature review automation
- Identifying research trends



AI has the potential to revolutionise education by making learning more accessible and efficient.

EdTech Magazine, 2023

Arguments Against AI in Academia

Concerns and challenges

Key Arguments Against AI

Bias

AI systems may reinforce existing biases in data.

Privacy

Student data security and misuse are significant risks.

Job Displacement

Automation may reduce the need for certain academic roles.

Over-reliance

Dependence on AI could undermine critical thinking skills.

Ethical Concerns in AI Use

Issues include algorithmic transparency, consent for data collection, and accountability for AI-driven decisions affecting students.

Risks of AI in Assessment

- Inaccurate grading
- Potential for cheating
- Loss of human oversight

Privacy vs. Progress

Privacy Concerns

- Data breaches
- Surveillance fears

Progress Benefits

- Improved learning outcomes
- Efficient administration

Should we trust machines with our education?

Debate Activity

Engaging with the issue

Class Activity: AI Debate

Form two groups: one in favour of AI in academia, one against. Prepare arguments and rebuttals. Present your cases and discuss as a class.

Debate Questions to Consider

- How might AI change the student experience?
- What safeguards are needed for ethical AI use?
- Can AI replace human educators?

Future of AI in Academia

What lies ahead?

Timeline: AI in Education

Past

Early automated grading and learning tools.

Present

Integration of adaptive learning, chatbots, and analytics.

Near Future

Expansion of AI-powered personalised curricula.

Long-term

Possible transformation of traditional educational models.

Emerging Trends

AI-powered virtual classrooms, real-time language translation, and advanced learning analytics are shaping the next generation of academic experiences.

Preparing for an AI-Driven Academic World

- Develop digital literacy skills
- Understand AI limitations and ethics
- Promote responsible AI usage

Balancing Human and AI Roles

Human Strengths

- Empathy
- Creativity
- Ethical judgement

AI Strengths

- Speed
- Data analysis
- Scalability

Survey: Student Attitudes Toward AI

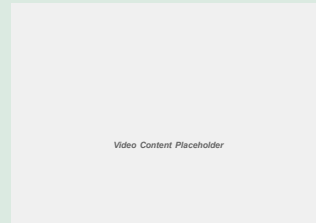
Bar chart showing percentages of students who support, oppose, or are neutral about AI use in academia.





The best educational outcomes come from collaboration between humans and AI.

Education Technology Council, 2022



AI in Higher Education: Opportunities and Challenges

A brief overview of AI's impact on universities.

The debate continues: Is AI a help or a hindrance in education?

Conclusion: Weighing the Evidence

AI in academia offers significant opportunities but also presents notable challenges. A balanced approach, with careful consideration of ethical, practical, and human factors, is essential for the future of education.

