

## Research Highlights

# Generative AI in education:

Current state, future directions, and implications in Bangladesh

## Background

Despite the rapid global rise of generative AI in education, Bangladesh lags behind in adoption due to significant structural challenges. The country's persistent digital divide driven by socio-economic inequality continues to limit equitable access to digital tools, internet connectivity, and AI literacy (Hendawy, 2024). As a result, students and educators in under-resourced regions face growing barriers to participation in AI-enabled learning environments. Bangladesh also ranks lower than several of its South Asian neighbors in terms of AI preparedness, according to the International Monetary Fund (IMF, 2023).

In response to these concerns, the Institute of Informatics and Development (IID) conducted a study titled **Generative AI in Education: Current State, Future Directions, and Implications in Bangladesh**, examining how Bangladeshi students and teachers engage with generative AI, their perceptions and readiness, and the support needed for meaningful integration in education.

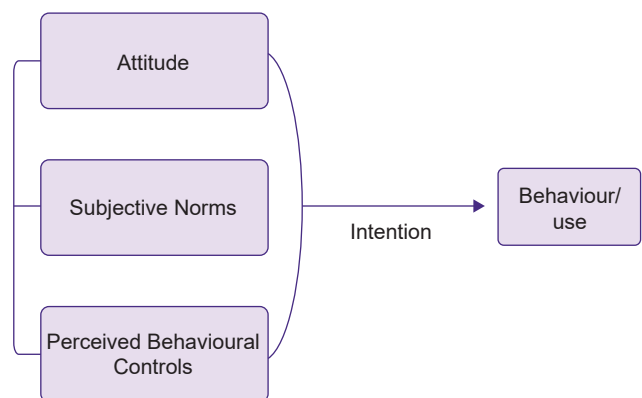
## Methodology

The research employed a mixed-methods approach.



## Theoretical Framework

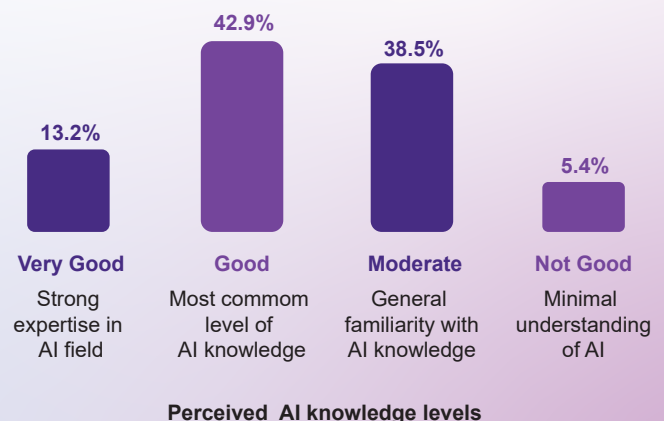
The research applied the Theory of Planned Behavior to examine how attitudes, social norms, and perceived control shape AI adoption.



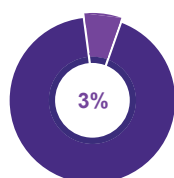
## Research Findings

### Overall AI Knowledge Levels of Students

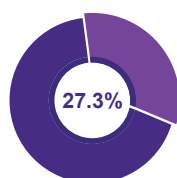
Students across education levels show basic AI familiarity, but only 13.2% feel highly confident. The confidence gap is sharpest at the secondary level.



### Perceived Low AI Knowledge by Education Level

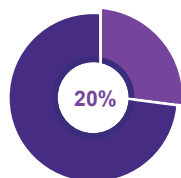


Graduates

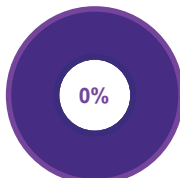


Secondary Level

### Perceived High AI Knowledge by Education Level



Graduates



Secondary Level

### AI Usage by Students

Students are using AI not just for academic purposes, but also as a part of their everyday lives. This reflects a growing dependence on AI across multiple dimensions of student life

#### Studies



#### Communication



#### Entertainment



#### Health Information

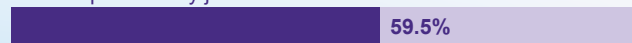


### AI Usage Across Different Domains

### Student Perceptions on AI and Jobs

This indicates that a majority anticipate job displacement to some degree, with very few expecting total elimination of employment opportunities.

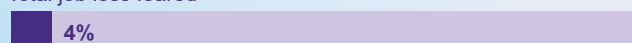
#### AI will replace many jobs



#### Significant but not complete job replacement



#### Total job loss feared



### Student Perceptions of AI's impact on Jobs

### Teachers' Perceived Benefits from AI



Saves time in lesson planning



Explains topics and finds examples



Improves language and presentation quality



Enhance efficiency and better support student learning

### Teachers Perceived Concerns about Students' Use of AI



Students' excessive dependence on AI



Risk to critical thinking and creativity



Harm to long-term learning



Risk of plagiarism without ethics

### Key Suggestions



Integration of AI education into the curriculum



Provision of structured AI training for teachers



Formulation of clear policies and ethical guidelines



Consistent institutional guidance for students and teachers