TNE - INCLUSIVE EDUCATION ACADEMY
CO-CREATION OF GUIDELINES ON THE ETHICAL USE OF GENAI TO SUPPORT HE AND TVET STUDENTS IN BANGLADESH.

INTRODUCTION TO HYBRID WORKSHOP IN BANGLADESH 9TH DECEMBER 10.30AM – 4PM DHAKA

ORGANISERS: AIUB, JU, BUET (BANGLADESH), NTU (UK)

Professor David J. Brown, Department of Computer Science, NTU

Funded by BRITISH COUNCIL

Partners:
American International University Bangladesh (AIUB)
Bangladesh University of Engineering and Technology
Jahangirnagar University
Nottingham Trent University
King Fahd University of Petroleum & Minerals

CORE AIM

- *"To significantly extend existing collaborations between the UK and BD to collaboratively progress and accelerate the internationalisation of the HE/TVET sector, using our extended and co-designed Inclusive Education Toolkit to tackle barriers to the access for students experiencing learning difficulties, sensory and physical impairments, those from socio-economically disadvantaged backgrounds and women students in BD."*

OUR PROJECT WILL SUPPORT KEY ACTIONS FROM THE TNE STRATEGY

1. Creating an enabling environment for TNE through strengthening the quality of TNE

- Training in leading edge Inclusive education practices and widen access and support for all students including disadvantaged, less privileged and excluded individuals.

2. Supporting TNE to transform local education systems and contribute to Sustainable Development Goals

- Co-creation of an inclusive, modern and quality curricula and courses on inclusive education including the use of Generative AI for Good.
- Widen access especially for students with learning difficulties, sensory and physical impairments, those facing socio-economic challenges and women students.

PROJECT OBJECTIVES

OBJ1:Build the capacity of academics and staff in Inclusive Education practices via Training Events and Workshops using the Inclusive Education Toolkit

OBJ2: Explore the potential of GenAI to support students with specific learning difficulties, sensory impairments, from challenged socioeconomic backgrounds and women

OBJ3: Promote adoption of our extended Inclusive Education Toolkit within our extended network

OBJ4: Disseminate and assess the impact of the use of our extended Inclusive Education Toolkit in creating equitable and inclusive HE and TVET Education

OB5: Promote Gender Equity and Equitable Access to HE and TVET Education with our network

PROJECT OUTCOMES

Outcome 1: Capacity Building to encourage staff to adopt inclusive education tools, methods and guidelines

Outcome 2: Increased Access to HE/TVET for Minority/Underrepresented Groups

Outcome 3: New and Improved TNE Partnerships.

OBJ4:Improved Curriculum, Guidelines and Courses on Inclusive Education in HE/TVET

Outcome 5: Improved Perceptions of Disabilities and Advocacy

Outcome 6: Impact Monitoring Evaluation

THE UNIVERSITY GRANTS COMMISSION OF BANGLADESH

University Grants Commission of Bangladesh

"UGC of BD supports the inclusion of neurodiverse students and those from less privileged backgrounds in HE through policies aligned with national and international commitments to equity and non-discrimination."

THE POTENTIAL OF GENERATIVE AI

Gen AI Tools take natural language prompts and dynamically generate highly personalised and contextualised content in real time.

Prompting these tools to present information in a way that meets the needs of individual users.

We will explore the potential of GenAI to support students with specific learning difficulties, sensory impairments, from challenged socioeconomic backgrounds and women with BD HE and TVET partners.

- Online Workshop 2.1: Introduction to the draft NTU Good Practice Guide "Learning, Teaching and Assessment with GenAI"
- Online workshop 2.2: Exploration of the opportunities and challenges of using GenAI in Learning, Teaching and Assessment to guide HE and TVET Staff and the neurodivergent students they support in BD.
- Online workshop 2.3: Co-creation of Guidelines on the ethical use of GenAI to support HE and TVET students in Bangladesh

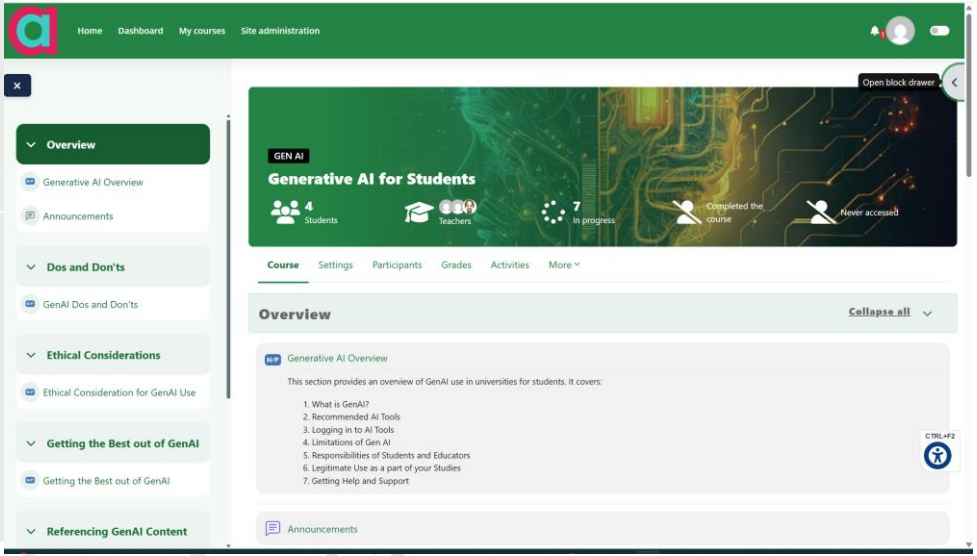
GENAI – BENEFITS & RISKS

Guidance for generative AI in education and research
https://www.unesco.org/en/articles/guidance-generative-ai-education-and-research

Potential but unproven uses	Appropriate domains of knowledge or problems	Expected outcomes	Appropriate GenAI tools and comparative advantages	Requirements for the users	Required human pedagogical methods and example prompts	Possible risks
AI-powered accessibility tools	These enable learners with hearing or visual impairment to access a wider range of content, thus improving the quality of their learning.	Meeting learners' access needs and supporting their acquisition of subject-specific knowledge by providing GenAI-enabled captioning and/or sign language interpretation for audio or video content, and audio descriptions for text or other visual material. **Potential transformation:** **1:1 personalized AI-powered language aids**	In addition to general GenAI tools, search for relevant and trusted AI-powered generators of captions and audio descriptions. Assess whether they are locally accessible, open source, rigorously tested or validated by authorities. Further consider the advantages and challenges of any particular GenAI tool, and ensure that it properly addresses specific human needs.	The educators or facilitators must help learners access and learn how to operate the GenAI tools. They also need to ensure that the tools' outputs genuinely support these learners and do not reinforce the challenges and biases that they face.	Need to test the accessibility of platforms or tools to identify and fix accessibility issues before they are used. GenAI tools can only provide access to content, so educators and facilitators should focus on enhancing their quality of learning and social well-being. Educators and facilitators need to teach the learners to create voice or text prompts based on their abilities.	The captions or audio descriptions produced by GenAI platforms that are not designed specifically to support vision or hearing are often inaccurate and may mislead learners with special needs. These tools may inadvertently reinforce existing biases.
Generative amplifier for marginalized learners	It might be helpful for learners from minority linguistic or cultural backgrounds to express and amplify their voices, to participate online, and to conduct collaborative social studies.	Providing real-time translations, paraphrasing, and automatic correction of writing to support learners from marginalized groups to use their own languages to communicate with peers from different linguistic backgrounds. **Potential transformation:** **Inclusive LLMs for marginalized learners**	A specific example for consideration is PaLM 2. Assess whether the GenAI tools are locally accessible, open source, rigorously tested or validated by authorities. Further consider the advantages and challenges of any particular GenAI tool, and ensure that it properly addresses specific human needs.	The learners should have knowledge or meaningful opinions on the topic of the conversation or collaborative study. They need to be capable of making responsible and non-discriminatory contributions and avoiding hate speech.	Teachers or educators should design studies and writing tasks for learners on social or cultural topics, or organize online seminars or intercultural collaborations to stimulate learners to generate ideas and share opinions.	Need to identify and correct the errors in AI translations and paraphrasing that may cause intercultural misunderstandings. This use can provide opportunities for marginalized learners to amplify their voices, but will not touch the root cause of data poverty and therefore cannot decolonize AI tools.

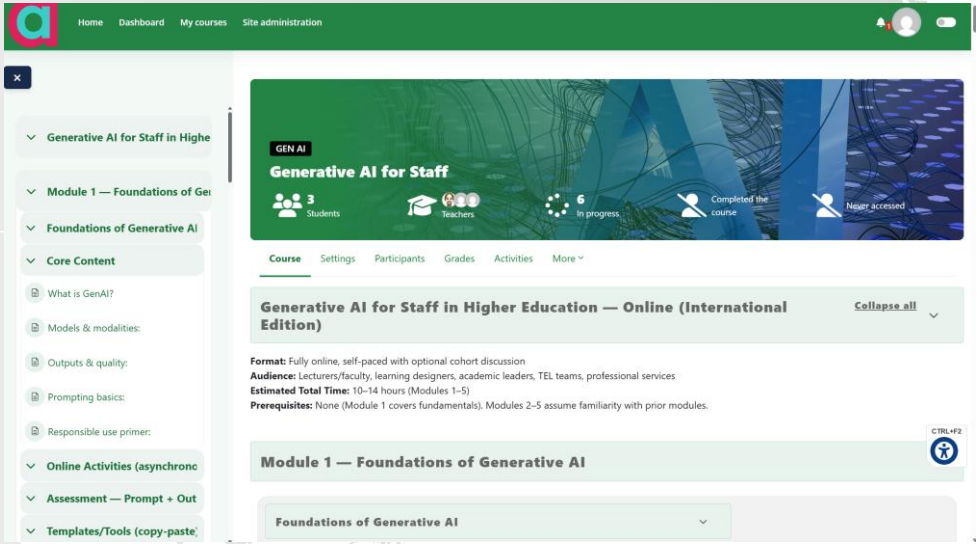
NTU GEN AI GUIDELINES

For students….



NTU GEN AI GUIDELINES

For staff…



PERSONAE & JOURNEY MAPPING

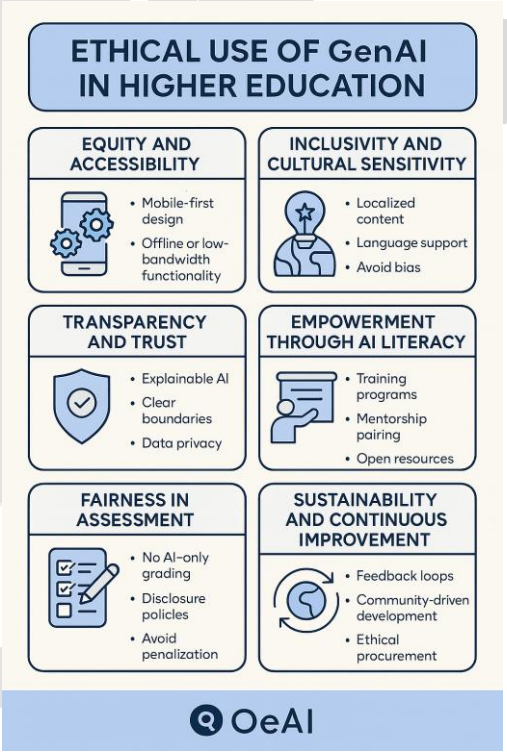
Ayesha is a second-year undergraduate student in Computer Science from a rural district in Bangladesh. She is the first in her family to attend university and relies on a government stipend to cover basic expenses.

Challenges:

- Limited access to a personal device; shares a mobile phone with siblings.
- Internet connectivity is unreliable, especially during monsoon season.
- Feels excluded from digital learning opportunities and career networks.

Needs:

- Mobile-friendly AI tools that work offline or with low bandwidth.
- Mentorship and career guidance tailored to local job markets.
- Institutional support for device access and AI literacy.



ONLINE WORKSHOP 2.2: EXPLORATION OF THE OPPORTUNITIES AND CHALLENGES OF USING GENAI IN LEARNING, TEACHING AND ASSESSMENT TO GUIDE HE AND TVET STAFF AND THE NEURODIVERGENT STUDENTS THEY SUPPORT IN BD

ATTITUDES TO DECLARING DISABILITY

Challenges faced by students with disabilities (hearing, vision) in Bangladesh:

- Many students hesitate to disclose disabilities due to social stigma.
- Universities should clearly announce available support and collaborate with counselling centres.
- Accessibility tools should be user-friendly and widely available.

ETHICS

Outlines ethical principles for AI use:

- Core values: human rights, inclusiveness, environmental responsibility.
- Key principles: proportionality, privacy, transparency, accountability, sustainability.
- Emphasises awareness and literacy to bridge the digital divide and ensure fairness and non-discrimination.

Workshop Schedule

- **10:30 AM – Welcome Remarks** (Profs. Mohammed Mostafizur Rahman, M. Shamim Kaiser and Risala Tasin Khan).
- **11:00 AM – 12:30 PM | Session 1: Context Awareness and Framing**
- Reflections on the opportunities and challenges of deploying Generative AI in Learning, Teaching, and Assessment in Bangladesh: drawing on insights from the online session held on 27th October (David J Brown)
- Introducing GenAI in teaching practice: the current context from a UK university – Dr Arif Rahman
- Introduction to the accessible academy site and Gen AI Guidelines – Nick Shopland.
- Interactive sharing session discussing lived experiences related to digital divides, gender biases, and sociocultural barriers (led by Prof. Risala Tasin Khan).
- **12:30 PM – 1:30 PM | Lunch Break**
- **1:30 PM – 3:30 PM | Session 2: Drafting and Tuning Guidelines**
- **Development of practical, context-sensitive guidelines for the ethical use of GenAI to support HE and TVET students, covering:**
  - Ethical and safety protocols (Prof. Risala Tasin Khan to lead)
  - Curriculum alignment for the Bangladeshi context (Dr. Md Saef Ullah Miah to lead)
  - Quality assurance frameworks (Dr. Md Saef Ullah Miah to lead)
  - Integration of EDI principles (Prof. Risala Tasin Khan to lead)
- **Group Activities:**
  - Collaborative brainstorming on draft guidelines
  - Discussions on consent, fairness, transparency, language barriers, and redress mechanisms
  - Formulating actionable recommendations and identifying follow-up responsibilities
- **3:30 PM Coffee, Wrap-up, and Departure –** led by Profs. Mohammed Mostafizur Rahman, M. Shamim Kaiser and Risala Tasin Khan.

CONTACT

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