Asia-Europe Meeting

ASEM Education

ASEM Expert Group Digitalisation

**Public Online Seminar on
The Impact of Artificial Intelligence on Learning & Teaching
in Higher Education**

Tuesday, 28 November 2023

Conclusions

Participants: Dr. Sharina Yunus (Universiti Teknologi Brunei), Bastien Degardins (European Students' Union), Associate Prof. Christine Slade (University of Queensland), Prof. Joshua Ellul (University of Malta)

Moderator: Ruben Janssens (Ghent University)

1. **Short Summary**

   The seminar addressed the challenges and opportunities of digital transformation in higher education. The discussions highlighted the potential of Artificial Intelligence (AI) in student-centred learning, its ability to challenge and improve patterns of knowledge transfer, and its potential to make processes around teaching and learning more efficient and effective.

   However, the debate also highlighted risks and challenges related to the use of AI in higher education, amongst others, the potential for fraud, complex ethical considerations, and the necessity to ensure sufficient competencies in and around the use of AI. In this light, students as well as teaching staff need to act with diligence and care, in order to benefit as much as possible from this new 'tool in the box', at the same time preventing misconduct, bias and discrimination.

   Furthermore, the need for an adequate regulatory environment was stressed, relating to both the general (inter-)national legal and the institutional level. Yet, it should be kept in mind that AI itself is merely a new tool, applied in many sectors that already possess good regulation which also covers the use of AI.

2. **Conclusions**

   a. **General Opportunities & Risks of AI in Education**

   As potential opportunities and improvements of AI in teaching at HEIs were put forward:

   - Improved accessibility of information and independent learning patterns;
   - Quick gathering of facts, leaving more time for actual, demanding assignments;
   - More student-centred, curiosity-based learning patterns; and
   - Means to break down barriers (e.g. language, shyness, access) and facilitate classroom discussion

Against this, as potential risks and obstacles were mentioned:

- Bias in the data and models that feed AI;
- Facilitation of academic misconduct and, on the other hand, fear amongst students of being falsely accused of alleged misconduct by false, automated detection;
- Intensified need for good human mentorship through limitations of AI (i.e. facts can be provided, interpretation needs human support); and
- Ethical considerations, such as access, transparency, and language barriers for advanced use in the academic context, potentially widening existing gaps

In addition, it was observed that the occurrence of AI has caused very different, sometimes emotional responses, ranging from open, excited and curious, on the one hand, to resisting, concerned and hesitant, on the other. Stakeholders should be aware of both perspectives and take these into account.

b. Handling of AI at Higher Education Institutions (HEIs) / Use in Assessment

According to the panel, many HEIs have been quick to adapt to AI and adopt adequate policies, but it is important to remain flexible and continue learning at all levels.

Regarding assessment, there are two sides to be considered:

a. the **student** (potentially) using AI (legally or illegally) to **fulfil requirements**; and
b. the **assessor** using AI to **make** her/his **assessment**.

While the latter is still limited, the use among students is becoming fairly standard in many fields. Unlike previous academic integrity sensations like contract cheating[1] (known as essay mills in some countries) where students can obtain individualised assessment responses from a third party, the use of AI can also be beneficial for students in their studies and preparation for employment. HEIs need to help students understand the appropriate boundaries for use.

In some countries, e.g. Australia, there are clear instructions, sometimes down to the course level, on the degree of AI use permitted. This makes conditions transparent and prevents unintentional cheating.

The European Students' Union argues that AI should not be seen as a threat, but as a new tool emerging out of a natural development, similar to the appearance of computers or calculators in the past. Also, assessors should be aware that if AI is capable of completing an exam on behalf of a student, the task itself is insufficient and should be changed, so that human capacity is needed to actually fulfil it.

In response to that, a growing number of institutions have revised their assessment patterns, giving more credits for creativity and human-centric skills, and fewer for delivery of facts and traditional assessments. Also, ethical training is being added to many curricula, with e.g. the deliberate encouragement of the use of AI, but asking students to then reflect on the added value and to justify the reasons behind.

With regard to instruction, it was observed that the use of AI has led to more exchange and discussion with the students (framing of questions, deliberation on next steps, building relationships), in turn reducing traditional paperwork.

---

[1] How to respond to contract cheating: Detection and management – TEQSA; Substantiating contract cheating: A guide for investigators – TEQSA

c. **Regulation & Legal Frameworks**

When looking at regulatory requirements of AI, it became obvious that a clear and effective framework is needed to safeguard the public interest, not least against commercial currents. Yet, this needs to be well-informed and to have a clear answer on what exactly needs to be regulated – i.e. AI itself or the sector it is used in – and to what specific end. In many instances, it was argued, sectors and fields already possess good and versatile regulation that also covers the use of technology, such as AI.

A major challenge for drawing up good regulation – both on the political and the institutional level – is to fully understand the areas that need regulation and those that do not from a perspective of public interest, not leaving the standards to be established by technology companies.

To that end, in Australia, for example, the federal government is undertaking an inquiry into the use of generative artificial intelligence in the Australian education system[2]. Further the higher education regulator, TEQSA (Tertiary Education Quality and Standards Agency) supported an Assessment Experts Forum that produced an AI guidance document for the sector[3]. In Brunei, by comparison, different means of exchange and peer-collaboration have been established.

An interesting argument in this context was that regulation can have counterintuitive effects, too, e.g. by raising the bar for new companies to enter the market, thereby indirectly contributing to the monopoly of a small group of global technology firms.

A general banning of AI as a pre-emptive measure has been observed in some countries but was seen as unsuitable and is unlikely to solve issues in the long term.

In the end, good regulation should be balanced, i.e. allow the use of AI in general, while safeguarding the individual user and society at large against misinformation, discrimination as well as threats to cybersecurity and privacy. Also, decision-making in sensitive areas such as human resource management or 'profiling' of people into groups must not be executed by AI alone but always involve a human component, not least in the education sector.

d. **Future Needs for successful Interplay of AI and Education**

When looking at requirements for a sustainable and successful use of AI in HE, aspects put forward by the panellists were **adaptability**, i.e. the ability to seamlessly integrate AI into T&L, a **collaborative learning ecosystem**, the **promotion of AI also in lifelong learning** to ensure professional development for academic staff, and the **provision of information and teaching** on a skilled, critical use of AI. Another major aspect are **ethical considerations**, e.g. on inclusivity and accessibility for marginalised groups, guaranteeing the use of AI under fair and equal conditions. This should merge with general principles on **academic integrity**, being relevant to all stages of academic life.

Concern was raised about the significant impact of a few global companies on the AI market. These determine not only the speed of technical development itself, but potentially affect political decisions and / or even act beyond public control, creating data and knowledge oligopolies – with effects on human rights, public interests etc.

By and large, the panel voiced their hope that there will be a **paradigm shift towards more confidence** in AI as being a helpful tool with many untapped potentials, at the same time treating it with care and ensuring well-informed, critical reflection when using it. To that end, it will be crucial to undertake more research into the matter and to keep on teaching all stakeholders in the use, the added value as well as the potential pitfalls of AI.

---

[2] Inquiry into the use of generative artificial intelligence in the Australian education system – Parliament of Australia
[3] Assessment reform for the age of artificial intelligence – TEQSA