

Awareness and perceptions of generative AI usage for supporting learning

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Students' views

HEPI Policy Note 51

- **More than half of students (53%) have used generative AI to help them with assessments.**
The most common use is as an 'AI private tutor' (36%), helping to explain concepts.
- **A 'digital divide' in AI use may be emerging.** Nearly three-fifths of students from the most privileged backgrounds (58%) use generative AI for assessments, compared with just half (51%) from the least privileged backgrounds.
- **Only a fifth of students (22%) are satisfied with the support they have received on AI.** Most students (62%) are neutral or say they do not know.

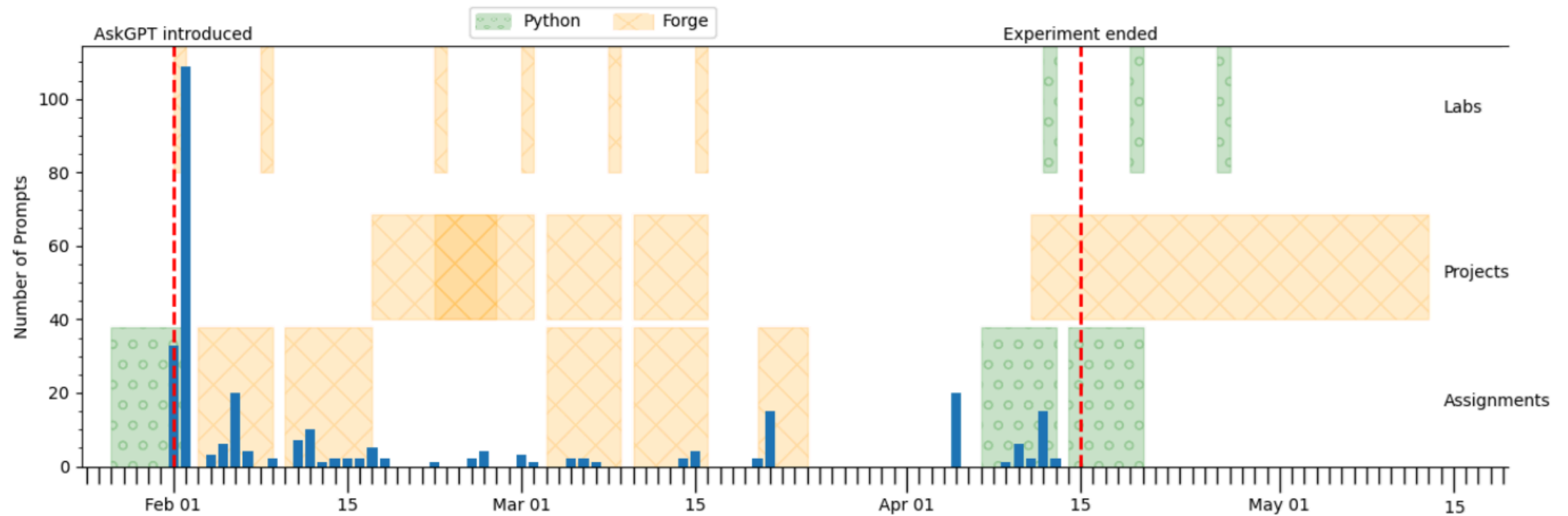


Figure 3: Number of student prompts to AskGPT per day, overlaid on a course schedule.

Student use of large language models

Student responses

- **P2:** "I learn better through struggling to find an answer. If it comes too easy, it's hard for me to remember any information I've learned."
- **P11:** "I have a vitriolic hatred toward AI."

Student use of large language models

Table 2: Reasons students did not use AskGPT.

Reason	Count	% Responses
May interfere with learning	25	57 %
Fear of breaking course rules	12	27 %
Awkward UI	9	20 %
Concerns about logging	7	16 %
Worse than alternatives	6	14 %
Responses were not useful	6	14 %
Did not want to use	4	9 %
Fear of overuse	4	9 %
Installation issues	2	5 %
Concerns about AI	2	5 %
Did not use VS Code	1	2 %

Student use of large language models

Educators' views

Luleå University of Technology staff survey

- 76.12% of the university teachers surveyed expressed willingness to encourage their students to use generative AI ethically.
- Over 50% currently use generative AI in some form.

Texas A&M University

- 47% are somewhat to extremely comfortable with students using ChatGPT in courses.
- 64% of faculty and 73% of students have used ChatGPT.

Purpose

- To inform generative AI-based pedagogical developments
 - University policy
 - Staff guidance and training
 - Integration into teaching and learning

Research themes

- Awareness and understanding
 - Common tools: ChatGPT, Microsoft Copilot
 - Embedded technology: Microsoft Word, Grammarly
- Usage patterns
 - Implicit versus explicit usage expectations

Research themes

- Trust and confidence
 - Ethical concerns
 - Domain expert knowledge
- Perceptions and anxiety
 - Breach of privacy
 - Confidence to ask questions
- Digital divide and equity of access
 - Accessibility and cost

Research themes

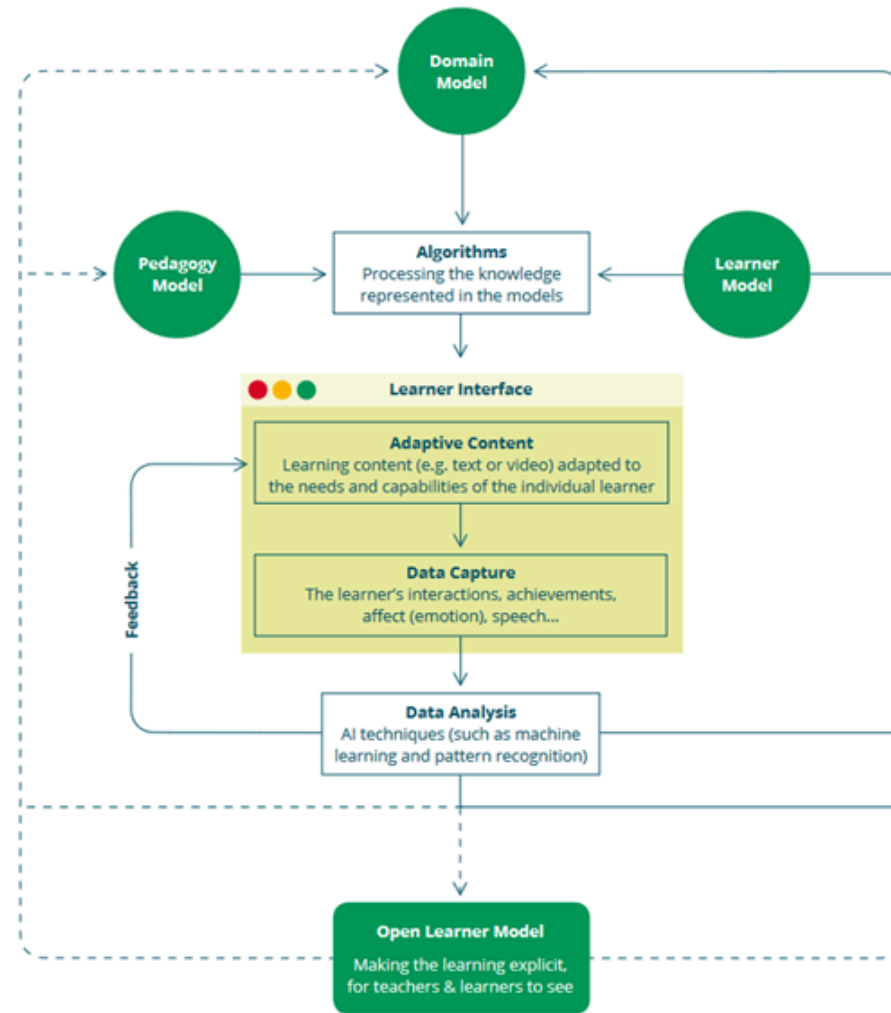
- Guidance
 - Supplementing university instructors and tutors
- Learning and teaching strategies
 - Fostering generative AI culture

Some literature

- Generation gap
- Artificial intelligence anxiety scale
- Intelligent tutoring systems
- Technology Acceptance Model links to an user acceptance perspective:
 - perceived usefulness
 - perceived ease of use

Figure 1

AIEd system showing a simplified picture of a typical model-based adaptive tutor.



A model-based adaptive tutor

Possible questions

- Do you think that generative AI will **replace skills** or **knowledge** that you are learning (or have learnt) from university?
- Will generative AI usage undermine your **learning experience**?
- How satisfied are you with your **university instructors**?
- Would you rely on generative AI as a **tutor** for your university subjects?
- What **concerns** do you have about using generative AI?

Logistics

- Multi-stage survey targetting students and educators
 - Current focus: statistics and data science
 - Future focus: ???

Participants

Currently targetting students from:

UK

University College London

Coventry University

Australia

La Trobe University

Federation University Australia

Macquarie University

Timeline: Student survey

- June: Pilot testing
- July - August: Survey launch phase 1
 - UK term 3: postgraduates
 - Australia semester 2
- September - December: Survey launch phase 2
 - UK term 1
- January - April: Survey launch phase 3
 - UK term 2

Timeline: Staff survey

- September: Pilot testing
- October - December: Survey launch

The end 🤔