UNIVERSITEIT VAN AMSTERDAM

Summary February 20th 2023

University Forum

AI in Education

AI in Education

On Monday afternoon, February 20th 2023, University Forum members and guests engaged in a digital conversation about AI in Education. After a plenary introduction to the topic by guest speakers, attendees split into groups to discuss the four questions and statements below. The outcomes of those discussions are summarized in this report.

Questions and Statements

Should we utilize AI in education? Should teachers and staff integrate programs such as ChatGPT into education? 1

With new developments in AI, questions emerge about the opportunities, risks, and ethics of its use. Who is responsible for addressing developments in AI that affect education? Are UvA-wide policies needed, or not? 2

Statement: the UvA should establish clear guidelines on the collaboration with the companies behind AI. 3

Statement: If our way of testing becomes more susceptible to fraud due to developments within AI, then we should adjust our testing. 4

Guest Speakers

To introduce the attendees to the topic, two (guest) speakers spoke at the beginning of the meeting: Frank Benneker & Harrie van der Meer.

Frank Benneker

Frank is Information Manager for Education and belongs to the Administrative Staff. Everyone is talking about AI in education, and what it will mean for education. Many people see it as a threat; what if students start plagiarizing? Do we have to change our essays and exams now? Frank discusses whether there are also opportunities and possibilities. For example, the UvA can respond well to AI in education because of its many knowledgeable staff.

Frank cited Russell and Norvig who define AI as "intelligence demonstrated by machines, in contrast to the natural intelligence displayed by humans. Colloquially, the term "artificial intelligence" is often used to describe machines (or computers) that mimic "cognitive" functions that humans associate with the human mind, such as "learning" and "problem solving."

An example of one of the programs that we can use in education is the program Synthesia that allows generating knowledge clips from texts. After this, Frank gave some examples of AI we already use in education, such as the program FeedbackFruits, or Kaltura which generates automatic subtitles for students with disabilities. When using data (from students) we should always remain critical: what kind of data is it? How is it stored? How do we deal with 'black box' systems? How do we ensure privacy? Frank concluded by stating that we must keep transparency central when communicating to students and staff about the use of AI.

Harrie van der Meer

As the library's coordinator of (educational) training and teaching materials, Harrie gave a taxonomy of information skills. After all, how does ChatGPT change searching, finding and evaluating information?

ChatGPT can be used as a tool for formulating research questions, summarizing or translating texts, converting sources to another reference style, grading exam questions and rubrics, and writing texts using prompts. When converting reference styles, you should always check that it has been done correctly, which makes reference software easier to use now than ChatGPT. At the moment, ChatGPT cannot yet provide (reliable) sources when generating texts. A few other caveats are that ChatGPT has biases in it since technology is not neutral. In addition, ChatGPT is not transparent about the used sources of files and moderation filters. Alternatives to ChatGPT include Elicit, an "AI Research Assistant," and Semantic Scholar, an "AI powered research tool."

In summary, ChatGPT can achieve a lot in the field of information skills and education, but as a user you have to remain critical of the relevance and reliability of the content of the generated texts. Harrie concluded by stating that this means we need to take a different look at teaching information skills. For example, as a university, we could offer trainings to students in which they learn to deal critically with AI tools, and become aware of the pitfalls of AI tools.

1

Question:
Should we utilize AI in education? Should teachers and staff integrate programs such as ChatGPT into education?

Not utilizing AI and programs like ChatGPT in education is not an option, we have to relate to it. ChatGPT is likely a tool that will continue to evolve and be used, so we as a university must respond to it in a way that does not impede the learning process and the quality of education. We must become aware of the advantages, disadvantages, opportunities and problems. Thereby, AI is an integral part of research in several faculties, so students should learn to use it. We do need to approach this in a critical manner by teaching our students to use and evaluate these programs critically. We could incorporate this into teaching. You can teach students to recognize important "flaws" of programs like ChatGPT, such as the lack of correct data and sources. It's important to teach students how programs like ChatGPT work so they know what source they relate to. For example, ChatGPT can work well to code and summarize texts. It is important that the UvA also properly schools its staff when it comes to AI in education.

Some programs already have courses such as "Responsible AI," these types of courses could be offered at all programs to teach students how to reflect on AI. Teachers could also, as an exercise, have students evaluate a ChatGPT answer to a complex question to teach them to think critically about these types of programs.

It is important to keep an open dialogue with students about how they use programs such as ChatGPT. This will allow staff and teachers to have more focused conversations with their students about the advantages and disadvantages of their use of AI. In doing so, as a university, we need to communicate clearly about the use of programs such as ChatGPT, and when we label it as fraud.

Question:
With new developments in AI, questions emerge about the opportunities, risks, and ethics of its use. Who is responsible for addressing developments in AI that affect education? Are UvA-wide policies needed, or not?

This group too felt that AI should not be banned in education, but rather treated as a new development that we can integrate into teaching and research. It is important to make decisions in the near future as we are already facing the consequences of AI as an university. However, the difference between programs and faculties must be taken into account. Within one program the emphasis is on writing skills, and in another the emphasis is on practical education.

AI programs remain partially elusive to us as a university due to factors such as rapid development. At the same time, it is important to form policies so that it is clear what we as a university think about AI and how we view issues such as the ethics and sustainability of the use of AI, and how it affects our business operations.
Policy on AI needs to be shaped at multiple levels. Both within the UvA, as well as the UNL and even politics.
A dedicated forum within the UvA could be created through which a unified view on AI in education could be propagated to the UNL and the House of Representatives. However, it should be noted that the development of AI is moving incredibly fast, and as a university you do not want to be too reactive. The UvA must maintain its existing competence in the field of AI; policy should not fall behind. Therefore, it is important that students and teachers are well informed about AI in education. It would be a good idea to incorporate interacting with AI into the curriculum as part of academic skills.

In conclusion, it is important to establish guidelines on the use of AI and when it is considered fraudulent so that bodies such as the examination board can deal with it. These will always have to be both general and faculty-specific guidelines.

3

Statement:
The UvA should establish clear guidelines on the collaboration with the companies behind AI.

AI could potentially be a useful addition to education. As a university, we must remain future-oriented. However, this should always be done in a critical manner. It is important to think carefully about cooperation with the companies behind AI and their programs.

With commercial companies, it is important to pay attention to what conditions we as users of the programs must agree to before we as a university introduce them into our research and teaching. For example, with programs like ChatGPT, we have to consider that because this is a free program, you pay with the data you are entering into it. And we need to realize that not every AI program works safely or reliably automatically. Right now, many programs still function as "black boxes," meaning that we don't know what is happening to our data. We must also consider that by using these programs, we participate in their development. But not using the programs at all is not a realistic solution.
It should not be our aim to ask students and teachers to create personal accounts for programs such as ChatGPT. As a university, it may be a good idea to ensure that students and teachers can sign in through an institution account so that they do not have to create an account with personal information.

As a university, it would be a good idea to establish regulations about collaboration with the companies behind AI programs. If possible, we should always work with a licensed system so that we have clarity on what is being paid for and signed for, and whether this program is secure enough for our data. This would also require regulation from the UNL or at least all the overarching universities. It would be a good idea to investigate if we can work with multiple universities to stay critical on the implementation of AI and certain programs in our education.

4

Statement:
If our way of testing becomes more susceptible to fraud due to developments within AI, then we should adjust our testing.

We must accept that these new developments within AI are entering into education. Test forms and the way tests are taken must therefore be adapted appropriately. With some digital tests, we can ensure that students cannot access ChatGPT, for example. But, we also need to think carefully about whether test forms such as the take home exam are still appropriate. It will probably be a matter of time before ChatGPT can provide sources to texts. If we continue to use test forms such as take home exams, we must formulate our questions in such a way that they require more critical thinking. For example, it is good to ask students to draw comparisons to the present and use "higher order reasoning processes". Another option could also be to give students less time to turn in take home exams.

It may be a good idea to continue to emphasize to students why we take tests and why we use certain forms. It is still important, whatever field a student ends up in, to first learn how to write a text yourself, how to find and analyze sources, how to argue for something, how to keep up with developments in your field and so on, before you do all of that with an AI tool. And in many professions, you also need to have knowledge ready on hand and you are unable to type everything into ChatGPT, for example. Teaching students to work with as well as without ChatGPT can prepare them for their future as working individuals.

In doing so, teachers should be trained to recognize the weaknesses of ChatGPT, for example, so they can take them into account when designing exams. It may be a good idea to enter exam questions into ChatGPT to see if the question is too easy for the program to answer. In doing so, we should work with a variety of test formats so that we can test multiple skills. By alternating between paper-based exams, take home exams, presentations and verbal exams, we are less dependent on AI. Then, of course, we have to pay attention to the pitfalls with all forms of testing, and whether we have the capacity to have students take more on-site exams again. In conclusion, teachers and staff should be given time to modify their exams.

Questions? Please contact the official secretary Zazie van Dorp.
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