ChatGPT & Co in higher education: to be cheered or feared ?

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One year after the sudden eruption of ChatGPT, the University Foundation devoted its annual Ethical Forum to some of the key questions it raises, especially as regards its impact on university teaching and student evaluation The text below is a written version of the concluding remarks by Philippe Van Parijs, coordinator of this edition of the Forum.

It is heavily indebted to the keynote lectures by Arianna Valentini (UNESCO) and Seger Breugelmans (Tilburg University), the panel contributions by Tine Baelmans (KU Leuven), Ilse De Bourdeaudhuij (UGent), Marius Gilbert (ULB) and Dominique Verpoorten (ULiège), the "interventions from the floor" by Olenka Czarnocki (CERIA), Michaël Lobet (UNamur) and Rodolphe Sépulchre (KU Leuven) and the active chairing by Marie-Catherine de Marneffe (UCLouvain) and Dominique Willems (UGent).

Ambivalence

When ChatGPT suddenly appeared a year ago, most of those who discovered it were baffled, and many were alarmed. Given the speed with which ChatGPT was spreading, the potential disruption looked formidable. Some teaching and evaluation methods, sometimes fashioned through years of strenuous trial and error, suddenly seemed useless. Understandably, defensive reactions propped up. Some thought of banning the use of ChatGPT altogether, others of switching abruptly to oral exams or on-site assignments, others again of bringing in new detectors of plagiarism and fraud that would catch and sanction any use of this awful chatbot that itself does nothing but plagiarize.

Soon, however, and indeed in parallel, many academics were intrigued by what ChatGPT could do for them: as a tool for brainstorming or feedback, or for turning slides into a syllabus or a syllabus into slides, or for summarizing, polishing or translating a text, or even for subjecting it to the norms of *écriture inclusive*. Some teachers — in higher education and also, as we saw at the Forum, in secondary schools — also managed to use it to make their lectures livelier, to make their student assessments more subtle and to provide their students with a 7/24 assistant.

Asking good questions, recognizing bad answers

Along the way, teachers realized that this should go along with learning and teaching new skills. "Prompting" is the most obvious example: how can you phrase your question or your instruction so that you get straight away the information or operation you want?

Critical skills will also need to be refined. For students may quickly perceive ChatGPT as a fantastic friend, always available, clear, polite, patient, and above all incredibly knowledgeable, thereby outshining their professors in several, if not all respects. It will not be easy, therefore, to make students realize that a chatbot knows nothing, that all it does — true, in a mind-bogglingly short time — is scan masses of sentences it found on the web, true or false, in order to generate a neat, sensible-sounding text by exploiting context-sensitive probabilities.

More than before, therefore, students — and pupils of all ages before them — will need to learn how to identify sources and asses their trustworthiness, and to understand how "true" knowledge is generated using reliable evidence and sound argument.

Skill atrophy: unavoidable — and regrettable?

Some skills need to be acquired or refined. Other skills, many fear, will be regrettably lost. As technological advances enable machines to do things better and/or faster than humans, they quasi-unavoidably lead to an atrophy, through lack of learning and use, of some human skills. Thus, arithmetic, manual writing, spelling, the memorizing of facts all suffered as a result of the spreading of the calculator, word processing, spellcheck functions and Wikipedia. The knowledge of foreign language and the ability to translate are also beginning to suffer as a result the dramatic improvement of the quality of machine translation.

Given what ChatGPT can do for us, can't we expect our capacity to synthetize a document or to turn ideas into legible texts atrophy in turn? Should we rejoice because of our newly acquired abilities to achieve better results in a shorter time while no longer wasting millions of hours on teaching and learning multiplication tables, calligraphy, orthography, myriads of facts, foreign languages, writing coherent prose ? Or is the atrophy of these human skills, especially the last one, so close to the loss of the ability to think by oneself that it amounts to a disaster to be avoided at all price?

The digital colonization of our daily lives

This is no doubt one of the fundamental questions raised by the spreading of ChatGPT and related AI applications. Other ethically relevant questions relate to the biases replicated or expanded by the chatbots, to the fact that the management of these biases and the design of the algorithms are left to the discretion of an American multinational, to the ecological footprint of the worldwide use of AI applications, to the fair remuneration of the Kenyan workers used to filter the data sets, to the impact on inequalities between individuals, institutions and countries of the price charged by Open AI and other companies for the professional use of their AI applications.

These questions are all important, but I wish to end by spelling out a different one. With every new technological advance in the digital realm, a digital divide — a sharp inequality between those who master that technology and those who don't — is recreated or deepened, whether between educational classes or between age groups. Lifelong learning is essential to keep reducing this divide for the benefit of the least advantaged, whether as workers, as consumers, as users of public services or as citizens.

The more successful this effort to reduce the digital divide, the more widely and deeply digitalized our societies become. Top-down efforts by governments and educational institutions do part of the job. Bottom-up network externalities provide a powerful supplement: the more others use a technology, the more one is motivated or even forced to follow. Is this digital colonization of our daily lives a problem?

Philippe Van Parijs
UCLouvain & KU Leuven