CHANGING THE GAME. AI IN EDUCATION

Alexandra Zbuchea, Florina Pînzaru, Cristian Vidu (Eds.)



București - 2023

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TRITONIC

Str. Coacăzelor nr. 5, București e-mail: editura@tritonic.ro www.tritonic.ro

Tritonic București apare la poziția 18 în lista cu Edituri de prestigiu recunoscut în domeniul științelor sociale (lista A2) (CNATDCU): http://www.cnatdcu.ro/wp-content/uploads/2011/11/A2_Panel41.xls

Colecția Smart Books este coordonată de lect. univ. dr. Bogdan Hrib.

ISBN 978-606-749-727-4

Coperta: Alexandra Bardan DTP: Ioan Dorel Radu Editor: Rebeca Cojocaru Decembrie 2023

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The Lure and Allure of Using AI Tools in the Romanian Higher Education

Andreea Mitan

Abstract

I asked ChatGPT to write an abstract for this chapter. This is the result: 'AI, epitomized by ChatGPT, has reshaped education since its 2022 release, fuelling a surge in scientific articles. The 4th Industrial Revolution's imminent impact is evident in globally accessible AI tools, prompting authors to examine positive and negative implications, emphasizing a human-centric perspective. In 2019, a UNESCO conference in China and the 2023 AI Safety Summit in the UK underscored the international discourse on AI's future and associated risks. AI's dual role of benefit and potential misconduct is evident in education, promising reduced professorial workload and tailored learning experiences while raising concerns about educators' roles diminishing and facilitating academic dishonesty. This chapter, amid rich literature, argues that systemic challenges must be addressed before integrating AI into Romanian tertiary education. Advocating a human-centric approach, it urges collaboration among scholars to transition smoothly towards an AI-empowered education system, enhancing the Romanian student experience.'

An ideal and a truth

The essence of the Renaissance Scholar is deeply connected to the freedom to pursue knowledge in a rather quiet place, and without the pressure of delivering results on a schedule. Many Scholars still choose to spend their lives in the monasteries of the mind, thinking about writing grants to conduct research on their chosen topic and to finance their conference attendance costs, publishing projects, and daily living. Life in a monastery of the mind can be comfortable, yet it is odd, at least to the nonbeliever in the God of Science and Time. The pace of the World's wheels is impacted by the ideas born in the monasteries of the mind where Scholars spend their lives. Nevertheless, sometimes, these wheels speed up and threaten to disrupt the established order.

Academia exerts a certain mystique and is seen by many as a bridge to the future – at least to prepare the future workforce and discover some valuable things that would improve the quality of life of the Everyman and Everywoman. The people outside of Academia rarely tap entirely into what it actually means to be there to those inside. The inviolability of the academic space makes it seem privileged, and perhaps it is, as it must allow the skilled Scholar to pierce through layers of reality that are not even visible to the people outside of the monastery until later dates. Some believe that the Scholars are even (relatively) disconnected from the mundane reality, living comfortable lives in their ivory towers of yet-tobe-proven-useful knowledge. On these grounds, it is not uncommon for outsiders to label members of the Academia as conservative, change-averse, or even narrow-spirited (Marks & Al-Ali, 2022).

From time to time, as any reader would be able to perceive, the silence of the monasteries of the mind is disturbed by the piercing sounds of the sirens that announce the discovery of a new technology or a ground-breaking idea. The sirens might claim that the latest discovery leads to the birth of something that will disrupt human existence as we know it. For example, sirens announced disruptive events in the past, such as the full sequencing of human DNA, the emergence of the World Wide Web, the creation of the personal computer, or the landing on the Moon. Every time the sirens go loud, a particular saving appears written with golden letters even on the walls of the largest monasteries of the mind: "The World is infinite, and, in this human form, you are but a grain of dust." Demotivation might arise as the Scholars (re)discover that they are nothing but beings living under the prejudices of a limited lifespan, with a relatively limited capacity for knowledge gathering and sharing. For the fearless and visionaries, opportunities are best seen during these times when sirens sing. But, indeed, sometimes the sirens signal hurricanes that could erase much of what is by announcing paradigm shifts.

The human mind, the mind of a Scholar, is fascinated by knowledge and has a desire to discover the causes and effects of any variable moving in a different direction, to break rules, and to create rules, to prove that they made it one step further than the rest. Most Scholars desire to leave the world a better place than they found. So, during the wildest hurricanes, they don't hide, but they embark on novel quests to unravel the intricacies of the tapestry of the World. Plans are made, and Scholars regain that amazing feeling that tells them they are now able to grasp and even control a part of the vast reality. Research avenues open. Moneys flow. The "new normal" is born. Once again, the day after tomorrow is there for all of us, Scholars, to live thinking of.

Between fascination and fear: a peek into the realms of AI

The door opened by the ideas of post-humanism, the desire of Scholars to become creators of sentient technologies, the popularity of the works of Yuval Noah Harari (2017a, 2017b), as well as the fear of 3D printed meat, eating locusts, or GMOs, of losing one's freedom to travel by being confined in 15 minutes cities, and of finding our lives reduced to a purely mechanical experience, have somehow touched many during the last decades, and even more so after the COVID-19 pandemic. The magnitude of change that the 4th Industrial Revolution is about to bring can already be felt, and it is quite normal to expect that even more dramatic changes will occur in the years to come, and that these changes will lead us to embrace novel solutions to older or newer problems of the World. The fact is that Augmented Reality, Virtual Reality, Machine Learning, Generative AI, explainable AI (XAI), and the like are easing their ways into the usual vocabulary, together with more concerning concepts, such as 'climate refugees'.

Sometimes, the tech novelties come towards us at a pace that is beyond our capacity to react, primarily due to us being limited by our mental, institutional, and legislative walls. Pursuant to the discoveries that seem to lead humanity towards Singularity by the 2030s, which would release AI from human control (Newcomb, 2023), a paradigmatic shift is expected to happen soon in Academia and not only. And this has been brewing for quite a while.

Over fifty ministers from multiple countries and around 500 international representatives from more than

100 UNESCO Member States, United Nations agencies, academic institutions, civil society, and private sector entities met in May 2019 in Beijing, the People's Republic of China, to discuss the implications of AI for the future of work and skills development, to plan for a potential reshaping of the processes of training, learning and the education system in its core structure. Some of the main takeaways of the discussions were included in a document titled 'BEIJING CONSENSUS on artificial intelligence and education' (UNESCO, 2019): first, it is underlined that professors cannot be replaced by machines and that their rights must be protected, second, the roles of professors must be redefined and they must be trained to be able to work in AI-rich education settings, third, the curricula would be adjusted to promote the integration of AI tools and solutions, fourth, pilot tests should be run in schools to be able to draw conclusions and scale-up evidencebased practices, fifth, AI tools should be applied to foster adaptive learning processes, as well as large-scale remote assessment, sixth, as the job market is expected to change substantially due to large scale AI adoption, AI-related skills and technical and vocational education should be embraced in the new curricula, including teaching AI literacy skills and making it available to all ranges of population, seventh, it is of utmost importance to support higher education and research institutions to create a massive pool of local AI professionals that would be able to develop AI systems.

Although not very new, Generative AI, the current star of the tech soup, grabbed the general public's attention during the last trimester of 2022, when ChatGPT was launched and reached 100 million users in just two months (Hu, 2023). As with any new discovery, it gathered many enthusiastic voices preached that it could support a person's documentation endeavors and write better codes, scripts, essays, and even poems (Chatterjee & Dethlefs, 2023; Terwiesch, 2023). ChatGPT, the `popular` Generative AI that many have already tried, is considered to offer easy access to information to tutors and students as well, to help professors plan their lessons or otherwise decrease their workload, to help students learn in a personalized manner, or to learn interactively, even by debating with the program (Farrokhina, Banihashem, Noroozi, & Wals, 2023). Although the opportunities that Generative AI brings to students and teachers are discussed in recent works (Pavlik, 2023; Zhai, 2022), the general focus of the researchers and the persons in power seems to be regulating and limiting its influence.

Some less-than-ideal features of ChatGPT have been pointed out numerous times. For example, it was stated that, at the moment, it does not have the capacity to fully grasp the concepts it operates with (Bogost, 2022), that it generates information that may or may not be accurate (Choi et al., 2023; Lecler, Duron, & Soyer, 2023; Sallam, 2023), especially when dealing with events and information newer than 2021 (Stokel-Walker & van Noorden, 2023), that is not free from biases (Zhai, 2022), that is thought to stimulate plagiarism (Gašević, Siemens, & Sadiq, 2023), and that it provides fake information in response to some queries (Tlili et al., 2023). Chomsky (Open Culture, 2023) even suggested that Generative AI tools such as ChatGPT are nothing more but a way of avoiding learning and embracing plagiarism using high-tech, while other authors go as far as to discuss banning Generative AI in schools and cite measures that governments have already taken to ban it altogether (Dibble, 2023; Lukpat, 2023). The paradoxical nature of Generative AI has been described by Lim, Gunasekara, Pallant, and Pechenkina (2023), who underline four streams: it is both a 'friend' and a 'foe,' it is 'capable' yet 'dependent,' it is 'accessible' yet 'restrictive,' and it gets even 'popular' when 'banned.' However, not all Generative AI gets to be perceived the same; by far, this is applied to the most popular product that reached the general public, ChatGPT.

Afraid of the possibility of soon becoming characters in an upsetting Black Mirror episode powered by sentient and malevolent AI, a number of Scholars began setting up a taskforce to counterattack at least Generative AI and its uses and misuses in Academia. The game recently became even more exciting or... worrisome. On November 1st and 2nd, 2023, an *AI Safety Summit* held in Great Britain gathered representatives from more than 25 countries, including China, the US, and the EU (Sandle & Coulter, 2023). The participants signed 'The Bletchley Declaration,' engaging to cooperate on designing, developing, deploying, and using AI in a manner that is safe, human-centric, trustworthy, and responsible, all the while engaging to identify and mitigate together risks that might arise from AI. as these would inherently be international in nature (UK Government, 2023).

Some insights from the Romanian educational landscape

While new technologies and software are developed in large amounts these last decades, and while they are or at least seem to be widely available to the public, including to the Romanian student population, one must not fear that a high-tech future is about to destroy the established order in the Romanian educational system. Some Scholars might focus on generative AI, and programmatic documents might have been prepared years ago. Yet, the Romanian context needs further exploration before unboxing the more innovative ideas.

Three of the points that I believe must be addressed prior to discussing the potential impact of using AI on a larger scale in the Romanian education system refer to the number of students who finish high school, to the number of people who graduate tertiary education, and to the level of bullying that can be witnessed in schools, which creates a rather unfriendly learning environment. Let us note that 42% of the EU population aged 25 to 34 had been or was currently enrolled in tertiary level education in 2022, while only 24.7% of the Romanians in the same age group did, with the region of South Muntenia scoring the lowest - 16% (EUROSTAT, 2023). This low attendance of tertiary education should not be viewed as a surprise, as Romania was among the last ten countries in the EU in 2020 in what concerns youngsters aged 20 to 24 who finished their secondary education (EUROSTAT in Cornea, 2021). That is, tertiary education is not a priority for many of the youngsters in Romania. Studies are needed to learn what these youngsters are doing and how they envision their future.

More so, perhaps the fear or awe of the powers of Generative AI concerning student education should be moderated by the grounding force that expresses itself as the lack of computers in many schools, especially in the rural regions, and by the fact that it is an association – Ateliere Fără Frontiere – and not an institution, which works since 2008 to collect computers from companies and people, to restore them, and to donate them to schools that do not have any (Boboc, 2023). In 2022, the Union of Informatics Professors underlined that the project through which schools were to be endowed with ITC equipment and furniture would have covered only half of the necessities that schools have to be able to respond to the requirements made by law (Lefter, 2022). If we add to these the fact that 82% of the students have witnessed bullying scenes in the school they attend (Hotnews, 2021), the landscape is better contoured.

Consequently, all discussions regarding student experience and learning in the Romanian higher education system need to be placed under the umbrella of overall low attendance of tertiary education in Romania, and should be moderated by the type of access to tech resources and tech education that educators in Romania have. My point is that although the World is changing and AI tools are available, even though students can easily use ChatGPT or other AI tools, there are more pressing issues that the educational system in Romania needs to address before embracing the fads of 'what if AI is going to steal our jobs?' or 'what if students are not going to learn as much due to using AI tools?'. The facts show that we already have a declining student population and that their attitude towards learning has not dramatically changed due to the availability of AI tools but due to other pre-existing and systemic issues.

On a brighter note, I would invite the reader to meditate on 'What if the world becomes how we want it to be?'. Perhaps we, as Scholars, as educators, or as people interested in improving the conditions for future students, should first take a step back and ask ourselves what we can do to stimulate more heart-to-heart learning and to proceed with creating a more loving environment for learning to take place, before thinking of using any technology that we may or may not have resources to access.

Perhaps the levels of school dropouts, the number of NEETs in the EU and elsewhere, and the levels of violence

in schools are not a sign that youngsters become savages who do not want to learn, but a sign that the education system needs to welcome numerous changes, as the World changes on a deep level. Could AI tools be employed to upgrade the teaching and learning experience in schools, high schools, and universities in Romania and elsewhere? They could. Could they have negative influences as well? Yes. However, let us bear in mind that a tool is nothing but a tool, that leaders are capable of strategic thinking, and that the creation and use of strategic plans are still needed today, perhaps even more than a century ago, this time taking into account the unprecedented levels of technological development we witness. Large systems, such as the educational system, are known to be slow to embrace profound change. However, deprofessionalization is the most probable outcome if we continue to stand in awe of new tools and forget to envision and plan for the future. As a new global experience of the Middle Ages is not desirable, I now urge Scholars to open the doors of the monasteries of the mind, step into their public counselors' shoes, and work together to smooth out the transition towards a future we would like to live in together. Not doing that would most probably mean seeing the risks related to the spread of AI materialize.

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