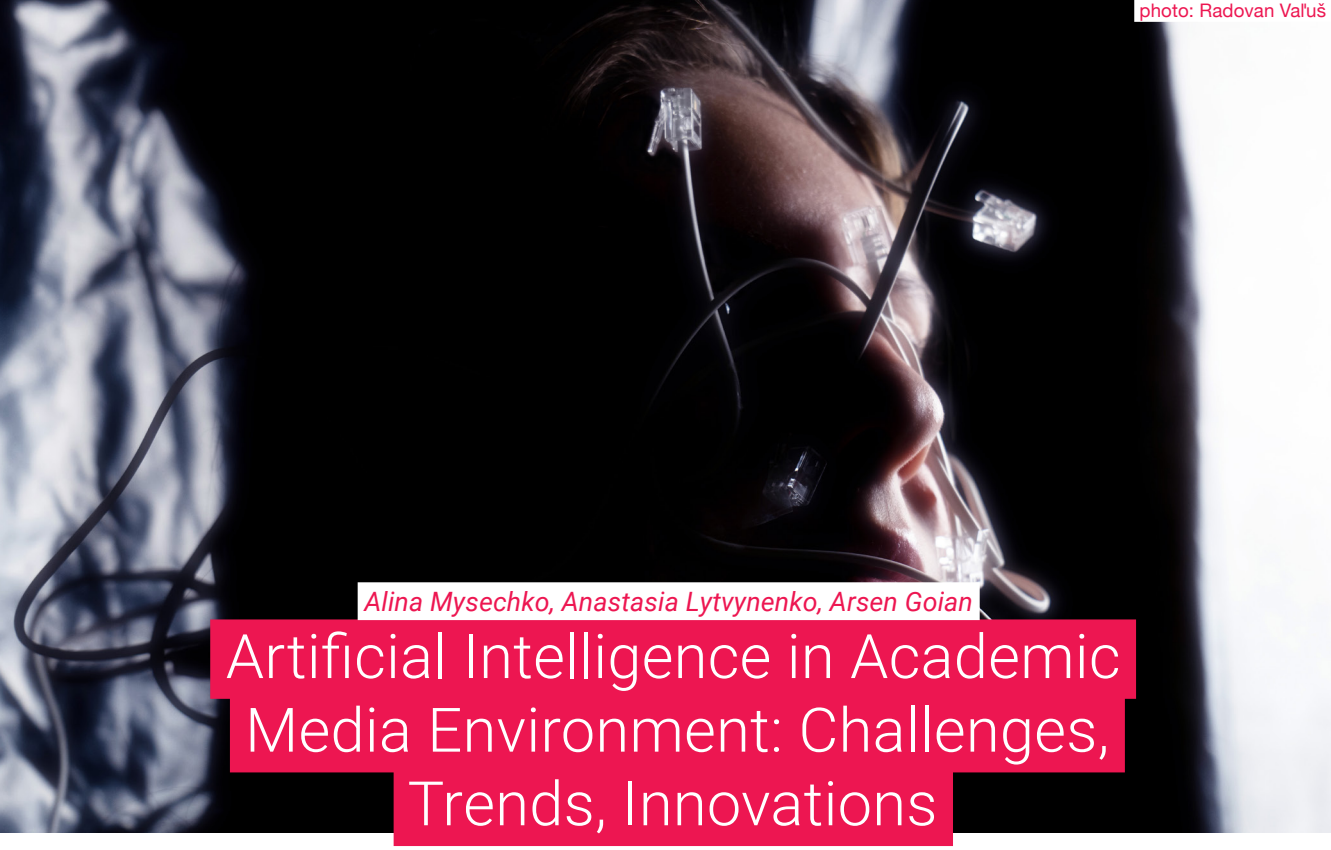

photo: Radovan Vaľuš

Alina Mysechko, Anastasia Lytvynenko, Arsen Goian

Artificial Intelligence in Academic Media Environment: Challenges, Trends, Innovations

DOI: https://doi.org/10.34135/mlar-24-02-14

ABSTRACT

The rapid development of artificial intelligence (hereinafter AI) opens up a variety of opportunities for creativity, innovation, and productivity improvement, particularly for students and academics in media specializations. However, it also causes a fundamental transformation in the studying approach. Additionally, there are several challenges in the implementation, adaptation, and use of AI as a learning method in the academic environment. Both possibilities and challenges are identified and analysed in this study. The empirical results of the research show which AI tools are most popular in the academic media community and reveal how they are used by academics and future media professionals based on the Educational and Scientific Institute of Journalism, Taras Shevchenko National University of Kyiv. The survey results also provide insights into opinions about ChatGPT as one of the main digital study aids in the academic environment. The study also suggests the review of universities worldwide from the perspective of allowing or prohibiting artificial intelligence in the studying process. Content analysis concerning the establishment of policies on AI usage helps determine whether the academic world is adapting to the new reality or rejecting it. Overall, the media environment already uses AI daily, so the academic community should also be prepared for this new reality. However, it is crucial to play by the rules. Finally, this research concludes that the ideal solution for integrating AI into innovative education is the creation of specific rules and ensuring their observance. This approach could be the right way to prevent risks, overcome challenges, and maximize the benefits of AI usage. Finally, the authors have developed basic recommendations for writing AI guidelines by higher education institutions (hereinafter – HEIs) and offered them in the article.

KEY WORDS

Academic Environment. AI Guidelines. Artificial Intelligence. Challenges. ChatGPT. Innovation. Media.

1 Introduction

The worldwide impact of artificial intelligence on the educational landscape is tremendous. It has provoked many discussions, causing the emergence of new trends and innovative approaches in the learning process. Like any new challenge, we must accept it with dignity, updating the academic environment's educational system as carefully and thoughtfully as possible.

Oliver Hedgepeth, a professor at American Public University discusses a critical point for universities today, which means that they need to change the way of thinking about how to use new technology now:

> I do believe here, at 2023, we are on the edge of a transformation as we saw in the '70s and '80s. I remember in the '70s and '80s that I am a math major, I have a math degree, and you could not bring a calculator into the classroom. If you brought a calculator in the classroom, the teacher would point to you: "Get out, you get a zero for today's work". (Hedgepeth & Varkonyi, 2023, para. 35-36)

Well, it took a few years before the faculty and the universities realized these calculators, if we bring them into the classroom, yes, they do not need to understand what two plus two is, that equals four, but they can analyse complex equations. They can analyse, in the classroom, how to send a rocket ship from earth to the moon and do calculations that they usually cannot do (Hedgepeth & Varkonyi, 2023).

The emergence of AI in open access, like the emergence of calculators, has fundamentally changed the educational process, because artificial intelligence opens up huge opportunities for creativity, innovation and increased productivity. Within the first two months after the appearance of ChatGPT in public access, 100 million users joined it (Sabzalieva & Valentini, 2023). Others say that AI should be banned in higher education, as there is a risk that students will stop thinking and researching subjects by themselves. In their opinion, AI tools like Gemini or ChatGPT have become instruments for "pre-prepared homework". Thus, several HEIs worldwide have banned ChatGPT due to concerns about academic integrity. It remains blocked or unavailable in about 30 countries (McCallum, 2023; Conroy, 2023).

So, does the use of AI harm the educational process, or does it help and increase efficiency? We empirically investigated the situation with the use of AI in universities (using Taras Shevchenko National University of Kyiv as a case). We analysed the experience of universities in different countries that either prohibit or allow the use of content-generating neural networks; examined state policies regarding the attitude towards models of artificial intelligence and studied and highlighted the advantages and disadvantages of using AI. Based on this analysis and survey results, we formulated a list of recommendations that, in our opinion, should be followed to minimize the risks and maximize the benefits of using AI tools in the academic environment (including media industry).

2 Methodology

The authors solicited feedback and questions from survey respondents through university networks. Therefore, no confidential personal information was obtained, and neither institutional review board approval nor informed consent was required. This was an observational survey. Students and educators at Taras Shevchenko National University of Kyiv (hereinafter KNU) were asked about their use of AI tools in the academic environment. The survey was conducted using Google Forms. It was spread by university email box and through the university communities in social platforms, and lasted from July 17 to August 31, 2024. In total, 144 respondents took part in the survey, including 70 students and 74 lecturers. The total target number could not be estimated.

Survey response data were presented using descriptive statistics.

The survey consisted of seven questions:

1. Have you used AI for studying (or working)? This question contained two answer options (yes or no).
2. What AI tools do you use? (Answer options: ChatGPT, Gamma AI, Doclime, Midjourney, your answer, or do not use any AI tools.)
3. What do you use AI for? (Answer options: for generating ideas, texts, images, videos, creating presentations, or your answer.)
4. Have you used ChatGPT for studying/working? (Answer options – yes or no.)
5. How do you use ChatGPT in the educational process? (Answer options for students: for generating ideas, using it as a base for further self-research, borrowing fragments of text, doing work completely with the help of AI, generating video images, not using this tool in any way, or your answer; Answer options for lecturers: for generating ideas, using it as a base for further self-research, borrowing fragments of text, doing work completely with the help of AI, generating video images, not using this tool, or your own answer.)
6. Should the use of AI be regulated at KNU? (Answer options – yes or no.)
7. How exactly should the use of AI be regulated? (Answer options: fully forbidden, allowed without limitations, allowed partially (up to 15%, 30%, 50% of the information obtained with the help of AI in one assignment.)

The inclusion of percentage-based options is justified by the fact that students' final papers undergo review and mandatory plagiarism checks using the Unicheck program. Papers with more than 25% of non-original text or those not completed independently are not allowed for defence (refer to the *Regulations on the System for Detecting and Preventing Academic Plagiarism at the University*, 2020). Some analogues of such programs also exist to determine AI generated texts, despite the fact that their 100% accuracy is currently not proven, which is mentioned in the study further.

Additionally, content analysis was used in this research to examine information about universities' policies concerning AI worldwide. The method of analysing university websites was employed to determine whether the academic world is adapting to this new reality or rejecting it.

Researchers visited the official websites of over 50 universities worldwide and conducted manual searches to locate the general AI guideline documents. The initial keywords used for the search included "AI policy", "AI guidelines", "Generative AI policy", "ChatGPT policy", "Generative AI guidelines", "ChatGPT guidelines", "AI guide", "Generative AI guide", and "ChatGPT guide". For the analysis, 50 of the most popular universities in the U.S. and primarily Europe, where media studies are conducted, were selected. The selection of these universities was driven by the fact that many of them initially announced bans on AI but later revised their decisions, in particular, the Russell Group Universities. Of the 50 selected universities, 30 had relevant departments or faculties related to media studies. After reviewing the available modern investigations in that field and monitoring related research, the list of suggested recommendations was created for implementation at KNU, and also for other Ukrainian and international universities, that need to create policies to work with AI tools as safely, efficiently and ethically as possible.

3 Results

3.1 Educators' Responses to the Survey

In the course of the study, a survey was conducted to gather students' and lecturers' opinions regarding their use of artificial intelligence in the educational process. 74 lecturers took part in the survey. Among them, 44.6% are docents, 23% are professors, others are assistants (21.6%) and lecturers (10.8%). 59.5% of respondents have the PhD degree, 25.7% are Doctors of Science and 14.9% have no scientific degrees.

Approximately half of respondents work in the Educational and Scientific Institute of Journalism and belong to the academic media environment. Simultaneously, we received responses also from other departments, including the Educational and Scientific Institute of Philology, the Faculty of Information Technology, the Department of Employment Assistance and Work with Alumni, the Faculty of Mechanics and Mathematics, the Faculty of Economics, the Faculty of Physics, the Faculty of Sociology, the Educational and Scientific Institute of International Relations, the Educational and Scientific Institute of Law, the Department of Economic Theory, Micro- and Macroeconomics, the Faculty of English Philology, the Faculty of Chemistry, and several others.

According to Figure 1, 68.9% of the surveyed lecturers use AI in their work, while 31.1% do not. Among the tools used by lecturers, ChatGPT is the undisputed leader, with 62.2% of respondents using it.

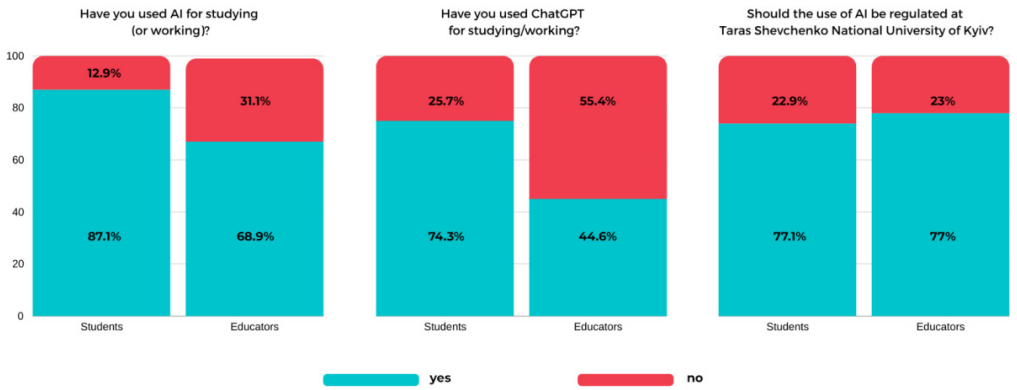

FIGURE 1: *Use of AI and ChatGPT tools by students and teachers in KNU; Reaction to the regulation of the use of AI tools in KNU*

Source: own processing, 2024

Among the tools used by lecturers, ChatGPT is the undisputed leader, with 62.2% of respondents using it. The second place goes to Midjourney, a text-to-image AI tool, with 12.2% of the votes, and the third place is taken by Gamma AI, an innovative tool for creating professional presentations, used by 6.8% of respondents (Figure 2). Other respondents mentioned using AI tools that were not among the provided options, such as Gemini (Bard), Claude, Grammarly, Copilot, Leonardo AI, and a few others. It's noticeable that Doclime, the AI-powered document analysis tool that helps users extract and analyse information from their PDF documents, is not used at all by any of the respondents (0%).

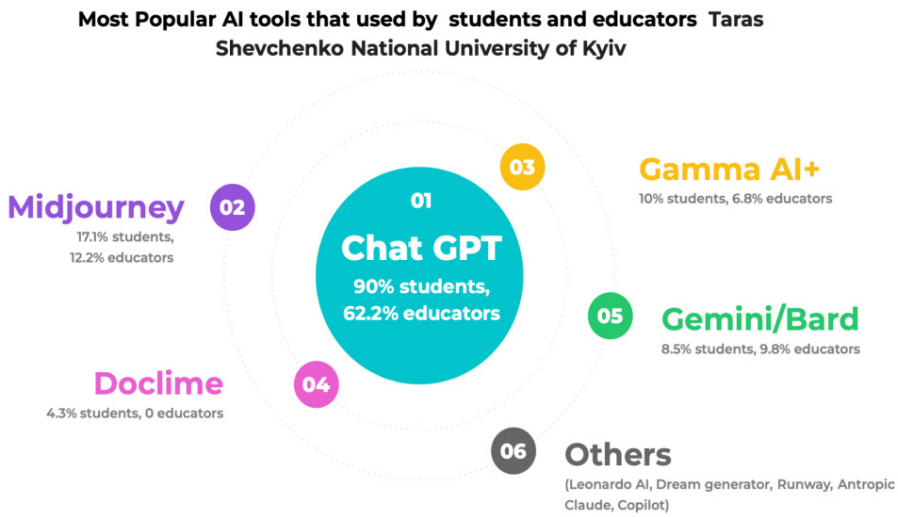

FIGURE 2: *Most Popular AI tools used by students and educators at Taras Shevchenko National University of Kyiv*

Source: own processing, 2024

Next question, "What do you use AI for?" provided these answers: 40.5% percent of lecturers use AI for generating ideas, 28.4% for writing texts, 25.7% for creating pictures, 13.5% for making presentations and 2.7% for creating video clips. The remaining replies were open-ended, so respondents wrote their own purposes of using AI tools by themselves, such as coding, making assignments, editing and improving texts, creating drafts for departmental social media posts, transcribing text from images, proofreading and stylistic enhancement of English-language texts, serving as the basis for homework where students correct AI-generated errors, creating Grammarly tasks with embedded AI, proofreading publications. Additionally, respondents mentioned using AI for tasks, such as translating, better structuring material presentations, sourcing international perspectives, generating prompts on specific research topics, finding relevant information and sources for analysis, editing audio material, planning, engineering, code generation and debugging, developing educational simulators for students, checking students' texts for plagiarism and AI use, aggregating data, finding information, and extracting key ideas from large text volumes. As we can see, the variety of responses is very wide, and we associate this with the facts that educators are from very different departments of the University and that AI tools have a very large helping functionality depending on what is needed from them.

According to the Figure 1, 55.4% of respondents do not use ChatGPT in preparing for classes. Though those who use it are in a minority (44.6%), the figures indicate that opinions among lecturers are nearly split on the matter.

When asked "How do you use ChatGPT in the educational process?", the survey revealed that 32.4% do not use it in any way, with an additional five respondents also indicating no usage in open-ended responses. Among those who do use it, the largest percentage (31.1%) use it for generating ideas, 27% use it as a basis for further self-research, 24.3% for generating images, 5.4% borrow text fragments and one lecturer (1.4%) completes work entirely with the help of AI.

Open-ended responses provided further insights, with lecturers mentioning uses, such as creating assignments, checking texts in foreign languages, structuring tasks more effectively, developing personalized assignments, gathering general information for lecture preparation, creating simple test questions, evaluating lecture comprehension, generating exercises, planning classes, structuring work, generating data for tasks, creating code snippets, developing educational simulators for students, and assessing students.

The answers "I encourage students to consult with ChatGPT for further discussion of the answer generated by it", "I demonstrate to students how to make inquiries better and how to effectively use them in journalistic activity", "I assign students to work with chat in pairs" demonstrate that the teachers of Taras Shevchenko National University of Kyiv directly engage the peer-to-peer tool and show students how to work with it, which is in line with the latest policies that universities around the world are currently implementing.

Regarding the feasibility of creating official written guidelines for the use of AI in the academic media environment and the higher education system in general, the authors found that 77% of respondents support the creation of such documents, while 23% are opposed.

In response to the question "How should the use of AI be regulated at KNU?", the majority of contributors offered a partial allowance, with 27% supporting the use of AI for up to 15% of the information in an assignment. Additionally, 18.9% believed AI use should be unrestricted, 10.8% considered that up to 30% of AI-generated information should be allowed in assignments, 5.4% considered assignments can include up to 50% of information generated by AI, while 9.6% advocated for a complete ban (Figure 3).

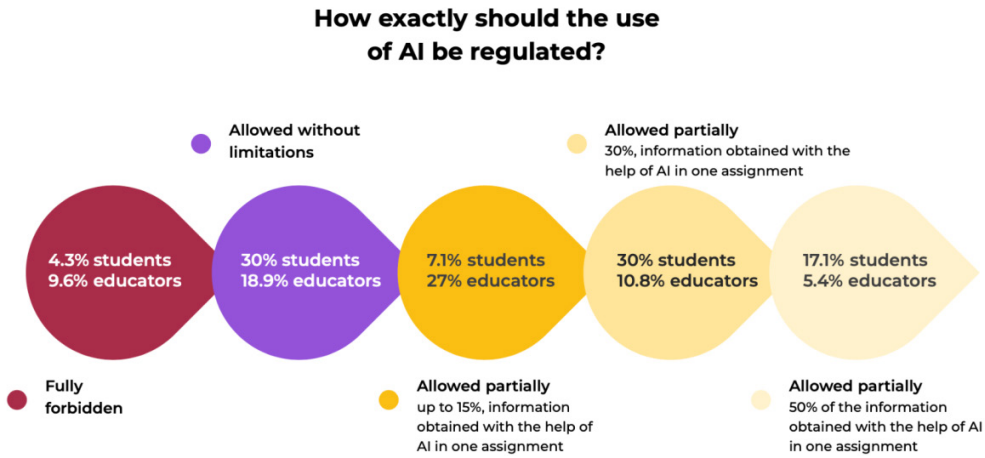

FIGURE 3: *Results of a survey of students and educators of regarding the regulation of AI policy at KNU*

Source: own processing, 2024

This question also included an option for open-ended responses, allowing lecturers at KNU to offer their perspectives on AI usage policies in the academic environment. Their suggestions were grouped into three main themes:

1. Answers that offer options for restriction: "allow, but the % should depend on the specifics of the 'tasks' and the specific speciality"; "to allow as a learning tool and as an opportunity to generate ideas, but not as an answer-performance of the task"; "allow, but emphasize that it is necessary to use AI correctly, to know its capabilities and limitations"; "reconcile the use of AI with copyright and educational purposes"; "develop principles of use"; "allow not for all types of tasks"; "to clearly outline the rules of use".
2. Responses that question the necessity of establishing a precise percentage and propose other solutions for regulating the use of AI: "From my experience, students used AI to generate code, but this did not help them develop their own coding skills. Therefore, I believe it is more appropriate to regulate not the percentage, but the categories of tasks where AI can be applied and for what purposes, and where it should not be used. In most cases, I think it should be banned"; "How will the percentage be measured? Much deeper restrictions are needed: for example, a list of fields or topics where AI can be used, and where it cannot."; "I don't like the option of 'allowing it partially', because, in my opinion,

each teacher should have the right to specify in the assignment the extent, scope, and manner in which AI can or cannot be used. In some cases, it should not be allowed at all, while in others, it may form the basis of the assignment"; "Allow it, but it's difficult to say to what percentage. It probably depends on various factors, such as the type of tasks. We need to test it first in order to gain experience."

3. Answers that refer to the marking of the use of AI: "allow with a mandatory indication of where and how it was used"; "if AI was used in the performance of the task, it must be described"; "mandatory marking that the content is created by AI"; "According to the rules for the use of AI in European scientific institutions, the use is allowed without any restrictions, but with the indication that the given fragment (image, etc.) was generated with the help of AI and which one. I consider it expedient to regulate the use of AI in KNU in the same way"; "it is necessary to indicate exactly which materials were created with the help of AI and in what volume"; "to allow with an amendment to the law on copyright and related rights"; "one can talk about the share only when there is a program that will accurately determine it". One suggestion was: "For lecturers – no restrictions; for students, either partial or complete prohibition". Another response was narrowed down purely to the use of AI in the academic media environment: "Follow guidelines for responsible AI use in the media sector". A third response stated: "I don't see the point in using AI for writing original texts".

3.2 Students Responses to the Survey

As for the student survey, from July 17 to August 30, 2024, 70 students participated in it, including 98.6% of students and 1.4% of graduate students. Though most of the students are from the Educational and Scientific Institute of Journalism, there are also representatives from the geographical and economic faculties and the Educational and Scientific Institute of International Relations. So, despite the fact that the survey was sent to various faculties, it was answered mainly by media specializations' students.

According to Figure 1, 87.1% of respondents use AI in the educational process against 12.9% of those who do not. The main used generative AI tool is ChatGPT (90%). Midjourney (17.1%), Gamma AI (10%), Doclime (4.3%), Gemini/Bard (8.5%) are the first five leaders among respondents. Also, students use: Leonardo AI, Dream generator, Runway, Antropic Claude, Copilot (Figure 2). The main purpose is generating ideas (67.1%), 52.9% use it also for creating texts, 30% for making pictures, 15.7% for creating presentations and 4.3% for making videos. Some of the open-ended replies are as follows: "sometimes for generating ideas, and then I continue researching independently", "I believe AI has no place in education", "for quickly finding and processing information", "for paraphrasing, finding synonyms, literary editing, and simplifying texts", "for finding synonyms and rewriting text", and "for creating schedules and maintaining discipline in text editing".

When asked whether students use ChatGPT when preparing for classes, 74.3% said "yes", against 25.7% who said "no" (Figure 1). Students use it mostly for generating ideas (60%), as a background for future independent investigations (54.3%), and for borrowing fragments of text (40%). There is also a group of students who replied that they do homework completely by ChatGPT (7.1%). 18.6% generate pictures with the help of AI. One student mentioned, "I essentially use it as a search engine to gather information, which I then use for class preparation", while another stated they "check text for errors and ask AI to improve and simplify sentences".

Regarding whether it is necessary to regulate the use of AI in the educational process at KNU, 77.1% of respondents answered affirmatively, while 22.9% believe it is not necessary (Figure 1).

The largest percentage of students, 30%, believe that AI tools should be allowed without any restrictions. Another 30% think AI should be allowed partially, permitting up to 30% of AI-generated content in one assignment. A further 17.1% support allowing up to 50% of AI-generated content in assignments. These three groups represent the majority of opinions. Additionally, 7.1% of students consider 15% AI-generated text sufficient, while 4.3% vote for complete ban of AI tools in any tasks (Figure 3). In the open responses, students shared a range of perspectives, and, as well as in the survey of educators, students' replies are also divided into the same groups:

1. Answers that offer options for restriction: "allow AI as a tool for searching, gathering, and processing information for assignments, but not as a tool that completes the work for the student"; "AI should be fully allowed, but the ideas and concepts should be 100% student-driven, as AI cannot create original thoughts"; "AI-generated information is not always reliable, so it should only be used for simple, repetitive tasks to speed up the work process".
2. Answers questioning the need to set the exact number of percentages for information generated by AI in one task: "I do not think AI usage should be regulated by percentage"; "Allow AI, but let instructors decide on a case-by-case basis"; "In my opinion, we need to learn how to use AI effectively rather than banning it. The focus should be on the quality of the work, (as fully AI-generated work is often low in quality, especially in text-based assignments), rather than just the presence of AI in the work. Moreover, detecting AI usage can be difficult, as even 100% original work has sometimes been flagged as AI-generated by detection programs. Imposing such restrictions could unfairly impact all students, including those who complete their assignments independently".
3. Answers that refer to the marking of the use of AI: "It is better to allow AI usage, but any information obtained should be marked as AI-generated, and text outputs should be manually verified for accuracy". Some students suggested "teaching students how to use AI properly".

In summary, it is evident that students use AI tools more extensively than lecturers, with 87.1% of students using AI compared to 68.9% of educators. Both students' and lecturers' favourite tool is Chat GPT (90% of students and 62.2% of educators use it in daily life), though only 74.3% of students and 44.6% of lecturers use it to study. Students, unlike lecturers, use Doclime, although not a high percentage (4.3% vs 0%). Programs which are noted by students and lecturers in open replies are similar, but lecturers also mentioned Grammarly, one student mentioned Focus AI program, but it was not mentioned by lecturers. The main purpose for using ChatGPT is idea generation for both groups of respondents. In the second place, both students and teachers devoted to the use of AI as base for their own investigations, but students use it more than educators (54.3% vs 27%). 40% of students use fragments of AI text, but, as we can see, only 5.4% of lecturers do so.

Interestingly, concerning the issue of implementing a policy or a guideline for using AI tools in the educational process in KNU, almost equal number of students (77.1%) and educators (77%) said "yes". So, as we see, the academic environment sees a real need to create them in HEIs.

However, the respondents' views on how to regulate AI usage in HEIs are significantly different. The largest number of students' voices (30%) would allow it without limits (against 18.9% of lecturers with the same opinion), while the majority of lecturers (27%) consider limiting the use of AI to 15% in one task (7.1% of students vote for the same). Nevertheless, no one is talking about banning the use of AI. Both students and lecturers generally believe that AI usage should be regulated individually, depending on the course and specific tasks. These responses indicate that the use of AI in academic activities for achieving effective results is not seen as plagiarism, as it was before the inventing of AI, which contrasts with earlier perspectives on a specific percentage of text matches (as defined in the Regulations on the System of Detection

and Prevention of Academic Plagiarism at Taras Shevchenko National University of Kyiv). After all, students and teachers know about the possibility of hallucinations and the need for validation (checking) of information obtained with the help of AI. Therefore, students also want to learn how to use AI with benefit, which is what they are asking for, and some lecturers, as we observed in the survey, are already teaching this to their students.

4 Discussion

4.1 Advantages and Disadvantages of AI

It is time for revolutionary changes in the educational field. Through such a deep transformation, two main points appeared in the academic world: first one says that AI should be used in HEIs officially and on a daily basis. The other one says that AI must be prohibited in academic environment. We analysed both perspectives concerning that issue, collected various experiences to make our own conclusion, justify our opinion and create our own list of recommendations.

Speaking about the advantages of AI usage, it provides a wide range of possibilities for research. UNESCO defines AI's roles in the educational process, as: "possibility engine", "Socratic opponent", "collaboration couch", "co-designer", "study buddy", "motivator", etc. Here are some examples of implementation of these roles: "lecturers can ask students to use ChatGPT to prepare for discussions; working in groups, students can use this tool to gather information to complete tasks and assignments", "lecturers use ChatGPT to generate content for classes/courses", "ChatGPT provides personalized feedback to students based on information provided by students or lecturers (e.g., test scores)", "ChatGPT can be used to support language learning", "AI helps the student reflect on learning material: students explain their current level of understanding to ChatGPT and ask for ways to help them study the material", "students interact with ChatGPT in a tutorial-type dialogue and then ask it to produce a summary of their current state of knowledge to share with their lecturer/for assessment" (Sabzalieva & Valentini, 2023). It is worth noting that these roles were described for ChatGPT-3.5 in 2023. However, AI models are updated regularly, and newer versions now offer even greater capabilities. Moreover, ChatGPT (operated by OpenAI) and Gemini (operated by Google AI) already have several counterparts and competitors.

Whereas projections of LLM performance growth vary, multiple LLM benchmarks, such as IFEval, GPQA and MuSR and LiveBench show increase in scores for all major LLMs in areas related to education, such as reasoning, mathematics, data analysis. Openly available data highlights the performance of various versions of Anthropic's Claude, OpenAI's GPT4 and GPT 4o, Google's Gemini and LaMDA, Mistral and Meta's LLaMA, as well as other models (White et al., 2024). The very fact that many of these benchmarks are based on the capacity of AI models to solve problems and answer test questions suggests the capacity of LLMs to accomplish education-related goals.

Indeed, the aforementioned models power a variety of tools, including general purpose AI-powered chatbots that can be used for educational purposes as well as newly developed ITSs (Intelligent tutoring systems) – apps imitating human tutors, which support learning using customized instructions and reinforce learned material with feedback. These apps use prompting, fine-tuning LLMs on data from human tutoring as well as other approaches suggested by LLM developers to increase the relevance of model outputs.

This development shows that the full potential of LLMs in education is yet to be understood. For instance, it has been shown that new AI models are capable of increasing learning performance, as well as enhancing the experience through personalized and engaging reflection practices. After using LLM for self-studying during one of the studies, students have performed

better on the subsequent test compared to other scalable reflection methods. This leads to deep implications for the edtech industry, as well as for educational establishments (Kumar et al., 2024).

Developments in tangential areas of research also have the potential to affect the use of AI tools in education. New startups are emerging that utilize intelligent platforms integrating AI into nearly all areas of life. For example, the Ukrainian startup Salesdep.AI has developed a platform that helps integrate an AI assistant into company sales departments to assist in consulting with clients (Salesdep, n.d.). Although these assistants were originally designed for business, they may soon be used for administrative functions during university admissions campaigns, such as responding to applicant inquiries, providing information about schedules and classrooms, and more. This is just a matter of time and it highlights the flexibility and universality of AI models. Currently, similar functions can be partially replaced by ChatGPT, saving university employees' time for routine tasks, such as finding news, resources, and other information, sending reminders or notifications, translation of information for international students/staff. On top of that, AI tools are available 24/7 (Sabzalieva & Valentini, 2023).

AI has also become widely used in the media environment. In an article for Nieman Reports, Gabe Bullard examines successful examples where AI has helped newsrooms optimize their operations, generate ideas, establish connections with readers, and reach new audiences (Bullard, 2023).

ChatGPT can help journalists analyse large amounts of data or information. It can also help summarize articles, suggest title options, and edit grammar. There are also advantages to implementing AI in editorial processes. A study conducted by the Reuters Institute in 2023 (Newman, 2023) revealed that two-thirds of surveyed newsrooms use artificial intelligence to personalize the reading experience.

AI automates many tasks and helps newsrooms reach readers online in new languages and compete on a global scale. It analyses publishers' stories to identify patterns in reader behaviour and uses these patterns to recommend stories that readers are more likely to click on. AI even fills in template paragraphs and assists authors with drafts. Additionally, AI is actively used in media for filming television projects and in the film industry. For instance, Disney is already using AI to analyse movie scripts to predict the potential popularity and financial success of their projects during the pre-production stages (Katerynych, 2024).

The academic media environment prepares future specialists (journalists, publishers, analysts, presenters, copywriters, editors, publishers, etc.) who, in a few years, will meet the requirements to work according to the same rules and principles. Therefore, they should learn to use AI as an additional tool to increase efficiency in their future work already during their studies. Accordingly, students at such universities, where AI is allowed in education, will be more competitive for employment. In particular, some companies note the skill of prompt engineering and the ability to work with ChatGPT as one of the expected hard skills in their vacancies' descriptions (UGEN, 2024).

In the American job market, for example, you can find suitable jobs for a request engineer with a decent salary. AI 'prompt engineer' jobs can pay up to $375,000 a year and do not always require a background in tech (Nguyen, 2023). As we can see, the impact of AI on the job market cannot be ignored, and as a result, workers who do not use AI will be replaced by workers who actively use it. In some sectors (advertising, software), this process has already taken place (KNU Career Days, 2024).

It is also important to note the limitations and challenges associated with generative AI tools usage. First of all, there are academic integrity concerns. "HEIs and educators have sounded alarm bells about the increased risk of plagiarism and cheating if students use ChatGPT to prepare or write essays and exams" (Sabzalieva & Valentini, 2023, p.11). Detection of AI usage is a related problem. Since it is currently not clear for sure whether a student has used ChatGPT or not, the responsibility of recognizing AI-generated work falls on the lecturer. Existing tools to

detect plagiarism may not be effective in the face of writing done by this pre-trained transformer. Plagiarism detection software such as iThenticate and Turnitin are commonly used to "check" students' assessment submissions. How well these tools can detect original texts generated by AI remains questionable (Perkins, 2023). Other tools such as GPTZero, ZeroGPT and Winston. AI also claim to be able to detect text generated by generative AI. Despite these claims, many scholars have questioned the accuracy of these tools (Dalalah & Dalalah, 2023).

While highlighting the impact of LLMs on education, researchers also voice concerns about the lack of explicit optimization for pedagogy among systems released on the market. Misuse or malicious use of LLMs may lead to key educational steps, such as data analysis and reflection to be omitted entirely. Rising dependence of students on LLMs and risk of misalignment of their use with the objectives of educational programs, for instance, forced Google to review their approach to responsible development of AI-driven educational tools (Jurenka et al., 2024).

Many in the academic environment also express privacy concerns and that is the main reason why governments ban AI models throughout the country. Most modern AI models require huge datasets for training and the ethics of sourcing data for these models, e.g. lack of consent of individuals whose data is being used for model training, are still the subject to scrutiny, despite the established prevalence of these models.

Lack of up-to-date information often also poses challenges. For example, ChatGPT's knowledge base was last updated in 2021, though it has been given access to the entire internet in 2023 (Reuters, 2023a). Facts retrieval (reference data) may not correspond to reality. For example, ChatGPT can generate links that do not exist. Sometimes AI tools hallucinate. With this in mind, it is critical to conduct effective validation, that is, checking the results that AI provides us. AI models cannot "guess" what you meant, as they are not humans. Therefore, the process of searching for information using AI and the process of thinking itself is impossible without human intelligence.

Next challenge, which has taken place, sounds like original research to create new knowledge: for example, it is not possible to conduct research simply at the request "write an article/research/dissertation". Users of AI tools should be very accurate with prompt engineering to get relevant and quality replies or rely on tools providing responses based on external database search. Anyway, users must check information very carefully every time they gain it.

4.2 Policies of World Universities Regarding the Use of AI

The experience of universities regarding AI use was important for our research. Investigating this issue, we saw that at the level of HEIs of Ukraine and the world, opinions on the introduction of artificial intelligence into the educational process are also divided: some universities prescribe usage policies, adapt to new realities, while others officially ban the use of ChatGPT and other deep-learning models.

The first significant steps in the study of the attitude of world's universities towards AI usage were made by scientists Ping Xiao, Yuanyuan Chen and Weining Bao, who conducted an empirical analysis of the policy of adapting AI in the world and investigated the strategies of its use by various universities. According to this research, as of May 2023, out of 500 universities surveyed, only one-third have official AI usage policies. 67.4% embrace ChatGPT in education, more than double the number of universities that have prohibited it (Xiao et al., 2023).

In another research (Moorhouse et al., 2023) that was published later, in December 2023, the authors examine the extent to which the world's 50 top-ranking HEIs have developed or modified their assessment guidelines to address AI use. Of the 50 universities, 30 were found to have guidelines related to generative AI on their official websites (60%).

As the survey at KNU showed, a significant number of respondents also use ChatGPT when preparing for classes (74.3% of students and 44.6% of lecturers). However, we were interested not only in individual usage, but also in the presence of AI usage policies within the academic environment. Among the supporters of the implementation of AI, who adapt it for their needs and at the official level, is Stockholm University community. Their management has already implemented guidelines for the use of AI-powered chatbots, particularly during exams and academic courses within areas, such as

> analyse with colleagues and students and reflect on benefits and problems with AI chatbots and the texts they generate; critically review responses from AI chatbots and make students aware of the risk of inaccuracy and bias; reflect on bias and how different perspectives are expressed in the automatic responses; compare the AI chatbot's responses with those written by experts; reflect on how different forms of knowledge are expressed and how these are valued when machines can now write text. (Stockholm University, n.d., "Use of AI Chatbots by Teachers and Students During Courses" section, para. 1)

The University of Tartu's guidelines for using ChatGPT provide specific tips for students and lecturers on using large language model-based chatbots in teaching and studies, and on citing AI properly. The general principles section states:

> The university encourages the use of AI chatbots to support teaching and learning and develop students' learning and working skills. The key aspects of using them are purposefulness, ethics, transparency, and critical approach. In the context of a particular course, the lecturer has the right to decide how to use an AI chatbot or, if necessary, limit its use. The instructions can be included in the course version information. If there are no instructions, the use of chatbots is treated as outside assistance used by the student. In the case of a written work, the use of an AI chatbot must be properly described and referenced. Submitting a text created by a chatbot under one's name is academic fraud. Personal data must not be entered in a chatbot without the person's consent. (Klavan et al., 2023, "General Principles" section)

The guidelines also include a list of examples showing how students and lecturers can use AI chatbots effectively.

Among the universities that have supported the initiative of using AI tools in their environment are also Yale University, the University of Helsinki, University College London, New York University, the University of California, Berkeley (UC Berkeley), Columbia University and Colorado State University, etc. Each of them has developed its own AI guidelines to support learning. For example, Stanford University integrates its guidelines into its media studies process, focusing at the responsible use of AI in media and communication technologies. The University of Southern California created an AI policy, particularly within its School of Cinematic Arts and Annenberg School for Communication and Journalism, which emphasizes the ethical issues of using AI tools in media production and research.

A significant number of universities in Hong Kong, Canada, Australia, and Denmark have created policies for the use of AI chatbots. We identified the implementation of ChatGPT policies at 132 out of 500 universities (26.35%) across 22 countries and regions. The United States had the highest number of universities with ChatGPT policies, with 43 institutions accounting for 32.6% of the 132, followed by the United Kingdom with 23 institutions (17.4%), Australia with 18 institutions (13.6%), and Canada with nine institutions (6.8%). Notably, most institutions with ChatGPT policies are in English-speaking countries, totalling 70.4% of the institutions with such policies (Xiao et al., 2023).

In Ukrainian universities, there is no explicit ban on the use of artificial intelligence, but there is still a need for the development of official guidelines for its application. Meanwhile, some HEIs have already incorporated AI into the educational process. The research indicates

that as of 2023, 5.6% of Ukrainians use artificial intelligence for learning. For example, some students have started using ChatGPT to complete their homework. The benefit of AI is that it adapts, personalizes and augments learning; but the main disadvantage is that compromises the integrity of students' writing and assessment (Kravchenko, 2023).

It is expected that a school for training specialists in the field of AI is planned to be opened on the basis of the Educational and Scientific Institute of Journalism of Taras Shevchenko National University of Kyiv, together with American partners. Partners of the school are American philanthropists – the couple Shelby and Caleb Ward, ideologues of the creative economy, founders of Curious Refuge (the world's first platform for AI storytellers). Their training courses are used by the American Film Academy, Netflix, Pixar, Google and other global technology giants (Yarema, 2024). For the present time, future screenwriters and directors are taught how to effectively use AI-based tools, while upholding the principles of academic integrity in KNU (Educational and Scientific Institute of Journalism, department of Film and Television Arts). To ensure that students remain competitive in the job market, they are trained to work with tools for script development, as well as those that assist with story structure and idea generation for scripts (Katerynych, 2024).

On the other hand, at the legislative level in Ukraine, there is a threat of prohibiting the use of AI. In particular, on June 6, 2024, the Verkhovna Rada adopted in the first reading bill No. 10392 on academic integrity, which provides the responsibility for writing scientific papers with the help of artificial intelligence and plagiarism in scientific activities. According to the document, a person cannot be considered the author of an academic work or part of it when it is generated by a computer program (*Bill of the Law of Ukraine on Academic Integrity*, 2024). However, it is the person who is responsible for checking the data, their validation, which is evidenced by a signature (indication of the last name) under any work/text. So, in our opinion, this bill does not solve the challenges associated with the use of AI in education, and it will not eradicate plagiarism, but may lead to the search for new platforms where students can borrow information and to the popularity of illegal writing services.

Nevertheless, at the level of the law, the prohibition does not exist yet. While about 30 states have already banned the use of AI.

At the educational level, not all universities were ready to accept the challenge. At the beginning of 2023, a number of universities around the world announced a strict ban on the use of AI among their students. For example, 8 out of 24 of the elite Russell Group universities have informed students that using the AI bot for assignments will count as academic misconduct. These includes Manchester, Bristol, Edinburgh, and Oxbridge.

In addition to banning the use of AI, universities aimed to control the environment in which students did their assignments and also aimed to return to proctored pen-and-paper tests. For example, The Australian National University has changed assessment designs to rely on laboratory activities and fieldwork, implemented timed exams and introduced more oral presentations (Cassidy, 2023).

Sciences Po, one of the best universities in France, banned the use of ChatGPT "to prevent fraud and plagiarism" (Reuters, 2023b). The ban has sparked outrage, particularly among visually impaired students who have used AI to make learning more accessible: "We need to be very careful about the difference between making things accessible and having AI do the thinking for us" (Starcevic, 2023, para. 4).

> Regarding the approaches to guide ChatGPT use, among the universities that have implemented a policy, a total of 43 universities (32.6%) have chosen to ban ChatGPT by restricting the use of it or any other AI tools in assessments unless explicitly permitted. (Xiao et al., 2023, p. 20)

According to Sullivan (Sullivan et al., 2023), universities that choose to ban ChatGPT face the challenge of effectively detecting its use. Researchers note that as generative AI tools continue to develop, it will become increasingly difficult to prevent students from accessing and using them.

However, in a short period, universities that initially banned the use of AI probably realized that this was not the right strategy, because they have changed their stance on the technology. Vice-chancellors of all 24 Russell Group universities, that include the University of Oxford, London School of Economics, the University of Cambridge, and Imperial College London, have designed five guiding principles that will drive the use of AI in classes and offices (Russell Group, 2023). Sciences Po has published official guidelines for AI use by students which it calls an anti-plagiarism charter (Sciences Po, 2023). Additionally, the university showcases outstanding student work that explores the impact of new technologies on modern education.

Thus, the status of AI usage policies is unclear on the websites of 9 out of the 50 selected universities. These websites indicate that no policies exist, either supporting or restricting AI usage. In contrast, the websites of 41 universities have published specialized guides regulating the use of AI by students and lecturers. Of these 41 universities, 24 with journalism or media-related schools or departments also enforce these AI policies. Many of these universities emphasize adhering to ethical standards in journalistic work, while leveraging the advantages of AI, such as the University of Bristol and Stockholm University. The researchers were unable to find publicly available information regarding AI usage policies at Cardiff University (School of Journalism, Media and Culture).

The high rate of availability of separate policies on the use of AI on university websites indicates that the academic world is adapting to the new reality, rather than rejecting it. Over the year, many universities have revised their AI policies in a positive direction, as mentioned before. The summarized results of the analysis of university websites for the presence of separate AI regulation policies are presented in Table 1.

University	Journalism-related faculty	AI policies or guidelines for students and researchers
Australian National University		Present
University of Birmingham	School of Media	Present
University of Bristol	Department of Film and Television	Present
University of Cambridge		Present
Cardiff University	School of Journalism, Media and Culture	Absent
Colorado State University		Undetermined
Durham University		Present
University of Edinburgh	School of Arts, Culture and Environment, which includes Media Studies	Present
University of Exeter		Present
University of Glasgow		Present
University of Leeds	School of Media and Communication	Present
University of Southern California	School of Cinematic Arts and Annenberg School for Communication and Journalism	Present
University of Liverpool	Department of Communication and Media	Present
Stockholm University	Department of Media Studies	Present
Columbia University	Columbia Journalism School	Present
New York University		Present
Stanford University		Present

Yale University		Present
University of Manchester	School of Arts, Languages and Cultures, which includes Media Studies	Present
University of Tartu	Institute of social science	Present
University of Helsinki		Present
Newcastle University		Present
University of Nottingham		Present
University of Oxford		Present
Queen Mary, University of London		Present
Queen's University Belfast		Undetermined
University of Sheffield	Department of Journalism Studies	Present
University of Southampton	School of Media, Culture and Society	Undetermined
University of Warwick	Department of Film and Television Studies	Present
Harvard University		Present
University of California, Berkeley (UC Berkeley)	Journalism School	Present
London School of Economics and Political Science	Department of Media and Communications.	Present
University of Chicago		Present
University of Sydney	Department of Media and Communications	Present
University of Amsterdam	Amsterdam School of Communication Research	Present
University of Copenhagen	Department of Media, Cognition and Communication	Undetermined
Ludwig Maximilian University of Munich	Institute of Communication Science and Media Research	Undetermined
University of Zurich		Undetermined
University of Barcelona	Department of Journalism and Communication Sciences	Undetermined
University of Bologna	Department of Communication	Undetermined
Scienses Po		Present
Massachusetts Institute of Technology (MIT)	Graduate program in Science Writing	Present
Pennsylvania	Annenberg School for Communication at the University of Pennsylvania	Present
The University of Melbourne	School of Culture and Communication	Present
Cornell University	The Department of Communication	Present
The University of New South Wales (UNSW Sydney)	Department of Communications and Journalism	Present
Princeton University	Emma Bloomberg Center for Access and Opportunity at Princeton University	Present
University of Toronto	Department of Arts, Culture & Media	Present
University of British Columbia		Present
Carnegie Mellon University	CMU's Home for Political Science and International Relations	Present

TABLE 1: *The existence of AI regulation policies at universities worldwide and the presence of faculties or departments related to journalism*

Source: own processing, 2024

Describing the rapid development of AI technologies, Toby Walsh, a Scientia professor of artificial intelligence at the University of New South Wales, said that "it's an arms race that's never going to finish, and you're never going to win" (Cassidy, 2023, para. 19).

4.3 Recommendations for Using AI Tools in Academic Environment for KNU

Despite the challenges universities have faced since the widespread availability of generative AI tools, we have found out that AI instruments can significantly speed up research work. So, what can be done to overcome the risks and challenges associated with AI use? The key question is "How to use AI properly?" and here are some ideas we have systematized:

1. "Students will cheat – academic environment need to adapt" (Genesis, 2023). To avoid copy pasting papers, lecturers have to update or change the way they do assessments, basing them on in-class or non-written assignments instead (Sabzalieva & Valentini, 2023). Give students such tasks that cannot be copy pasted from AI models. Lecturers should create complex assignments that require critical thinking and problem-solving, forcing students to engage deeply with the material. In this way, AI can be used as a supportive tool rather than a shortcut to answers. Create tasks that require collecting original data by means of interviews, observation, fieldwork, archive study, or other methods, and analysing the data – the University of Tartu guidelines for using AI chatbots for teaching and studies, Version 1, 28 April 2023 (Klavan, 2023).
2. To avoid AI errors and mistakes, always check the information it provides. AI models can sometimes hallucinate, meaning they may generate material that does not exist or provide false citations and links, as they do not have access to real-time Google search. Additionally, be mindful of prompt engineering. The type of task you need to solve will determine which AI tool you should use (e.g., ChatGPT from OpenAI, Gemini from Google, Llama from Meta) and the quality of the response you receive. Traditionally, OpenAI models rank at the top ("Chatbot Arena (formerly LMSYS): Free AI Chat to Compare & Test Best AI Chatbots", n.d.). To ensure effective prompts, developers of large language models (LLMs) have created specialized guides that detail how to work with each model. OpenAI, for example, offers six strategies to help users achieve better results (Open AI Platform, 2024). The resource https://www.promptingguide.ai offers a detailed tutorial to help users achieve better search results. The site describes 17 different techniques for working with search queries. Educators can also find a specially developed guide from Microsoft (Rice, 2024), which provides tips on constructing prompts when using AI (DAIR.AI, 2024).

One more statement authors would like to notice here: don't hesitate to ask your mentor anything concerning Generative AI tools. If you are in doubt about whether a generative AI source (or any source) is a permitted aid in the context of a particular assignment, talk with the instructor (Stanford University, 2023). The need to talk with mentors was announced also by both students and lecturers during the survey.

3. Regarding the issue of the impossibility of checking for plagiarism, developers are still working on creating a program which will be effective for detecting "copy pasting assignments" made by ChatGPT. At the same time, Gemini AI can already be detected in the researches, because it uses information from Google (Sabzalieva & Valentini, 2023). And yet, as for now, lecturers need to control academic integrity issues by themselves. Distinguishing whether a text was written by AI or a human:

   We also have such students very often, who come to us for different kinds of cases, perform tasks and when the answers are written by ChatGPT – it is always obvious. It is clear when something is just copy-pasted and slightly edited or when it is written by the

> student... We got 100 works, 20 of which were completely identical... but on the other hand, there were works where you can see that ChatGPT was used intelligently as a tool for generating ideas. When you have looked through dozens of papers, you already see that these patterns are similar. (Genesis, 2023)

Based on the results of two surveys, taking into consideration the analysis of university experiences and ideas how to use AI to avoid the main challenges, which we systematized in the text above, we formulated recommendations for using AI tools in academic environment for KNU. These guidelines can also be taken into consideration by any other Ukrainian or international HEIs, which are interested in creating official AI policies. We would call them "fingers rules", as they can be counted on one hand and are easy to remember, but at the same time they are crucial to follow:

I. The academic environment encourages the use of generative AI models to support teaching and learning and develop students' skills to be competitive in the job market. Use ChatGPT as a tool for brainstorming ideas/exploring different perspectives on a topic, or for supplementing your understanding; but ensure that the final work reflects your own original thoughts and analysis. Note that using any AI tools to substantially complete an assignment or exam is not allowed.
2. Main principles of AI tools use should be the same for everyone and obligatory: transparency, ethics, academic integrity, and a critical approach. At the same time, rules for AI use may be individual and differ depending on the subject and the type of task. But in general, universities' employees should develop complex assignments which require original thought and data collection, updating assessment methods to avoid copy pasting in papers.
3. Always critically evaluate and verify the content generated by ChatGPT/other AI tools before including it in your academic work. AI models can reflect biases, harmful narratives or discrimination present in the data it was trained on. Also, AI-generated content may contain inaccuracies or outdated information, such as non-existent links or fabricated facts.
4. Implement citation rules: always mark when the content was created by an AI tool when conducting research.
5. Personal data must not be entered in a chatbot without the person's consent for privacy concerns.

5 Conclusion

The rapid development of AI has significantly transformed the academic landscape, offering immense opportunities for creativity, innovation, and productivity, particularly in media studies. AI offers numerous benefits, such as aiding research, personalising education, and enhancing media production. For instance, it was found in the research that after using LLM for self-studying during one of the studies, students have performed better on the subsequent test, compared to other scalable reflection methods. This leads to deep implications for the educational establishments and confirms the expediency of using AI in education.

However, it also reveals challenges, concerning academic integrity, the potential for plagiarism, misinformation, lack of up-to-date data, privacy concerns or the potential loss of critical thinking skills among students. That's why Universities worldwide are divided on AI integration, with some institutions adopting official policies to embrace AI tools like ChatGPT, Gemini, DALL-E in the educational process, while others have banned them. First instruments to detect AI in students' papers are only in development, and those which have appeared, like The Turnitin AI Detector, have raised more questions than answers.

During the research, we found out that websites of 41 universities have published specialized guides regulating the use of AI by students and lecturers. Of these 41 universities, 24 with journalism or media-related schools or departments also enforce these AI policies. Many of these universities emphasize adhering to ethical standards in journalistic work, while leveraging the advantages of AI. The high rate of availability of separate policies on the use of AI on universities' websites indicates that the academic world is adapting to the new reality, rather than rejecting it.

Empirical research conducted at Taras Shevchenko National University of Kyiv revealed that both students and lecturers are actively using AI tools like ChatGPT, Gemini, Midjourney, Gamma AI, etc. for various educational tasks. The survey highlights the need for clear guidelines on the ethical and effective use of AI in KNU and other HEIs, which still don't have them. It also shows that it is better not to limit the AI use with percentage restrictions, but to create individual approaches to the assignments depending on subject and task. It's important to teach students how to work with AI to achieve better results, rather than simply ban its use and rely on detection, because students will likely use it anyway.

We do believe that using AI as a springboard for personal development and remembering to adhere to ethical standards and principles of academic integrity, the scientific community can reach new heights, while saving time and effort. The main thing when using artificial intelligence is to use your own intelligence as well, which will definitely minimize risks and double profit.

Bibliography

Bill of the law of Ukraine on academic integrity (2024). https://en.naqa.gov.ua/wp-content/uploads/2021/02/Bill-on-Academic-Integrity_EN.pdf

Bullard, G. (2023, June 20). Smart ways journalists can exploit artificial intelligence. *Nieman Reports*. https://niemanreports.org/articles/artificial-intelligence-newsrooms

Cassidy, C. (2023, January 10). Australian universities to return to 'pen and paper' exams after students caught using AI to write essays. *The Guardian*. https://www.theguardian.com/australia-news/2023/jan/10/universities-to-return-to-pen-and-paper-exams-after-students-caught-using-ai-to-write-essays

Chatbot arena (formerly LMSYS): Free AI chat to compare & test best AI chatbots. (n.d.) https://arena.lmsys.org

Conroy, S. (2023, December 6). *What countries is ChatGPT available & not available in?* https://www.wepc.com/tips/what-countries-is-chat-gpt-unavailable/

DAIR.AI. (2024). *Prompt engineering guide*. https://www.promptingguide.ai/

Dalalah, D., & Dalalah, O. M. A. (2023). The false positives and false negatives of generative AI detection tools in education and academic research: The case of ChatGPT. *International Journal of Management Education*, *21*(2), 100822. https://doi.org/10.1016/j.ijme.2023.100822

Genesis. (2023, June 3). *Workshop Impact of ChatGPT on the educational landscape: Trends and discussions in the world, examples of use* [Video]. YouTube. https://www.youtube.com/watch?v=EzkWnM_FQVs&list=PLF9HFWsOwLhE2z6_QWn2V2kDqWy2XPJCG&index=8

Hedgepeth, W. (2023, March 3). *Should universities embrace ChatGPT?* https://apuedge.com/should-universities-embrace-chatgpt

Jurenka, I., Kunesch, M., McKee, K. R., Gillick, D., Zhu, S., Wiltberger, S., Phal, S. M., Hermann, K., Kasenberg, D., Bhoopchand, A., Anand, A., Pîslar, M., Chan, S., Wang, L., She, J., Mahmoudieh, P., Rysbek, A., Ko, W.-J., Huber, A., … Ibrahim, L. (2024). *Towards responsible development of generative AI for education: An evaluation-driven approach* [Reprint]. arXiv: 2407.12687. https://doi.org/10.48550/arXiv.2407.12687

Katerynych, P. (2024, October 5). Artificial intelligence in film: How it is rewriting the rules for screenwriters, directors, and screenwriting instructors. https://www.jta.com.ua/trends/shtuchnyy-intelekt-u-kino-iak-vin-perepysuie-pravyla-hry-dlia-stsenarystiv-rezhyseriv-ta-vykladachiv-stsenarnoi-maysternosti/

Klavan, J., Meelis, K., Kütt, K., Lepik, K., Luik, P., Marandi, T., Pilt, L., Tina, A., Valk, A., & Voolaid, E. (2023, April 28). *University of Tartu guidelines for using AI chatbots for teaching and studies*. https://ut.ee/sites/default/files/2023-05/university_of_tartu_guidelines_for_using_ai_chatbots_for_teaching_and_studies_28_april_2023_pdf.pdf

KNU Career Days. (2024, July 10). *KNU Teach Week 5 | SoftServe: Practical application of AI in the students and educator's work* [Video]. YouTube. https://www.youtube.com/watch?v=YszHfl3p7MM

Kravchenko, N. (2023, December 10). *How artificial intelligence is used in Ukraine*. https://ms.detector.media/trendi/post/33704/2023-12-10-yak-v-ukraini-vykorystovuyut-shtuchnyy-intelekt/

Kumar, H., Xiao, R., Lawson, B., Musabirov, I., Shi, J., Wang, X., Luo, H., Williams, J. J., Rafferty, A., Stamper, J., & Liut, M. (2024). Supporting self-reflection at scale with large language models: Insights from randomized field experiments in classrooms. In M. K. Kim, X. Wang, & M. Xia (Eds.), *Proceedings of the eleventh ACM conference on learning @ scale* (pp. 86-97). Association for Computing Machinery. https://doi.org/10.1145/3657604.3662042

McCallum, S. (2023, April 1). *ChatGPT banned in Italy over privacy concerns*. https://www.bbc.com/news/technology-65139406

Moorhouse, B. L., Yeo, M. A., & Wan, Y. (2023). Generative AI tools and assessment: Guidelines of the world's top-ranking universities. *Computers and Education Open*, *5*, 100151. https://doi.org/10.1016/j.caeo.2023.100151

Newman, N. (2023, June 14). *Overview and key findings of the 2023 Digital news report*. https://reutersinstitute.politics.ox.ac.uk/digital-news-report/2023/dnr-executive-summary

Nguyen, B. (2023, 1 May). *AI 'prompt engineer' jobs can pay up to $375,000 a year and don't always require a background in tech*. https://www.businessinsider.com/ai-prompt-engineer-jobs-pay-salary-requirements-no-tech-background-2023-3

Open AI Platform. (n.d.). *OpenAI developer platform*. https://platform.openai.com/docs/overview

Perkins, M. (2023). Academic integrity considerations of AI large language models in the post-pandemic era: ChatGPT and beyond. *Journal of University Teaching and Learning Practice*, *20*(2). https://doi.org/10.53761/1.20.02.07

Regulations on the system for detecting and preventing academic plagiarism at the Taras Shevchenko National University of Kyiv (2020). https://senate.knu.ua/?p=1352

Reuters. (2023a, September 27). *ChatGPT users can now browse internet, OpenAI says.* https://www.reuters.com/technology/openai-says-chatgpt-can-now-browse-internet-2023-09-27/

Reuters. (2023b, January 27). *Top French university bans use of ChatGPT to prevent plagiarism*. https://www.reuters.com/technology/top-french-university-bans-use-chatgpt-prevent-plagiarism-2023-01-27/

Rice, Ch. (2024). *Prompt for education: Enhancing productivity & learning*. https://github.com/microsoft/prompts-for-edu

Russell Group. (2023, July 4). *New principles on use of AI in education*. https://russellgroup.ac.uk/news/new-principles-on-use-of-ai-in-education/

Sabzalieva, E., & Valentini, A. (2023). *ChatGPT and artificial intelligence in higher education: Quick start guide.* UNESCO. https://www.iesalc.unesco.org/wp-content/uploads/2023/04/ChatGPT-and-Artificial-Intelligence-in-higher-education-Quick-Start-guide_EN_FINAL.pdf

Salesdep. (n.d.). *What is Salesdep.ai?* https://salesdep.ai/

Sciences Po. (2023). *ChatGPT: Sciences Po implements rules and opens up discussion about AI in higher education*. https://www.sciencespo.fr/fr/actualites/sciences-po-fixe-des-regles-claires-sur-lutilisation-de-chat-gpt-par-les-etudiants/

Stanford University. (2023, February 16). *Generative AI policy guidance*. https://communitystandards.stanford.edu/generative-ai-policy-guidance

Starcevic, S. (2023, January 24). *FEATURE-As Australian colleges crack down on ChatGPT, disabled students defend AI.* https://www.reuters.com/article/idUSL8N3420OE/

Stockholm University. (n.d.). *Guidelines on using AI-powered chatbots in education and research*. https://medarbetare.su.se/en/our-su/communicate-su/communication-support/guidelines-on-using-ai-powered-chatbots-in-education-and-research

Sullivan, M., Kelly, A., & McLaughlan, P. (2023). ChatGPT in higher education: Considerations for academic integrity and student learning. *Journal of Applied Learning & Teaching*, *6*(1), 31-40. https://doi.org/10.37074/jalt.2023.6.1.17

UGEN. (2024, February 28). *Uni Biz Bridge: "Modern teacher" 28.02* [Video]. YouTube. https://www.youtube.com/watch?v=sa44AxY9RhM

University of Southern California. (n.d.). *AI guidelines*. https://careers.usc.edu/ai-guidelines/

White, C., Dooley, S., Roberts, M., Pal, M., Feuer, B., Jain, S., Shwartz-Ziv, R., Jain, N., Saifullah, K., Naidu, S., Hedge, Ch., LeCun, Y., Goldstein, T., Neiswanger, W., & Goldblum, M. (2024). *LiveBench: A challenging, contamination-free LLM benchmark.* arXiv: 2406.19314. https://doi.org/10.48550/arXiv.2406.19314

Xiao, P., Chen, Y., & Bao, W. (2023). Waiting, banning, and embracing: An empirical analysis of adapting policies for generative AI in higher education. *SSRN Electronic Journal*. http://dx.doi.org/10.2139/ssrn.4458269

Yarema, O. (2024, May 1). *At the T. Shevchenko National University will train specialists in the field of artificial intelligence*. https://ms.detector.media/withoutsection/post/34823/2024-05-01-pry-natsionalnomu-universyteti-im-t-shevchenka-gotuvatymut-spetsialistiv-u-galuzi-shtuchnogo-intelektu/

Authors

Alina Mysechko, PhD.

Taras Shevchenko National University of Kyiv
Educational and Scientific Institute of Journalism
Yuriy Illienko St. 36/1,
04119 Kyiv
UKRAINE
alina.mysechko@knu.ua
ORCID ID: 0000-0002-5103-8872

Alina was born in Ukraine in 1989. She completed her Bachelor's degree (2010), Master's degree (2012) and PhD (social communication, 2016) in Educational and Scientific Institute of Journalism at Taras Shevchenko National University of Kyiv and has been working there as a lecturer at the Department of Cinematography and Television Arts (since 2018). Alina's scientific interests are trends on TV, multiplatform TV journalism, storytelling, AI in higher education and TV production. She also has been working on TV as a reporter, editor and TV host for more than 10 years. Alina's hobbies are dancing and travelling.

Assoc. Prof. Anastasia Lytvynenko, PhD.

Taras Shevchenko National University of Kyiv
Educational and Scientific Institute of Journalism
Department of Cinematography and Television Arts
Yuriy Illienko St. 36/1, 04119 Kyiv
UKRAINE
alytvinenko@knu.ua
ORCID ID: 0000-0003-1375-5202

Anastasia Lytvynenko was born in the Kharkiv region in Ukraine on January 29, 1992. She graduated from Karazin Kharkiv National University in 2012 (Bachelor's degree) and in 2014 (Master's degree). Her specialty is social communication. Cultural art journalism, television history, and innovation in journalism work are among her research interests. During 2012 – 2018 Anastasia worked as a journalist at television and online media in Kharkiv and Kyiv, Ukraine. Since 2018 she has been a lecturer at the Department of Cinematography and Television at Taras Shevchenko National University of Kyiv. So far, she has published over 20 publications in the fields of television journalism, online journalism and cultural media.

Arsen Goian

Taras Shevchenko National University of Kyiv
Educational and Scientific Institute of International Relations
Yuriy Illienko St. 36/1,
04119 Kyiv
UKRAINE
arsengoian@gmail.com
ORCID ID: 0009-0000-4007-0394

Arsen Goian graduated with a bachelor's degree from the Educational and Scientific Institute of International Relations at Taras Shevchenko National University of Kyiv. He focuses his research on startups, as well as on the application of artificial intelligence in international business. He co-founded and currently operates WeDo, a Ukrainian outsource web studio which tightly works with startups and software development in the area of artificial intelligence.