

Peer-reviewed academic journal

**Innovative Issues and Approaches in
Social Sciences**

IIASS VOLUME 18 (2025)

Innovative Issues and Approaches in Social Sciences

IIASS is a double blind peer review academic journal published 3 times yearly (January, May, September) covering different social sciences: political science, sociology, economy, public administration, law, management, communication science, psychology and education.

| 2

IIASS has started as a Sldip – Slovenian Association for Innovative Political Science journal and is being published by ERUDIO Center for Higher Education.

Typeset

This journal was typeset in 11 pt. Arial, Italic, Bold, and Bold Italic; the headlines were typeset in 14 pt. Arial, Bold

Abstracting and Indexing services

COBISS, International Political Science Abstracts, CSA Worldwide Political Science Abstracts, CSA Sociological Abstracts, PAIS International, DOAJ, Google scholar.

Publication Data:

ERUDIO Education Center

Innovative issues and approaches in social sciences, 2025,
vol. 18

ISSN 1855-0541

Additional information: www.iiass.com

POSSIBLE ABUSES OF ARTIFICIAL INTELLIGENCE IN THE STUDY PROCESS

Srečo Zakrajšek¹

ABSTRACT

As part of the project Use of Artificial Intelligence (ChatGPT) in the Course, Leadership and Organisation of Media Production at FUDŠ, we conducted a study to identify potential abuses of artificial intelligence in the study process.

The findings indicate that students are aware of potential abuses of AI in the study process and propose specific measures to limit or prevent such behaviour, as it could negatively affect the academic process and create disparities among students. Students believe that those who abuse AI are primarily motivated by a lack of time, low levels of knowledge, or limited motivation.

The main forms of abuse include creating content that students present as their own, generating assignments without understanding the material, and cheating during exams.

To address these challenges, students suggest that institutions should establish guidelines and rules for the use of AI in the study process, implement programmes to raise awareness about the ethical use of artificial intelligence, use appropriate tools to detect AI abuse, and introduce sanctions where necessary. Additionally, they recommend adapting knowledge assessment methods to focus more on oral exams, practical assignments, and projects that foster creativity and require independent critical thinking.

Keywords: ChatGPT, artificial intelligence, AI abuse, higher education, Ethics and AI

Introduction

Artificial intelligence became widely accessible with the launch of the free platform ChatGPT on November 30, 2022 (ChatGPT (GPT-4)). It rapidly gained popularity among young people, including those in educational processes within higher education institutions worldwide. Currently, most students and teachers use existing systems (e.g.,

¹ Ddr. Srečo Zakrajšek, Assistant Professor, IAM Visoka šola za multimedije and FUDŠ Ljubljana

ChatGPT) rather than professional educational AI platforms. Using ChatGPT, students can receive tailored assistance as a substitute for instructors, such as explanations of complex concepts, answering questions, solving problems, summarising lengthy texts, generating test questions for self-assessment, writing essays and assignments, engaging in interactive language learning, and finding various informational resources.

For teachers, tasks and opportunities differ significantly compared to those of schools integrated into professional AI educational platforms. While they can prepare lesson units with innovative approaches and materials, generate test questions, and analyse responses, they cannot create personalised learning strategies for students, implement automated grading, or other advanced functionalities. Despite its functional limitations, ChatGPT stands out for its accessibility, adaptability, speed, and interactivity, enabling discussions. To effectively use ChatGPT, it is crucial to clearly define goals, ask specific questions, and request further information, clarifications, or revisions to responses.

Developing AI educational platforms requires ensuring accurate data and algorithms. Databases must be regularly reviewed and updated to remain relevant, accurate, and adaptive to new developments and information changes (Teehseen, 2024). Due to its remarkable capabilities—such as rapid responsiveness and features that save time and effort—young people worldwide have embraced AI for various purposes, including education. However, this has also led to abuse, significantly affecting educational processes and the credibility of learning outcomes.

Major abuses of AI tools include generating false content (e.g., information about schools, students, and lecturers, causing distrust in institutions and individuals), preparing assignments (e.g., seminar papers, theses, projects) falsely claimed to be student-produced, cheating in exams, and other forms of academic dishonesty. Educators are particularly concerned that students might use AI tools like ChatGPT for writing assignments, bypassing the learning process. This could jeopardise the preparedness of entire generations, who may fail to develop skills like critical thinking, creativity, writing, and research. AI tools that save students hours of research raise concerns about cheating, diminished academic abilities, and a loss of learning skills. Many educators fear that students may become lazy thinkers, ultimately losing lifelong skills such as inquiry and reasoning (Internet 1).

This global trend has spurred research and actions aimed at promoting the ethical use of AI while ensuring high-quality knowledge, skills, and competencies for students. Some proposals include completely banning AI use in educational institutions, similar to bans on mobile phones in certain settings. For instance, regions in the United States and Australia have prohibited the use of ChatGPT on student devices and networks (Kamalov F. et al., 2024).

Many education experts argue that identifying inappropriate AI use requires tools to detect AI-generated content. However, current tools have limited effectiveness due to the nature of AI operations and their low detection capabilities. Therefore, the focus should shift toward developing new methods that encourage deep learning, critical thinking, understanding, and creativity among students, as well as fostering greater collaboration among educators to ensure effective engagement and assessment (Matthijs, 2024).

In Slovenia, the prevailing general opinion is that successful AI integration into education and training requires proactive and systemic support from educational institutions. Raising awareness among educators, students, parents, and other learners about the importance, role, and potential of meaningful AI use is essential, along with providing adequate training to develop knowledge and skills in this area at all levels. Decisions about incorporating AI into education must be thoughtful and inclusive, involving policymakers, educational institutions, industry, and society. Ethical principles, equity, and access to technology must be ensured to prevent exacerbating disparities.

A 2024 study involving 258 students from various faculties in Slovenia revealed that nearly all students are familiar with AI (primarily ChatGPT), and 88% have used it. Only 9% use it daily, a quarter use it rarely, and most use it a few times a month (Jereb, Urh, 2024).

Our research focused on identifying abuse of AI in educational processes and exploring ways, suggestions, and specific solutions to prevent such abuse. It is important to recognise that the time is approaching when Slovenian higher education institutions will adopt professional AI educational platforms to harness the vast potential, benefits, and efficiency offered by AI systems. AI (specifically ChatGPT, which we used in our research) enables personalised learning, immediate feedback, and addressing complex questions through brainstorming, discussions on various topics, multilingual communication, translation, resource searching, and drafting documents in complex systems.

Summarising texts, creating creative proposals, assisting with writing articles and materials, verifying and assessing knowledge, creating teaching materials, and preparing lesson plans, etc. (Žerovnik, Zapušek, 2024).

For education, it is crucial that AI can both teach and automatically assess knowledge at different taxonomic levels by posing questions, providing feedback, and offering additional explanations for incorrect or incomplete answers (Bonsu, Baffour-Koduah, 2023; Sakirin, Said, 2023).

With these new possibilities, however, new risks also arise. When AI is used for analytics and adapting teaching strategies to individual students, the risks and opportunities for abuse increase. Features such as automated assessment of learning outcomes without human involvement, personalised learning, and automated attendance checks can lead to abuse of personal data, manipulation of grades and results, and reinforcement of social inequalities. A significant danger is also the growing dependency on AI systems, which can lead to people increasingly relying on AI for decision-making (Internet 2).

This section addresses the problems and solutions associated with the abuse of AI, particularly ChatGPT, in the study process.

Possible abuse of AI:

Unfair assignment completion: This includes writing essays or seminar papers for which ChatGPT generates the entire text, which students present as their own without adapting it, adding sources or comments, or understanding the content. This category also includes solving tests, quizzes, exams, or homework without students having any knowledge or understanding of the material.

Generating false data: This involves creating non-existent citations, references, or data to make work appear more academic or generating fictitious research data or analyses using AI.

Plagiarism: While plagiarism may only apply to shorter texts and quotes without citation, longer texts generated by AI are often compiled from multiple sources. Plagiarism can also include AI-generated text presented as the author's own work. Additionally, using AI to simulate participation in student forums, projects, and brainstorming activities, in which students present ideas as their own without understanding or reflecting on the content, falls into this category.

Cheating in group or online exams: Using ChatGPT to generate answers or solve problems during exams, especially for tasks

requiring translations or solving complex problems for which external sources are prohibited.

Advanced cheating techniques

Cheating begins with authentication systems in which biometric fraud, such as fake fingerprints, facial recognition, or voice impersonation, grants access to systems using biometric authentication. This enables individuals to impersonate students or lecturers, leading to abuse, fraud, and threats to the integrity of the education system.

During remote exams, developed cheating methods include the use of smart devices (watches, rings, miniature cameras, speakers, microphones) and now AI, which enables real-time answers. Programmes that provide access to answers during exams (e.g., communication tools, video conferencing, screen sharing) also contribute to fraudulent prices.

Over-reliance on AI: Excessive dependence on AI assistance for most academic tasks can lead to the loss of essential skills such as critical evaluation, research, writing, and analysis. This negatively impacts academic performance in exams and the practical application of knowledge.

Educational system adjustments:

AI tools like ChatGPT have already triggered a learning crisis, compelling educators to rethink current teaching methods. While tools for solving mathematical problems and writing essays have existed for years, schools have adapted. Regardless of AI use, curricula must be updated and enhanced annually. Important measures include detecting and preventing cheating and plagiarism. OpenAI, for instance, is exploring ways to embed cryptographic signals or watermarks in ChatGPT outputs to aid anti-cheating software, such as Turnitin, in detecting AI-generated content (Internet 1).

Educational curricula should focus on teaching analytical thinking and fostering a critical perspective toward AI systems. Schools should encourage collaborative approaches, enabling diverse perspectives and experiences to create more holistic viewpoints. As AI becomes a creative co-pilot and companion, foundational ethics, social-emotional learning, and equity must remain priorities. Developers should ensure transparency about data usage and algorithmic approaches, building trust and shared governance of technology impacting people's lives (Shelton, Lanier, 2024).

All educational system updates based on new technologies must prioritise clear rules regarding technology use, particularly AI, in academic work. Students must also be educated about responsible technology use and the ethical principles of academic education. Furthermore, systems must integrate mechanisms, programmes, and procedures to minimise abuse. Some possibilities are outlined here.

To reduce unfair task completion, long-established methods have proven to be the most effective. These include working on authentic cases (real-world examples) involving research and project work, source study, interviews, case studies, discussions, and presentations. Such study methods require students to engage in thinking, planning, problem-solving (if issues arise despite planning), and self-reflection instead of merely relying on knowledge acquisition.

These approaches enable the achievement of a long-sought goal—evaluating students based on their ability to apply knowledge in real-life situations. Those leveraging the power of artificial intelligence to create better learning experiences will provide students with high-quality education in the AI era (Matthijs, 2024). This type of work, however, demands much more direct interaction between teachers and students in both individual and group work. Since such interaction largely disappeared from programmes during the COVID period, it is only gradually returning to the study process.

To prevent cheating in live and online exams, several methods are available. The most crucial aspect is to verify that the actual student is taking the exam. This requires secure authentication systems, and where students are unknown, biometric scans, such as facial recognition and fingerprints, are necessary. A secure browser is an excellent way to protect online exams. It prevents cheating by not allowing students to switch to other applications or resize the browser window. After the exam, the browser generates reports with images showing any suspicious behaviour, such as excessive head movement, prohibited objects nearby, or more than one person in the frame. This ensures fairness in exams and compliance with the rules. Advanced AI-powered plagiarism detection tools represent cutting-edge technology for identifying instances of plagiarism during essay-based exams. These tools analyse the content of essays, assignments, or any written material and compare it with an extensive database of existing texts to detect similarities or copied content. An effective method is to design exam questions requiring higher-order thinking skills, such as analysis, synthesis, and evaluation of information, rather than simple fact-finding through

internet searches. Multiple versions of the test can be prepared, with questions randomised by a programme. Open-ended questions should be used instead of closed ones, as this approach yields diverse responses (Tran, 2024).

Building on these theoretical foundations, described practical examples from real-world applications, and our two years of experience using AI in education, we conducted a study to gather students' opinions, insights, experiences, and suggestions regarding potential abuses of artificial intelligence in the academic process.

The research examined various forms of potential abuses arising from AI use in the study process, focusing on the opinions and practical experiences of students familiar with AI tools (primarily ChatGPT), which they use regularly in their studies. As part of the course Leadership and Organisation of Media Production, students completed three projects using this tool. The results obtained from surveys and discussions with students were, and will continue to be, instrumental in planning the study process and finding optimal solutions.

Purpose and goals of the research

The introduction of artificial intelligence, specifically the use of ChatGPT, began in 2023 and continued in the academic year 2024/2025 in the course Leadership and Organisation of Media Production at FUDŠ. Despite having some prior knowledge and experience, introducing a new tool is a challenging and responsible task, as research and practical applications remain limited. The use of ChatGPT in educational institutions is being cautiously introduced in certain subjects or activities. However, there are no clear didactic guidelines on how AI can be integrated into higher education programmes, and opinions on the methods and impacts of such teaching vary widely.

The research aimed to identify possible abuses of AI (specifically ChatGPT) in the study process. The results were compared with findings from similar studies in advanced educational systems worldwide and practical solutions already tested by some institutions. The goal is to optimise the study process for the course and minimise abuses and the negative impact of AI on the school's academic integrity.

Another important objective was to obtain relevant opinions, suggestions, and solutions from students systematically trained to use ChatGPT in the course (including methods for critical evaluation of data and results, team discussions on solutions, and feedback).

Students were encouraged to use AI in all phases of their studies except for the final written exam.

Research questions and hypotheses

Two research questions and four hypotheses were formulated, and surveys were developed for each research question.

1. Research question: What forms of artificial intelligence abuse occur in the study process?

Hypothesis 1 (H1): The most common forms of artificial intelligence abuse in the study process, such as plagiarism, cheating during exams, and automatic task generation, reflect unethical behaviour that undermines academic integrity.

Hypothesis 2 (H2): Students who abuse artificial intelligence for cheating in exams or completing tasks perceive academic integrity and ethical behaviour as less important compared to those who do not use these tools.

2. Research question: What approaches and tools are effective in limiting the abuse of artificial intelligence in the study process?

Hypothesis 3 (H3): The use of plagiarism detection systems and tools for verifying automatically generated content is one of the most effective approaches to limiting artificial intelligence abuse in the study process.

Hypothesis 4 (H4): Adapting pedagogical methods, such as deeper knowledge assessments through oral exams and placing greater emphasis on practical tasks, is more effective in reducing artificial intelligence abuse than solely relying on technological tools.

Methods

We employed a qualitative research method, collecting data through a review and analysis of sources, a survey conducted among students, and discussions with students and experts regarding the research results. The research involved 24 second-year students (17 female and 7 male), who completed the survey, presented their projects, and participated in discussions about the survey results.

Preparation for research and student engagement

In the Leadership and Organisation of Media Production course (8 ECTS, 40 lecture hours, and 60 practical hours), held two to three times weekly over two months, we began with a brief but systematic training on using the free ChatGPT programme. The training focused

on preparing texts linked to brainstorming proposed solutions. Students prepared texts, data, and ideas on various topics related to the study process, as well as issues and solutions in work and private life.

Students initially approached tasks traditionally—drawing from personal knowledge and using various resources (e.g., library materials, Google). However, as they discovered the utility of ChatGPT, they increasingly used it for planning and solving tasks from the outset. Some solutions and materials were discussed collectively, others in project groups or individually when preparing specific materials.

Most students used the free version of ChatGPT, while the research employed the paid version.

Student Projects using AI:

- Personal organisation programme: Each student individually developed a programme to improve their personal life organisation.
- Professional guide: Students independently or collaboratively (in pairs or trios) created a professional guide related to leadership and organisation of media production, based on their interests.
- 1.5-Minute Single-shot film: Students worked in groups of five to produce a single-shot film on a specific topic, gaining insight into group-based project work.

Review and examination of sources

Throughout the research, reviewing and analysing sources was essential at every phase. Secondary sources included scientific articles and monographs from multidisciplinary bibliographic databases. For literature searches, the following keywords and phrases were used: AI, Artificial intelligence, Education, High school, Abuse of artificial intelligence, Organisation, Ethics and AI.

Literature Review Results The systematic review of the literature showed a significant number of results in databases for keywords like AI, Artificial Intelligence Education, and their combinations. However, the selected keyword combinations targeting the narrower research area of AI related to media, AI abuse, and education yielded very few results. Most articles and materials on AI in education highlighted risks and the importance of ethical AI use.

Surveys

Surveying is a quantitative research method (Groves et al., 2009; Rek, 2011) used to collect data from respondents. Surveys can be conducted through various media. In our research, students were surveyed, completing the questionnaires either during lectures or at home, submitting them via Moodle.

The design and preparation of surveys are critical, as the goal is to gather the desired responses with as few questions as possible. We used four types of questions:

- Open-ended questions allow free responses and are used when insufficient information exists to formulate closed questions. Responses to open-ended questions were summarised into five categories using ChatGPT.
- Closed questions offer predefined answers for respondents to select or evaluate. These questions were used to collect precise data for our research.
- Likert scale questions provide a uniform distance between response options, allowing respondents to rank their answers, typically on a scale (e.g., 1 = worst, 5 = best) or descriptive categories (e.g., strongly disagree to strongly agree).
- Ranking questions require respondents to rank options by importance (e.g., 1 = least important, 4 = most important).

Results

Results related to research question 1

Research question 1: What forms of artificial intelligence abuse occur in the academic process?

Closed Questions

- Have you ever used artificial intelligence for your academic work?
Yes: 100%, No: 0%
- Have you noticed or heard of cases of AI abuse among students?
Yes, frequently: 37.5%, Yes, rarely: 58.3%, No, never: 4.2%
- What do you think is the most common form of AI abuse?
 - Plagiarism: 45.8%
 - Automatic task generation without understanding the content: 45.8%
 - Cheating during exams: 8.4%

- Grade manipulation (e.g., cheating to achieve a higher grade): 0%
- Other (space for description): 0%

Open-ended questions

1. What is your opinion on using artificial intelligence as a study aid?

Efficiency and time savings: Students believe that artificial intelligence (AI) simplifies studying, saves time, and enables faster access to information. It is particularly useful for writing assistance, research, content summarisation, and idea generation. Many perceive it as a helpful tool for completing tasks more easily and quickly.

Support, not a substitute: Many students emphasise that AI is a valuable resource as long as it is used as a supplement to studying and not as a replacement for their own work. They believe it is crucial to maintain independent thinking, understanding, and critical judgment, as AI cannot replace in-depth learning.

The importance of ethical use: Students express concerns about the overuse and abuse of AI, particularly in writing assignments and taking exams. They caution that such practices are unethical and could lead to diminished creativity and intellectual independence.

Limits of usage: AI is seen as beneficial for simple tasks, finding basic information, and providing quick summaries. However, it should not be relied upon for tasks requiring in-depth research, credible sources, or creativity. Some argue that project work and other complex tasks should remain the responsibility of students.

Adaptation and encouragement in universities: Students recognise the potential of AI as a tool that could be integrated into the academic process. They suggest that promoting responsible use of AI could enhance the quality of education while preparing students for the future.

2. What measures could reduce the abuse of artificial intelligence, in your opinion?

Education and awareness: Students propose educational programmes to teach ethical practices in using AI, highlight the consequences of abuse, and encourage responsible usage. Ethical conduct should become part of academic culture and learning processes.

Technological tools to detect abuse: Introducing programmes and applications capable of detecting AI usage in document writing or content creation could help prevent abuse. Such tools could operate similarly to plagiarism detection systems.

Strengthening academic integrity and independent work: Promoting independent thinking and adapting assessment methods to focus on understanding and explanation, rather than solely submitting written assignments, is essential. Prohibiting AI use in exams and specific tasks would further reinforce academic integrity.

Legislation and stricter regulations: Enacting laws and rules to monitor AI usage could limit abuse, especially in sensitive areas, and prevent the creation of fake content and information manipulation.

Restricting usage and verifying sources: Students recommend limiting AI use in tasks requiring creativity and independent thought. They also advocate for verifying the origin of materials and assessing whether products are the result of AI assistance.

3. How would you evaluate AI use at the university and its impact on academic integrity at FUDŠ?

Benefits of AI for study: AI allows students to find information more quickly, analyse data more effectively, and receive support for writing assignments. It aids in idea development and enhances understanding of content, thereby improving productivity and simplifying the study process.

The need for balanced use: Students believe AI should not be used for every aspect of studying, as this diminishes creativity and independent thinking. They encourage moderate and thoughtful usage that supports but does not replace personal effort.

Education on ethical use: Most students agree on the importance of the university providing clear guidelines and education on responsible AI usage. Ethics and independence should remain core values promoted by the university.

Impact on academic integrity: Students observe that AI abuse, such as plagiarism or automated writing without understanding, threatens academic integrity. They propose stricter monitoring and technologies to detect AI-generated content to prevent abuses.

Connection to the future: Students support AI integration at the university as a means of preparing for a future in which such technologies will be increasingly significant. They view incorporating AI into academic processes as a progressive step that improves education quality, provided its use remains deliberate and balanced.

Likert scale questions

a. Abuse of AI in the academic process is a serious threat to academic integrity.

(Strongly Agree) | 16.6%, (Mostly Agree) | 41.6%, (Neutral) | 29.2%, (Mostly Disagree) 12.6%, (Strongly Disagree) | 0%

b. Using AI to cheat in exams is unethical.

(Strongly Agree) | 33.3%, (Mostly Agree) | 41.6%, (Neutral) | 8.3%, (Mostly Disagree) | 12.6%, (Strongly Disagree) | 4.1%

c. Academic institutions should implement stricter measures to prevent AI abuse.

(Strongly Agree) | 8.3%, (Mostly Agree) | 45.8%, (Neutral) | 33.4%, (Mostly Disagree) | 8.3%, (Strongly Disagree) | 4.2%

Questions Ranked by Importance

Ranking: 4 - Most important, 3 - More important, 2 - Less important, 1- Least important

1. How important are the following measures for limiting AI abuse?

Ranking	Advantage
4	Implementing plagiarism detection systems
3	Increasing awareness about ethical practices
2	Introducing stricter penalties for abuse
1	Improving knowledge assessment (e.g., oral exams)

2. Which types of AI abuse have the greatest impact on academic integrity?

Ranking	Advantage
4	Automatic generation of tasks without understanding content
3	Plagiarism
2	Cheating in the preparation of written assignments
1	Grade manipulation (cheating to obtain grades)

3. How important are the following reasons for AI abuse?

Ranking	Advantage
4	Lack of time
3	Low level of knowledge or motivation
2	Lack of rules and oversight for AI use in education
1	Lack of ethical values

4. How would you evaluate the advantages of using AI in studies?

Ranking	Advantage
4	Speed of task execution
3	Less effort required for task completion
2	Quality of obtained results
1	Easier achievement of better grades

Results related to research question 2

Closed Questions

Does your educational institution use systems to detect plagiarism and AI-generated content?

Yes: 45.8%

No: 8.4%

I don't know: 45.8%

Do you think technological tools for detecting plagiarism are effective in preventing AI abuse?

Yes, very effective: 25.0%

Somewhat effective: 70.8%

Not effective at all: 4.2%

In your opinion, is adapting teaching methods (e.g., oral exams, practical tasks) a better solution than technological tools to limit abuse?

Yes: 41.6%

No: 29.2%

I don't know: 29.2%

Open-Ended Questions (Students provided an unlimited number of suggestions)

1. Which tools or approaches do you find most effective for limiting AI abuse?

Legislation and regulation: Students often highlighted the importance of introducing strict laws and regulations that clearly define where and how AI can be used. Ethical guidelines and transparency in AI systems' operations are key to preventing abuse.

Technological tools for detecting abuse: Students suggested employing software for detecting plagiarism (e.g., Turnitin) and systems for identifying automatically generated content. Reliable technology for detecting fake content, such as deepfakes, is crucial.

Education and awareness: Emphasis was placed on educating students and instructors about the risks and ethical issues of AI use. Training on fair and responsible use of AI is seen as essential for reducing abuse.

Practical tasks and alternative assessment methods: Students proposed increasing the number of practical tasks and oral exams as alternatives to written assignments, where AI abuse is more likely. Practical tasks such as projects encourage creativity and specific skills.

Integrating AI with usage rules. Suggestions included integrating AI into the educational process but with clearly defined rules and stricter monitoring of its usage. This includes controlling and limiting AI use in classrooms.

2. What shortcomings do you observe in the current measures for preventing AI abuse at the university?

Insufficiently strict or specific measures: Students noted that current measures are neither strict nor specific enough to prevent all possible forms of AI abuse. A lack of clear guidelines on when AI is permissible in assignments, exams, and research is evident.

Inadequate tools for detection: Existing tools for detecting AI-generated content are often unreliable or underdeveloped. Students pointed out that current systems may incorrectly flag quoted content as plagiarism or fail to detect complex AI-generated material.

Insufficient awareness among students: A lack of education on the risks, consequences, and ethical aspects of AI use was observed. Many students are not sufficiently informed about when and how AI usage is acceptable.

Limited variety in knowledge assessment: Students feel that universities rely too heavily on written exams and assignments,

which are more susceptible to AI abuse. More oral exams and practical tasks could mitigate this risk.

Lack of visible actions and regulations: Some students observed that current measures are barely noticeable, as AI usage is not clearly regulated or monitored. They also highlighted missing regulations and guidelines to ensure consistent and responsible AI usage.

3. For what percentage of courses can students fulfill course requirements and pass exams with minimal effort and knowledge by using AI? What is planned and implemented incorrectly in these courses that should be changed?

High percentage of courses allow AI usage for easier completion: Students estimate that AI can significantly reduce effort and knowledge requirements in 20–90% of courses. This is particularly evident in theoretical courses and tasks with simple, repetitive questions.

Overemphasis on repetitive tasks: Tasks requiring only basic understanding or solving routine problems allow AI to generate most of the answers. Courses emphasising rote learning over critical thinking are more vulnerable to this issue.

Lack of practical and creative tasks: Students suggested incorporating more practical tasks that promote independent thinking, creativity, and solving complex problems, which AI cannot easily replicate.

Insufficient instructions and oversight: Some courses lack clear guidelines on how and when AI usage is permissible. Additionally, insufficient monitoring during exams and assignments facilitates excessive AI use.

Diverse perceptions of AI utility: Some students believe AI usage depends on individual approaches—many use it to complement their knowledge, while others exploit it to reduce effort. Suggested changes include raising awareness about responsible AI use and altering assessment methods to encourage greater independence.

Likert Scale Question

a. Plagiarism detection systems are essential in preventing AI abuse in the academic process. (Strongly Agree) 8.4%, (Mostly Agree) 41.6%, (Neutral) 45.8%, (Mostly Disagree) 4.2%, (Strongly Disagree) 0%

b. Adapting pedagogical methods (e.g., oral exams, practical tasks, increased interaction with professors) would significantly reduce AI abuse.

(Strongly Agree) 8.4%, (Mostly Agree) 41.5%, (Neutral) 29.2%, (Mostly Disagree) 12.6%, (Strongly Disagree) 8.4%

c. Effectively limiting AI abuse requires a combination of technological tools and adapted pedagogical methods.

(Strongly Agree): 25.0%, (Mostly Agree): 29.2%, (Neutral): 41.5%, (Mostly Disagree): 4.2%, (Strongly Disagree): 0%

Ranking Questions by Importance

1. How important are the following approaches for limiting AI abuse?

Ranking	Advantage
4	Implementation of practical tasks and projects
3	Plagiarism detection systems
3	Knowledge assessment through oral exams
1	Raising awareness about ethical behaviour

2. How important are the following features of technological tools for limiting abuse?

Ranking	Advantage
4	Reliability in detecting plagiarism
3	Ease of use for students and professors
3	Adaptability to various academic content
1	Affordability

3. How important are the following aspects of pedagogical methods for preventing abuse?

Ranking	Advantage
4	Interactive tasks and projects
3	Written assessments under controlled conditions
3	Regular monitoring of students' work and progress
1	In-depth knowledge assessments (oral exams)

4. Rank the reasons why students resort to AI abuse

Ranking	Advantage
---------	-----------

4	Lack of time
3	Lack of clear rules and penalties
3	Low motivation or knowledge
1	Inappropriate teaching methods

Discussion

In the discussion, we present a summary of the results for each research question and evaluate the validity of our hypotheses.

Research Question 1: What forms of AI abuse occur in the academic process?

The study highlights the following most common forms of AI abuse in the academic process:

Plagiarism (45.8%): Using AI to generate content that students present as their own work.

Automatic task generation without understanding the content (45.8%): Students rely on AI to complete assignments without gaining knowledge or understanding.

Cheating during exams (8.4%): A less frequent but present abuse, in which AI is employed to answer exam questions.

These data directly address the research question, revealing specific forms of abuse and their frequency. Grade manipulation did not emerge as a significant form, indicating a narrower scope for abuse in this area.

Hypothesis 1 (H1):

The most common forms of AI abuse in the academic process, such as plagiarism, cheating during exams, and automatic task generation, reflect unethical behaviour that undermines academic integrity.

The results confirm this hypothesis:

Plagiarism and automatic task generation, the most frequent forms of abuse, are recognised by students as unethical practices that threaten academic integrity.

58.2% of students believe AI abuse poses a serious threat to academic integrity, with 16.6% strongly agreeing.

Students emphasise the consequences of abuse, such as reduced creativity, intellectual independence, and the quality of education,

supporting the assertion that AI abuse undermines the fundamental principles of the academic community

Hypothesis 2 (H2):

Students who abuse AI for cheating in exams or completing assignments place less importance on academic integrity and ethical behaviour compared to those who do not use such tools.

The results indirectly confirm this hypothesis:

Students who abuse AI are primarily motivated by a lack of time and low knowledge or motivation, reflecting a diminished emphasis on academic values.

Most students who do not abuse AI stress the importance of ethical use, independent understanding, and critical thinking, indicating a higher awareness of academic integrity within this group.

Students who support abuse are less likely to agree with statements about its negative impact on academic integrity (12.5% see no need for stricter measures against abuse).

Research Question 2: What approaches and tools are effective in limiting AI abuse in the academic process?

The study identifies key approaches and tools for limiting AI abuse:

Plagiarism and AI content detection systems:

Most students (70.8%) consider these tools partially effective, while 25% rate them as very effective. About half believe their educational institutions use such systems, but a significant portion (45.8%) is unsure.

Adapting pedagogical methods:

Students support adjustments such as oral exams and practical tasks, but opinions are divided: 41.6% support them, 29.2% are undecided, and 29.2% believe they are not a more effective alternative to technological tools.

Emphasis is placed on practical tasks and projects that encourage creativity and independent thinking.

Legislation and regulation:

Students call for strict laws and clear guidelines for AI use to prevent abuse.

Education and awareness:

Proposed programmes aim to raise awareness about ethical AI use, reducing abuse and increasing responsibility.

Combination of technological and pedagogical solutions:

The majority (54.2%) believe that combining technological tools with adapted pedagogical methods is the most effective approach.

Hypothesis 3 (H3):

The use of plagiarism detection and AI content verification systems is one of the most effective approaches to limiting AI abuse in the academic process.

The results confirm this hypothesis:

87.4% of students believe plagiarism detection systems are crucial for preventing abuse.

The findings highlight the importance of integrating both technological and educational strategies to effectively address AI abuse in academic settings.

Hypothesis 4 (H4):

Adapting pedagogical methods, such as in-depth knowledge assessment through oral exams and increased emphasis on practical tasks, is more effective in reducing AI abuse than solely using technological tools.

The results partially confirm this hypothesis:

Practical tasks and projects are identified as an important approach for preventing abuse, but students do not perceive pedagogical adaptations as unequivocally more effective than technological tools.

41.6% of students support these adaptations, while 29.2% believe they are not more effective than technological tools.

A combination of both approaches (technological tools and adapted pedagogical methods) is recognised as the optimal solution, indicating that pedagogical methods alone are insufficient without technological support.

Conclusion

As part of the FUDŠ Ljubljana course "Leadership and Organisation of Media Production," a project on AI usage (specifically ChatGPT) has been implemented since 2023. Alongside a literature review of the global state of the field, students receive training in using AI and complete three projects based on meaningful AI application. A survey was also conducted to gather student opinions and suggestions.

In 2023, the focus was on understanding students' perceptions of how AI integration into the course affected their learning experience, satisfaction with the course, and grades. These insights were incorporated into planning AI integration for 2024 (Zakrajšek, 2024).

In 2024, the research emphasised the identification of potential AI abuse in academic processes. A review of global trends indicated that abuse is becoming a growing problem, exacerbated by advanced solutions such as personalised teaching and automated grading offered by AI-integrated educational platforms.

As FUDŠ has not yet integrated such platforms, the survey focused on the most common forms of abuse associated with ChatGPT.

Key findings from research question 1: Forms of AI abuse

Most students use AI in their studies: 37.5% frequently hear about or notice AI abuse, and 58.3% rarely do.

Common forms of abuse include: Generating content presented as students' own work, creating assignments without understanding the content, cheating in exams.

Perceptions of AI abuse: 58.2% of students consider AI abuse a serious threat to academic integrity.

Students who abuse AI are primarily motivated by a lack of time and low knowledge or motivation.

Key findings from research question 2: Effective approaches and tools

Plagiarism and content detection systems: 70.8% of students consider these tools partially effective, while 25% find them very effective.

About half of the students believe their institution uses such systems, but a significant portion (45.8%) is unsure.

Student recommendations for improvement include: Raising awareness of ethical AI usage, implementing suitable tools to detect abuse and applying sanctions, adjusting assessments to include more oral exams, practical tasks, and projects that encourage creativity and critical thinking.

Challenges in AI usage: Some students rely excessively on AI, avoiding genuine study efforts, and there is a need for clear guidelines. Students emphasise the importance of clearly defined rules for using technology in educational programmes.

Our findings show that students are well aware of the possibilities and risks associated with AI usage (specifically ChatGPT) in academic processes. All students use AI, and the responsibility lies with the institution and teaching staff to ensure optimal integration of AI into the learning process while maintaining high academic standards and learning outcomes.

The entire research is presented in the research project report (Zakrajšek, 2024). ACKNOWLEDGEMENTS: We thank all students for participating in the study. CONFLICTS OF INTEREST: The authors assert that there is no conflict of interest.

FUNDING: We conducted the study without funding.

NOTE: In the preparation and execution of the research, as well as in the preparation of the final report and article, we practically utilised the assistance of ChatGPT in all stages.

Resources

Bonsu, Emmanuel Mensah, Baffour - Koduah, Daniel (2023): From the consumers' side: Determining students' perception and intention to use ChatGPT in Ghanaian higher education. *Journal of Education, Society & Multiculturalism*, 4(1), 1–29.

ChatGPT (GPT-4) [Linguistic model]. OpenAI. Dostopno na <https://openai.com/chatgpt>), (Pridobljeno 15.12.2024)

Groves, Robert M., Fowler, Floyd. J., Couper, M. P., Lepkowski, James. M., Singer, E., Tourangeau, R. 2009. *Survey Methodology*. New Jersey: John Wiley & Sons.

Internet 1: https://racunalniske-novice.com/umetna-inteligenca-v-izobrazevanju-chatgpt-midjourney/?utm_source=chatgpt.com (15. 12. 2024)

Internet 2: <https://education.ec.europa.eu/focus-topics/digital-education/action-plan/european-digital-education-hub> (15. 12. 2024)

Jereb, Eva, Urh, Marko (2024): The use of artificial intelligence among students in higher education. *Založba Moderna organizacija*, vol. 57, 2024, 333-345.

Kamalov, Firuz, Santandreu Calonge, David, Gurrib Ikhlaas, Muhammed (2024): New Era of Artificial Intelligence in Education: Towards a Sustainable Multifaceted Revolution, *Sustainability* 2023, 15, 12451.

Matthijs, Nicolaas (2024): Umetna inteligenca v visokem šolstvu – uravnoteženje tveganj in koristi. Available at: <https://www.unite.ai/sl/ai-v-visoko%C5%A1olskem-izobra%C5%BEevanju-pri-uravnate%C5%BEevanju-tveganj-in-koristi/> (15. 12. 2024)

Rek, Mateja (2011). Anketiranje. *Medijska vzgoja in produkcija*, Vol.: 4, No.: 1, pp.: 16-20.

- Sakirin, Tam, Said, Rachid Ben (2023). User preferences for ChatGPT-powered conversational interfaces versus traditional methods. *Mesopotamian Journal of Computer Science*, 24–31.
- Shelton, Ken, Lanier, Dee (2024): Thinking About Equity and Bias in AI. Available at: <https://www.edutopia.org/article/equity-bias-ai-what-educators-should-know> (15. 12. 2024)
- Teehseen, Zia (2024): Krmarjenje po dobi dezinformacij: Primer za podatkovno osredotočeno generativno umetno inteligenco. Available at: <https://www.edutopia.org/article/equity-bias-ai-what-educators-should-know> (15. 12. 2024)
- Tran, Astrid (2024): Kako se izogniti goljufanju na spletnem izpitu | Posodobitve 2024. Available at: <https://ahaslides.com/sl/blog/exam-cheating> (15. 12. 2024)
- Zakrajšek, Srečo (2024): Uporaba umetne inteligence (ChatGPT) pri predmetu Vodenje in organiziranje medijske produkcije na FUDŠ, Ljubljana : poročilo o raziskovalni nalogi. Available at: <http://www.dlib.si/details/URN:NBN:SI:doc-6P2FLVBT> (15. 12. 2024)
- Žerovnik, Alenka, Zapušek, Matej (2024): Uporaba generativne umetne inteligence v izobraževanju. Available at: <https://zalozba.pef.unilj.si/index.php/zalozba/catalog/view/226/508/603-1> (15. 12. 2024)