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Nataša Z. Janković[1]
University of Belgrade, Faculty of Education
Belgrade, Serbia

Aleksandar Đ. Vuletić
University of Arts in Belgrade, Faculty of Applied Arts
Belgrade, Serbia

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From Human Art to Artificial Intelligence and Back: Practical Considerations from Academia[2]

Abstract: *Globalization has had an impact on us both as individuals and social actors, with technological advancements setting the course. Hybrid formats, which blend human-machine interaction with cooperative classroom methods, have become a regular feature of modern education. While artificial intelligence (AI) can, undoubtedly, add to both independent individual study and collaborative on-site practice, the question is to what extent it can be perceived rather as support or threat to human learning and activity. Relying on a mixed-methods approach, this paper investigates the cognitive-affective, pragmatic, and ethical aspects of using AI tools in art students’ learning of English for specific purposes (ESP), and the value they attribute to it in education, their personal lives, and especially in the world of art.*

Keywords: *art students, interaction, artificial intelligence (AI), higher education, English for Specific Purposes (ESP)*

1 natasa.jankovic@uf.bg.ac.rs:;
https://orcid.org/0000-0002-9975-1685

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Introduction

Social, educational, and professional interactions today can hardly be imagined without technology. Technological advancements and their influence on human activity and communication can be observed from behavioural, cultural, economic, and other relevant perspectives. With regard to artificial intelligence, several domains of human learning are particularly worth considering, such as: cognitive-affective, pragmatic, and ethical.

Cognitive and affective domains make inseparable parts of our lives. When British mathematician Alan Turing broke the code of the German 'Enigma' cipher machine in WWII,[3] it was the moment when human intelligence threw the door open to artificial intelligence. In his book *The Prevention of Literature*, George Orwell (Orwell, 1946)[4] wrote the words: "It would probably not be beyond human ingenuity to write books by machinery," and then exemplified it in his *Nineteen Eighty-Four*, expressing a reasonable concern about the constraints that machinery would impose on human imagination. Things changed so fast that recently UNESCO issued a document on *Rethinking Learning* (Duraiappah, et al., 2020: xxviii),[5] with one of the key messages being that "an individual's emotional and social development is as important as the individual's cognitive and biological development", which is why "education systems must be able to address and contribute to this aspect of human experience". Part of that experience is also our eternal need to create and enjoy art. While scientific advancements show the crucial role of human labour and creativity, and give humanity a sense of purpose (Ribarić, 2010: 18), it is art that can "communicate beyond language and time, appealing to our common humanity and linking disparate communities, intelligence and experience" (Thapa, 2019: 231).

Modern era has taught us to be pragmatic. Connecting with others is in the essence of our social role, and so is our need to move forward. Technology has already enabled us to see remote places, participate in distant events, listen and tell, or buy and sell, and achieve so much more. It increases and facilitates our access to numerous sources of information, and artificial intelligence only adds to the quality of search and output. Gaining knowledge is no longer restricted to direct classroom encounters. "Connectivism posits that learning is shaped by the distribution of knowledge across networks and the interplay of connections within them" (Kurt, 2023).[6] It occurs through various social networks, digital platforms, and AI generative or other applications. Such pragmatic approaches to human learning are nowadays best visible in numerous networks of teachers and students established across the world, in which students act as explorers and teachers as guides and facilitators in the digital learning environment (ibid). Our inclination towards pragmatism, on the other hand, may lead to such social transformation (Hanandini, 2024; Tuomi, 2018; Vernyuy, 2024) in which the basic human qualities of critical thinking and social responsibility can become disputable, while our eternal need for creativity may be challenged by both the art of AI use and the AI use of art.

Ethical approaches to new learnings and results of scientific activity should be inherently human. However, while perceiving the need for adaptation in political and social life, Kissinger et al. (2021) see a possibility of growing conflicts as well, since AI does not only facilitate education and access to information, but also increases "the potential for amplification and manipulability". So, each soci-

3 https://www.iwm.org.uk/history/how-alan-turing-cracked-the-enigma-code

4 https://www.orwell.ru/library/essays/prevention/english/e_plit

5 https://unesdoc.unesco.org/ark:/48223/pf0000373890

6 https://educationaltechnology.net/connectivism-learning-theory/

ety – the authors believe – "must determine […] the full range of permissible and impermissible uses of AI in various domains" (Kissinger et al, 2021: 142-144). For such reasons, the European Parliament has adopted a number of AI-related resolutions on ethics, including the matters of education, culture and the audio-visual sector. It has also recommended the ethical principles for the development, deployment and use of AI, robotics, and related technologies (European Union, 2021). Aware that we are facing a new epoch in a moral, philosophical, psychological, and every other way, the authors above conclude: "We must draw on our deepest resources – reason, faith, tradition, and technology – to adapt our relationship with reality so it remains human" (Kissinger et al. 2021: 146).

The use of AI in language education

Modes of learning and professional training have changed over years. Pursuing a career requires of individuals to foster the necessary knowledge, skills and abilities (KSAs) in order to reach mastery and progress on the expertise continuum (Martinez et al., 2025: 15). Student-centred teaching of the recent decades puts students in the position of co-creators of their own academic growth. As an integral component of contemporary life, mobile learning brings not only new roles to teachers and students, but also new sources of knowledge and approaches to learning independent of time and space. It also implies new drivers of motivation, as well as diversity in the teaching methods, tools and scenarios, and adaptive formats of monitoring and evaluation (Janković & Ristić, 2018: 44). We are investigating whether methodologically grounded use of artificial intelligence for academic purposes can additionally help shift balance towards students and benefit their learning. Equally important, we provide enough space for our students' critical thinking regarding the use of artificial intelligence in their artistic aspirations.

Sociological perspective

Language, art, and culture are the areas of human activity which determine us as social beings. In light of Bourdieu's theory, our social standing is determined by our economic, social, and cultural capital. The cultural capital can be gained: a) by being passed down generationally b) subconsciously through socialisation, and c) intentionally through formal education and academic degrees (with school systems and educators passing cultural capital to students). One's mastery of a language, regional accent, manners or tastes, from Bourdieu's point of view, is knowledge acquired through socialisation and education (Reed & Johnson, 2023). According to Rubenson (2019), social and cultural practices are now evolving and necessitating advanced skills to fully participate in cultural life, democratic processes and complex daily life (Ovesni et al., 2025: 68). From the perspective of UNESCO and the Council of Europe, it is lifelong learning that is, at its most basic level, seen "as a way to promote freedom and democracy and reduce alienation" (ibid, p. 66).

Technological advances have certainly reshaped the distribution of roles in the learner-teacher relationship, whether observed through Foucault's power/knowledge framework, in which knowledge is seen as inherently influenced by power dynamics of institutional systems (Pitsoe & Vlăduțescu, 2024: 43), or through Giddens's concept of agents as active and creative persons engaged in a continual flow of action (Kipo, 2013: 18). The use of technology in education raises many questions, some of which are still subject to debates. While proponents of the social construction of technology (SCOT) see our social and cultural practices as those which shape technological development, technological determinists argue that it is technology that defines social change (Tessema, 2021: 71). Both perspectives seem acceptable in educational settings, as we can neither turn a blind eye to our students' need for social and technological progress, nor can we deny the inevitable influence of that same progress on our social and pedagogical self.

The way in which AI (so inherently artificial) tends to be used in art (so inherently human) can make an impact on one's professional self probably greater than, or even quite opposite to, one's personal growth in language learning.

Adopted in many spheres of human activity, AI is already becoming part of our cultural capital. Since it is also being integrated into academic curricula, it is necessary to consider its dichotomous impact through the pedagogical lense as well. Hence, questions like these logically impose themselves: Will the commonly centralised teacher control be only reduced with increased implementation of AI, or will the teacher's role be minimised to a mere human agent in the classroom? Will adaptive approaches to teaching and learning limit personal creativity or elicit more critical thinking? Will such a change in classroom dynamics deepen the gaps or induce the feeling of democratisation in education? Strength or weakness, opportunity or threat – AI is here, and there is no way back.

Seen through activity either on a personal, or broader social and intercultural plane, the basic human values, such as openness to change, self-enhancement and self-transcendence (Schwartz, 2012: 8) must be based on critical thinking and purposeful, benevolent use of technology in general, and artificial intelligence in particular. As the highest step in one's formal education, university is not only the place where knowledge, skills and professional competencies are gained, but an intellectual hub where the basic human values are shaped and honed.

Sociolinguistic perspective

Language evolves with society. Observing what nuances in communication were brought about by the inventions of printing and telephone, broadcasting and the internet, famous linguist David Crystal states: "technology always changes the language".[7] It has brought about democratisation of language by enabling increasing numbers of people to share their thoughts on the one hand, while relaxing the norms of both spoken and written language on the other, making it less formal and punctual, and more pictographic and casual. Due to globalisation, "communications technologies have fundamentally changed the ways people interact with each other," (Wang et al., 2023: 8), whereby new perspectives, such as 'metrolingualism', are gaining more attention. The authors refer to Jaworski (2014: 151), who sees language as interacting with other modes or types of resources or as part of the visual mode of communicating. While "stresses, intonations, and paralinguistic resources" are all integrated into spoken language (Wang et al. 2023: 7), Jaworski sees metrolingualism as characterised by its multimodal forms "realized by materiality (e.g., papers, cloths, walls where the language is written), media (e.g., soundtrack, video, moving images, etc.), and styles (e.g., fonts, letterform, layering like add-ons or decorations)" (in: Wang et al., 2023: 6).

Academic debates on the use of technology in education can be found via digital libraries and web search engines in numerous scholarly articles (Chun et al., 2016; Godwin-Jones, 2019; Maly, 2024; Williams, 2017, etc.), on topics ranging from online communication, through social media, to digital dialects. Language teachers gather in communities of practice[8] within European University Alliances, such as Circle U., where arguments can be heard that "it is crucial for us teachers / educators to pave our students' way so they use AI effectively," while remembering that "using AI effectively also includes criticality, that is, the ecological part of it." According to widely accepted Bloom's taxonomy, the highest level of the cognitive domain, in which critical thinking and problem-solving abilities are honed, is the level of creation (Lukić et al., 2020: 69). This is the level for which future artists need the most practice in English for specific, i.e. artistic, purposes. In dramatic and applied arts, language-in-use practice

7 https://www.youtube.com/watch?v=P2XVdDSJHqY ("How is the internet changing language today?")

8 https://www.kcl.ac.uk/events/language-teachers-nexus-building-communities-of-practice-london-2025

nowadays implies contextualised language usage through different forms of:

- input – such as printed, digital, spoken, audio-visual, or AI-generated materials, or
- output – such as (shorter or longer) texts to be provided in speech or writing, visuals or other design materials that are to be communicated or which integrate language one way or another (presentations, videos, podcasts, lyrics and librettos, scriptwriting, copywriting, contracts and riders, artwork descriptions, festival entries, etc.).

The English language and the language of art represent universal means of communication (Janković & Večanski, 2020: 176). While teaching a foreign language for general purposes, such as English (EFL), can largely contribute to one's personal and academic growth, it is learning English for Specific Purposes (ESP), or another language (LSP), that may be crucial for a job which entails international cooperation. Besides its idiomatic, almost proverbial, meaning, the phrase "the world of art" truly signifies "the world" across which many artists have travelled through history to absorb impressions and share inspirations, to spread the word of new artistic forms and skills and build them into their own art. In such sociocultural encounters, "successful communication within any given scientific and professional community is marked by the clearly defined, unambiguous and economical terminology" (Vuletić & Orašanin, 2022: 546). In light of our topic, from constructing knowledge, through developing autonomy (Janković, 2024: 202), student-centred learning has evolved into education in which "purposeful attractiveness, effectiveness, and usefulness of digital instruments can positively affect learner motivation" (Wei, 2022: 1) if reasonably utilised.

It may, hence, be speculated, according to Wang et al. (2023: 8), "that sociolinguistics will be increasingly less concerned with the boundaries of language and non-language resources, but will focus more on the social constructs, social meaning, and language as a force in social change." As a tool of personal and social change in the rapidly evolving world, AI must be wisely used to support education, without hindering our development in terms of basic human values.

The aim of the research

In educational contexts, flexibility and versatility are prerequisites for avoiding the feeling of stagnation and rather sparkling students' motivation. Language teaching in particular requires a dynamic classroom environment, which primarily means constant engagement and active communication among students. The aim of our research, therefore, was to check the effects of the use of AI tools and to test their educational potentials for developing art students' communicative competence in higher-education EFL/ESP courses, bearing in mind the cognitive-affective, pragmatic, and ethical perspectives of their use.

Research Methodology

Research methods

As our research was conceptualised as a multilayered process in several stages, we opted for a mixed-methods approach, which included a) a Multi-Criteria Analysis (MCA) – to select suitable AI tools; b) an empirical method – to test the selected AI tools in EFL/ESP courses; c) a qualitative method – to gather students' opinions before and after the experiment with AI tools; and d) a descriptive method for presenting the research results.

Research instruments

The following instruments were applied in different stages of our research: a quality criteria checklist, group interviews, teachers' diaries, an experiment, and a questionnaire.

Research sample

The participants in the study were students of the University of Arts in Belgrade. The total number of participants was N = 192, of whom 97 were from the Faculty of Applied Arts, 72 from the Faculty of Dramatic Arts, and, in one stage of the research, 23 students from the entire University of Arts. Most of the research was conducted during the second semester of the academic year 2023/2024, and partly at the very beginning of the academic year 2024/2025. Shifting from EFL to ESP contents gradually increases during each course and from one course to another. Students' participation in different phases of the process depended on their presence in classes. Those were mainly the same groups of the first- and second-year students at each faculty, which, thus, comprised convenience samples. Some stages of the research also included an experimental group and a control group, which will be explained in more detail in the following chapter.

Since the materials collected are too voluminous for a single paper, we shall first briefly present all the stages of the research. Then, bearing in mind the theoretical framework of this article, we shall pay most attention to the participants' opinions on the use of AI gained through the questionnaire from the students of the entire University of Arts. The other segments of the research will be more thoroughly presented in another study.

Results and discussion

To begin our research, we built a framework as guidance. Teaching requires positive and encouraging atmosphere, and it is upon the teacher to make sure that only respectful language and conduct is experienced in the classroom. Therefore, the ethical principle was our first and foremost criterion underlying all activities or materials used, including the application of AI tools. In their selection, we were also guided by the cognitive-affective and pragmatic domains, as described in the introduction.

Stage 1

Stage 1 was a Multi-Criteria Analysis of AI tools. Our aim was to rate the qualities of a number of AI tools, and choose those that could benefit our students' learning most and improve/facilitate our teaching, so we designed a quality criteria checklist to assess their features. Since our plan was to apply some AI tools in the following weeks at both faculties, to be selected they had to reflect more benefits than downsides in our analysis, i.e. to result in more tick marks (✓) than cross marks (***x***) when evaluated according to the agreed criteria. Some features could get both marks at the same time, depending on the extent to which they met the learning/teaching needs or the degree of usability.

The analysis was based on the following twelve criteria we agreed upon:

The AI tool: 1) supports integrated language skills; 2) is relatable to ESP lesson aims; 3) is adaptable to CEFR B1-C2 levels;[9] 4) suits learner-centred strategies; 5) is characterised by engaging content and appealing form; 6) offers high-quality output (text, speakers' pronunciation, etc.); 7) has the possibility of multimodal task design; 8) generates ready-made tasks and adaptable prompts; 9) features clear layout and practical navigation; 10) spares time for lesson preparation; 11) offers free access in unlimited time; 12) does not require institutional log-in.

Among the eight AI tools included in our analysis, the two with the best tick mark / cross mark ratio were *Twee* (scoring 12:1) and *Perplexity* (scoring 11:3). The next two AI tools with favourable results were *Skybox AI Blockade Labs* (10:4) and *Ginger Software* (11:8). A pair of Text-to-Speech applications rendered similar results: *TTS Natural Reader* (10:9) and *TTS Maker* (10:7). Two more AI tools were analysed, *Canva* (9:10) and *Kahoot!* (8:6).

9 CEFR (2020). *Common European Framework of Reference for Languages: Learning, Teaching, Assessment. CEFR Companion Volume.* Council of Europe.
https://www.coe.int/en/web/common-european-framework-reference-languages/cefr-descriptors

Therefore, the final choice of four AI tools (one per week) for the experimental stage was: *Twee, Perplexity, TTS Maker* and *Ginger Software* for dramatic arts, i.e. *Twee, Skybox AI Blockade Labs, TTS Natural Reader* and *Ginger Software* for applied arts. Partial differences in the final choice resulted from the specific study areas at the two faculties. Finally, having been already tested as an educational tool, *Kahoot!* was chosen for further consolidation phases of work, not necessarily connected with this specific research. Although all the tested AI tools provide good support to teachers in some respects, while there are certainly many more of them, this research was an opportunity to share experience with some of those already familiar to either of the researchers, hoping they could benefit our students.

Stage 2

Stage 2 consisted of a preliminary interview conducted to gather students' general opinions about the usefulness of AI tools in education. As reflective practitioners (Vuletić & Janković, 2023), we also wanted to learn if the students' awareness of the use of AI, as the variable, would create potential bias and influence their participation in practice activities. Bearing in mind that the following stage 3 was the experimental stage – in which the students of applied arts (AA) would be aware of their teacher's use of AI tools in the design of practice tasks (the experimental group), and the students of dramatic arts (DA) would not be aware of that fact (the control group) – only the students of applied arts were included in the preliminary interview. The results of this semi-structured interview were recorded in the teacher's diary. A lot of students expressed similar opinions, and, as explained above, we shall only summarise them in this paper under the interview questions:

- Q_1: *Are you familiar with the possibility of the use of AI tools for teaching foreign languages (for general or specific purposes)?* • All students are aware that there are language learning applications, but are not familiar with the ones specially designed for teachers, although they are quite sure such applications exist.
- Q_2: *Do you think foreign language teachers should use AI tools when teaching? For what purposes? To what extent? How?* • Students agree that language teachers should use AI tools when needed, but not all the time. They rather see them only as tools for improving teaching and getting students more interested.
- Q_3: *What language skills (reading, writing, listening, speaking) would you like to improve by using AI?* • Not having regular opportunities to speak English, most students would like to improve their communication skills. Apart from the need to speak in English more, they also find writing as particularly important, especially in terms of different forms (e.g. formal writing). They are fully aware of the benefits of AI in that respect, because, as one student wrote: "you can just give it good prompts and it writes all sorts of texts for you".
- Q_4: *Do you think teachers' use of AI tools can help make foreign language (ESP) lexis more understandable and language acquisition more interesting?* • All students believe there are such helpful tools, but many of them stress that "the teacher needs to make a good choice and be well prepared", because: "Artificial intelligence can't teach you on its own."

We could conclude from stage 2 that students of the experimental group are aware of the cognitive-affective, pragmatic and ethical aspects of using AI in education, finding it useful and attractive for learning and teaching, pragmatic for the support it provides, but also requiring good balance when used by both students and teachers.

Stage 3

In the experimental stage, apart from testing the above described effect of awareness, we also

wanted to check the impact of technology itself by comparing students' activity which included AI-enhanced tasks with their engagement in former typical language tasks. We did so by introducing a new AI tool each week to enhance our work on integrated communicative skills through mainly collaborative tasks. It meant practising all language skills and language functions (e.g. project pitching, presenting artistic portfolios, etc.), with a special focus on ESP contents at required language levels. Such contents served as prompts for AI tools (e.g. professional phrases and collocations, idiomatic expressions, contextualised grammatical structures, varieties of English pronunciation, etc.). They were integrated through textual inputs/outputs, profession-related video clips, audio or visual materials, etc., and were AI-generated as ready-made practice tasks or partial materials to be embedded in further teacher-made activities. The AI tools were utilised for lesson preparation and materials design, while some were partly used in classes, too. The table below presents some of the tasks designed with the assistance of AI tools.

As explained above, the applied arts (AA) students were told in advance that AI would be used for lesson preparation, and were asked to use some of the tools in class (e.g., to write a brief descriptive prompt of a piece of artwork, though as detailed as possible, which AI then turned into an image; or choosing the speaker/variety of English to hear various artwork descriptions from the coursebook) (Vuletić, 2021). The dramatic arts (DA) students were not informed that AI tools would be utilised, nor required to use them themselves, though AI was utilised in the preparation of the materials (e.g. to cut excerpts from video tutorials and provide script summaries for further use, or to generate elaborate professional dialogues for communicative practice). Most applications could not provide all the materials needed (e.g. ready-made tasks or desired types of tasks), so we sometimes had to supplement an AI tool with another AI tool or additional, teacher-made handouts. In short, while some AI tools can "do the magic", it is the teacher who does the work.

It took a lot of hard work to get to know the advantages and downsides of the chosen AI tools, to prepare suitable materials, and combine them well to fulfil our own objectives and our students' needs. Now we can say that it was worth the time and effort. Despite the difference in the experimental group's and control group's awareness of the "presence" of AI in the activities, all students were very responsive. Except for seeing (or, actually) "hearing through" a solid, but still imperfect TTS pronunciation of a text in a listen-and-speak activity, when a few DA

Table 1 – AI-assisted task design for English courses in Applied Arts and Dramatic Arts

AA / Week 1	AA / Week 2	AA / Week 3	AA / Week 4
Twee	*Skybox AI Blockade Labs*	*The Natural Reader*	*Ginger Software*
matching concepts and definitions, multiple choice questions, gap filling, text summary, artwork descriptions	writing prompts for AI, text-to-image practice, lexical-semantic analysis & prompts discussion, input & output analysis	text-to-speech input: varieties of English, listening & reading, summarising the text, conversation practice	Grammar Checker, Sentence Rephraser, Translation into Eng, Text Spell Checker, Essay Checker
DA / Week 1	DA / Week 2	DA / Week 3	DA / Week 4
Twee	*Perplexity*	*TTS Maker*	*Ginger Software*
watching & listening (YouTube video), gap filling of the video script summary, relay dialogue practice	identifying collocations in generated short texts, reading & pronunciation, decoding jumbled letters, argumentative discussion	listening to the text-to-speech converted texts, job descriptions, comparing careers, festival entry proposal	Phrase of the Day, Grammar Checker, Commonly Confused & Misspelled Words, story / essay writing

students noticed "strange pauses" and "unusual pronunciation" of some text elements, the groups had no comments which could indicate their awareness of the AI-generated materials. On the scale 1-5, both teachers' assessment of students' engagement in the activities was 5. Thus, the awareness of AI-enriched tasks caused no bias in terms of students' motivation to fully participate in activities.

To evaluate the impact of technology itself on the quality of learning, we rated the AI-enhanced experience compared to traditional language lessons using the above MCA checklist and the same Likert scale. The use of the multimodal task design (our MCA criterion 7), and ready-made tasks or adaptable prompts (criterion 8) on the desired language levels (criterion 3), as well as clear layout with practical navigation (criterion 9) produced better effects than traditional teaching. Additionally, criterion 7 showed better rating in the experimental group, as students could use AI tools in class. The remaining MCA criteria for evaluating AI-assisted task design produced ratings quite similar to traditional language learning (criteria 1, 4, 5 & 6), sometimes scoring even better values for standard language tasks (e.g. criteria 2, 10, 11 & 12), which altogether included teachers' increased engagement in lesson planning and activity design, especially when additional audio-visual materials were used.

What certainly added to the quality of the experimental lessons were the variety and dynamics of the activities, which, once again, depended primarily on the teachers' classroom management. The next stage of our research provides additional proofs of how students reacted to the use of AI in the experimental stage.

Stage 4

The aim of stage 4 was hearing students' impressions after the application of AI in ESP classes at both faculties. In this post-experimental stage, the DA students were finally informed that most of the tasks done in the previous four weeks were designed with the help of AI. A few students voiced their earlier assumptions that the text read by "a native speaker" was actually digitalised speech. Otherwise, they did not mind the content or design of that or any other activity. The conversations led with students of both faculties were in the form of semi-structured interviews and focused on the activities and AI tools used in each week. The anwers were recorded in the teachers' diaries, and the basic questions asked were:

Q_1: *Describe your impressions after the lesson in which the _(name)_ AI tool was used. Related to the pre-experimental stage: were your expectations met?* - (AA students only.)

Q_2: *Did you find that lesson or activity useful / interesting / motivating?*

Q_3: *Do you see any shortcomings / downsides of utilising the AI tools that your teacher used?*

Q_4: *To what extent and in what way do you see the potential use of AI tools in future teaching of foreign languages (for specific purposes)?*

Q_5: *Do you think the teacher should recommend AI tools which students could use when learning a language (ESP) in class or on their own?*

Q_6: *Would you like to share any other impressions / opinions / attitudes on the use of AI in education not included above?*

Fully aware that AI is capable of providing high-quality support, as many of them often rely on ChatGPT, the students were still positively surprised with the quantity and diversity of language exercises rendered through the tested AI tools. In terms of skills development, they are pleased with:

- *TTS* tools, for giving voice to their arts through different varieties of English;
- *Twee* and *Perplexity* for generating excellent questions, dialogues and texts, and the possibilities they offer for further work in class discussions or individual writing;

- *Ginger Software* for enriching vocabulary and revising grammar and spelling, and
- *Skybox AI Blockade Labs* for inspiring them to improve their writing in a fun way.

These young emerging artists found the activities truly engaging and motivating, and the effects of practice tasks beneficial, as there were a lot of lively discussions and purposeful writing tasks, despite some very challenging requirements. Following some of our earlier experiences, this was achieved without limiting either the students' or the teachers' creativity, thinking skills or investigative spirit (Tanasijević & Janković, 2021: 180). For instance, based on the AI-assisted treasure hunt game they had played at the very beginning of the academic year, the dramatic arts students were asked to team up and write a short story in a literary genre of their own choice, as a synopsis for an imaginary future film/ play/ radio drama/ video game.[10] There were other highly interactive and collaborative tasks. A potential downside, in their opinion, could be if always the same tools and activities were used, or if the tools were not used again in future lessons, as observed by an applied arts student (rather jokingly).

On the other hand, regarding the extent to which AI should be used, many students state that good balance is required, well combined with the teacher's own "classic approach". Some believe there will soon be too many of such tools available, which they do not see as an advantage, since languages have always been learnt, with or without AI at hand. They appreciate the idea of teachers recommending such tools to students, and some even consider it our obligation, but they also stress that students should not overuse or misuse them. Once more, voices were heard that AI tools cannot fully replace "the human factor" in education, because "the teacher's knowledge and experience are of crucial importance", while they agree students should be taught how to use AI tools for (language) learning in ethical ways. We may, thus, conclude from the students' response in these four stages of research that our mission regarding the cognitive-affective, pragmatic and ethical aspects of AI use in language learning and teaching was fully accomplished, with some positive effects later measurable in our students' essays, exam papers and oral presentations.

Stage 5

The University of Arts in Belgrade is comprised of four institutions; apart from the Faculties of Applied and Dramatic Arts, it also includes the Faculties of Music and Fine Arts. We took an opportunity when students from all the four institutions got together (N = 23) to check their attitudes on the use of AI as well. Those were mainly students of the senior years of study, and we thought it would be wise to hear their opinions too before completing our research. The survey relied on three open-ended questions related to the use of AI in the world of art, education and life in general. It was completed anonymously. We present the majority of their answers under the three questions they were asked.[11]

Q_1: *How do you think AI can impact the life of an artist, particularly in your field of art? (e.g. the use of augmented reality in museums/galleries; the use of AI in editing, script writing, etc.)*

10 The requirements of the task were: a) lexical resource: professional collocations from the treasure hunt game; b) text length: between 150 and 200 words; c) language level: upper-intermediate-advanced; d) time allowed: 30 minutes. The teams chose to write a thriller or a horror story. The following example is an excerpt from the thriller-team's synopsis: *"In a hidden room beneath the gallery filled with curated collection of avant-garde masterpieces, a creative genius is using his technological wizardry to create his new masterpiece - an artist with a cyberpunk-inspired attire. He believes and hopes for it to be a fusion of tradition and innovation.* […]"

11 The questionnaire was printed and filled in by the students in English. Some answers may contain linguistic mistakes, and, according to the standards, they are preceded by an asterisk. The way the answers are enumerated corresponds to the students who submitted them. The missing numbers signify repetitive answers, among which we chose the more representative ones.

A1: The use of augmented reality can be beneficial and yield great results. However, I am firmly against generative AI in any art from. I believe art to be inherently human and a matter of skill and soul, neither of which is present in AI.

A2: AI can speed up * technical process, assist in concept generation, and improve visualizations in design and architecture. It enhances interactivity in museums and galleries, and streamlines editing and production. However, relying too much on AI can weaken originality and creativity. Art is deeply personal, shaped by emotions and experiences, which AI lacks. It should be a tool, not a replacement [for] artistic intuition.

A3: There can be a good side to AI for helping with some minor edits and for idea development.

A4: I'm a little bit scared about *ai in my field of expertise because I'm a writer. I think that we need to learn to use it, it can be helpful, but the truth is – it will replace us one day, and it's the sad truth ☺.

A5: I believe the fear of AI taking over is quite irrational. We should not allow AI to take control, but instead use it to our advantage! *The AI itself is a tool which works only based on our prompts and commands/demands. It helps us by reducing time, doing the work for us to *double check our texts and writing when it comes to grammatical errors, etc.

A6: In my opinion, *I think, the use of artificial intelligence can be damaging to creativity and opportunities for work. In a few years, AI will be advanced enough to completely replace artists. For traditional art it would still require some time for AI to be able to *mimique human hand.

A9: AI is already making a big impact in fashion industry. It can generate mood boards, help *sumarise trends, it can create patterns and textile designs.

A10: My field of art is graphic design and I think that's the only field that AI can have some influence *to. But it can't be anything more than a tool for help. I think artwork made by human hand can't ever be replaced with artificial intelligence, and the reason is so simple – AI doesn't have feelings. Therefore it can't express them.

A11: I think it is very *replacable if we are talking about commercial posters and logos. If we are talking about thoughtful design dealing with * topics of politics or democracy, it is hard for AI to solve those problems and create something from subjective human perspective.

A12: AI is very useful in conservation and restoration of immovable cultural heritage because it allows us to quickly and easily reach certain results that, over years of work, become routine and unnecessarily take up experts' time. Specifically, for example, space mapping, object sketching, calculating reference values… What I don't support is the excessive use of AI, which may lead to future generations that don't know how to perform those tasks.

A13: I don't think it can have any impact in my life, since I play an instrument.

A14: AI can impact the life of an artist (musician) in learning about different musical styles and history, in all kinds of research when it comes to *musicologists field.

A17: I don't think it can have any impact at all. Nothing compares to a human mind when creating any form of art.

A18: […] I think that there are no robots powered by AI that can make paintings like humans do, but in future that wouldn't be the case*, they may become better than us* but that won't matter because there will always be someone that enjoys human art.

A21: So, let's be honest, we *are all using Chat GPT on * daily basis. So, if we give *him/her

enough information about our work, it can be really helpful and inspiring.

A22: It *maybe can help with some practical things, but I wouldn't use it.

A23: It can worsen the state of minds and anything for us to be free, *specially *cuz AI doesn't know anatomy or anything.

Q2: *In what areas of life do you see AI as useful / not useful and why?*

A1: I don't see it as useful outside of making mundane life tasks faster.

A2: AI is useful in medicine, science and architecture for efficiency and analysis. It helps with organization. However, in education, young students may overuse it instead of developing critical thinking.

A3: For me, it has been useful for quick research in some difficult to navigate sites. Also for exploring topics I am not familiar enough with. But it is not useful in the long run for essays, CVs, motivational letters and such documents, because they require a more personal approach.

A4: It's useful in every area if you know how to use it, and if it's well programmed. Maybe it can't be used in * mental health field, but who knows? […]

A5: It's not useful, but also very damaging when it comes to our environment! I oppose to it as much as I believe we should use it […]. Before we indulge in using *chatgpt, we shouldn't allow it to dictate our knowledge and make us more lazy by doing our work for us! In my opinion, the only time it's acceptable to use it is to enhance the use and efficiency of our time.

A9: It's not *usefull if we start to *relie on it a lot and stop exploring by *ourself because all the answers are available on one click. I think it's useful for guidance.

A12: AI can be a good tool in any profession, but it cannot replace the professional *itself. If AI were the professional on its own, we would become redundant, because it would handle all the tasks. But in reality, I think our human element – creativity, intuition, cannot be replaced by any technology.

A13: I use it when I discover something that I don't know of, for example, random words in languages that I want to learn, or grammar.

A14: It is perhaps useful *in collecting information, but not in expanding your creativity.

A15: I see it useful as help with *unnecesery work which doesn't include creative thinking. But I think most people don't use it as they should, but more because they are lazy.

A16: It is useful in computer science, medicine, economy, as well as in mass production.

A17: "I want AI to do my laundry and dishes so that I can do art and writing, not for AI to do my art and writing so that I can do my laundry and dishes." – Joanna Maciejewska

A20: I think that AI can be useful in many areas * but in the right way.

A21: For finding artistic projects, for finding inspiration * etc. But AI often has false information, and we always need to check the info.

A22: Maybe with writing some essays.

A23: Hmmm, maybe like * tool as Siri on *iphone only, *cuz otherwise* we as *human can lose *ability of life and everyday choices.

Q3: *Which AI applications (if any) would you recommend to others to improve their language, artistic or any other skills? (Please, specify in what aspect of life you've found them useful.)*

A2: In architecture, *grasshopper aids parametric design, but still needs human creativity. AI should enhance, not replace human skills. For language learning, *duolingo or *chatgpt

could help with translation and grammar but shouldn't replace learning.

A3: I have only used *Chat-GPT, but that also was only for some information I couldn't find otherwise.

A4: Grammarly or even ChatGPT, but you need to use it *smart, only to gain the knowledge.

A5: *Chat gpt, *Deep Seak, Midjourney – I found them useful when I spent hours on a certain essay, but due to my deadline I didn't have enough time to reread it so I checked the grammar using *Chat gpt. Also using Midjourney to get some inspiration for some ideas I've had or just out of sheer curiousity.

A6: The most famous one currently would probably be *Chat GPT. It's useful in helping to articulate your words carefully and more *proffesionally. […]

A7: I don't use AI that much, just for my calorie intake, and maybe for some life advice (so I don't start overthinking *xD). But when I use it, I use *Chatgpt.

A8: I only use *Chat GPT. I find it useful for * variety of reasons. *Typo and email conversations, making emails more formal and *proffesional. When visiting a foreign country, I often use AI to help me find cool places to explore, such as restaurants, museums…

A10: I would recommend *chat gpt for correcting grammar and searching for information.

A12: I personally still don't use AI, but that's just because I'm generally not inclined toward technology. […]

A13: *Chat GPT for grammar.

A15: *Chat GPT is the only one I used while looking for more *proffesional texts.

A17: I wouldn't suggest any*, it can be helpful, but also dangerous and addictive, *so-called "the easy way out".

A18: I never used AI for learning * foreign language but I used it for doing homework and it sped up the process ten times. I would *recomend it for that, to save valuable time.

A19: It can help with writing sample texts when you don't have any *inspo, or don't know where to start.

A20: I don't know any of them.

A21: *CHAT GPT ♡ ♡

A22: I don't use them.

A23: No *i don't know any.

We encouraged our respondents to answer the questions frankly, wishing to improve our work by taking into consideration their opinions on the discussion topics, materials and digital tools suitable for their own and future generations. What mattered most was the content of their answers. With reference to the cognitive and pragmatic domains, the students' answers mainly confirm our previous findings on the usefulness and effectiveness of AI tools, with ChatGPT being the favourite choice of many (52%), while some students have not yet had any experience with such tools, or show no interest in them (22%). What added depth to the findings was the young artists' testimony in the affective domain, which clearly reveals a disinclination towards AI in the emotional and inspirational, i.e., genuinely human approach to art, whereas they find certain applications acceptable for pragmatic everyday purposes. Several honest answers and insightful observations that address ethical approaches to AI usage in education (e.g. in terms of writing essays or checking their quality) reveal both an inclination and reservations towards it. Reasonable fears of potential prevalence of the artificial factor in many spheres of human activity on the one hand, and well-grounded argumentation against it on the other hand, corroborate the theoretical considerations from the beginning of our paper. Overall, we

may conclude there is a reasonable dose of critical thinking among our young creative respondents.

An additional relevant conclusion for us as reflective teachers is our own need to enhance certain areas of teaching, such as spelling, punctuation, and the use of articles. We shall attribute the usage of emoticons and colloquialisms (e.g. clippings) in some of the answers, as well as a relaxed manner in writing some others, to our initial call for openness in providing the responses. In general, the one aspect of writing which seriously calls for action regarding functional literacy among younger generations is following certain standards in formal writing, especially capitalisation, as opposed to the instant messaging style.

A modern linguistic feature worth both teachers' and students' attention, and actually a lesson learnt for us too, is acknowledging the official proper names of digital tools, as the so-called CamelCase trend seems to have become a widely adopted branding convention in the world of technology. Following the values that we promote by this very research, we shall admit that it was through AI that we learnt the basic facts about this new convention, including the above name of 'TheTrend'. Sharing the same values as our students, we have concluded that we ourselves must restrict the use of AI for educational purposes as much as possible, bearing in mind its environmental impact. This will not be difficult to achieve, since the materials designed for this generation of students will be perfectly suitable for future attendees of our ESP courses for artists.[12]

12 We initially planned to reuse the materials during the 2024/2025 academic year. However, as of November 2024, due to human error and ethical failure on one side, and a massive affective response awakened on the other, our country has been shaken by social discord, due to which our academic endeavours have been disrupted and severely punished. Grateful for all the support we are receiving from scholars and researchers locally and internationally, we truly hope our academic activities will soon be resumed.

Conclusion

Social inclusion and employability largely depend on personal development. With the ongoing digital revolution, keeping up with the times has become a must and a need. Student-centredness has transformed the role of the teacher into that of a guide and facilitator; traditional textbooks are giving way to digital formats; teaching and learning are done on-site and online, while classroom interactions seem to have got a new member on the team: artificial intelligence. The aim of this research was to test the advantages and/or disadvantages of including that same new "member" in our educational circles. In particular, we were interested to see if the use of certain AI tools in our EFL/ESP lessons would enhance our students' motivation to engage in communicative activities, and our own teaching as well. Another methodological aim underlying such a choice was improving our students' linguistic, sociolinguistic and pragmatic competence through the use of AI-assistive technology. Our research showed positive results in both respects, while not at all diminishing the teacher's role in standard approaches to language teaching. These results were measurable through our research instruments, as well as formative assessments in classroom discussions or students' written assignments, and summatively through students' exam papers or oral presentations. As reflective practitioners, we have also learnt which aspects of art students' language use require instructional reinforcement, and which topics figure prominently in their reasoning.

Preparations for such lessons and the research itself required careful consideration of the cognitive-affective, pragmatic and ethical domains of learning and teaching. Organised in five stages, which included interviewing students before and after the experiment, selecting and testing AI tools in classes and conducting a survey, our endeavours resulted in findings which largely corroborate literature-based conclusions. Students see both positive and negative aspects of using artificial intelligence in educa-

tion, artistic work and life in general. They consider it acceptable in a pragmatic way, mainly as technical support in mundane tasks, or as a tool which can help them improve their learning. However, the role of the teacher, in their opinion, still remains central to good class organisation and striking balance between the human-made and AI-based tasks. A lot of them tend to use AI tools (mainly ChatGPT) to meet certain personal or academic needs. However, as emerging artists, they do not welcome the idea of artificial intelligence taking over their essential role as art creators or insightful thinkers, although they may accept the support of some AI tools in practising language for general or artistic purposes.

Therefore, we can now answer the questions from the beginning of our study. This research has shown that new classroom dynamics do not deepen the gaps between teachers and students, but rather strengthen the bond by inducing the feeling of greater democratisation in education. According to our findings, centralised teacher control only reduces, without any prospects of the teacher becoming only a human agent fully replaced by the implementation of AI. Especially important for our students of dramatic and applied arts, as well as their colleagues studying music and fine arts, is the fact that such new adaptive approaches to learning and teaching do not and cannot limit their personal creativity or critical thinking.

During the entire process, we also dealt with the issue of the environmental impact of AI, starting from planning our research, through classroom discussions and interviews, or online meetings within professional communities of practice, to the final stage, when students shared with us their thoughtful observations in the survey. The conclusion is that raising awareness about the potential negative impact of using AI in education and life in general is as important as acknowledging its advantages. Additional personal encounters with other professionals and the opinions we exchanged have confirmed to us that relying on human experts is certainly much more rewarding than inquiries made through artificial intelligence, however helpful it may be.

Learning languages evidently means much more than just doing exercises or reading important texts. In the era of intensified migrations, knowing languages does not only prepare us for intercultural encounters in the plurilingual world. Communication with others implies understanding a variety of social factors and circumstances in which we share professional experiences or exchange personal points of view. Artificial intelligence tools and innovative channels of communication are welcome if they support, rather than hinder, our overall growth and mutual understanding. Through history, directly or indirectly, artists have acted as cultural diplomats, as keepers of tradition or bearers of change. They have given the world new forms and styles, new sounds and colours – the distinctive features that could be imparted to it only by an unmistakably human touch.

References

- CEFR (2020). *Common European Framework of Reference for Languages: Learning, Teaching, Assessment. CEFR Companion Volume.* Council of Europe. https://www.coe.int/en/web/common-european-framework-reference-languages/cefr-descriptors
- Chun, D., Kern, R., & Smith, B. (2016). Technology in Language Use, Language Teaching, and Language Learning. *The Modern Language Journal*, *100*, 64–80. https://doi.org/10.1111/modl.12302
- Duraiappah, A., et al. (2020). *Rethinking Learning: A Review of Social and Emotional Learning for Education Systems.* UNESCO.
- Godwin-Jones, R. (2019). In a World of SMART Technology, Why Learn Another Language? *Journal of Educational Technology & Society*, *22*(2), 4–13. https://www.jstor.org/stable/26819613
- European Union (2021). *EUR-Lex. Proposal for a Regulation of the European Parliament and of the Council – Laying Down Harmonized Rules on Artificial Intelligence (Artificial Intelligence Act) and Amending Certain Union Legislative Acts*. https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A52021PC0206
- Hanandini, D. (2024). Social Transformation in Modern Society: A Literature Review on the Role of Technology in Social Interaction. *Jurnal Ilmiah Ekotrans & Erudisi*, *4*(1), 82–95. https://doi.org/10.69989/j0m6cg84
- Janković, N. (2024). The IN-learning paradigm of contemporary education. U R. Šimonji Černak i M. Jelić (ur.). *Alternativa i obrazovanje* (*Alternative and Education*) (str. 199–213). Unverzitet u Novom Sadu, Pedagoški fakultet u Somboru.
- Janković, N., i Ristić, M. (2018). Hand in hand – developing university teachers' and pre-service teachers' cross-curricular competences. In Z. Zacłona, & I. Radovanović (Eds.). *Chosen issues of education in the modern era* (pp. 38–50). State University of Applied Sciences – Teacher Education Faculty.
- Janković, N., i Večanski, V. (2020). Educating pre-service teachers for integrated English language and Art activities with young learners. *The teaching and learning process organization*. Teacher Education Faculty – State University of Applied Sciences.
- Jaworski, A. (2014). Metrolingual art: Multilingualism and heteroglossia. *International Journal of Bilingualism*, *18*(2), 134–158. https://doi.org/10.1177/1367006912458391
- Kipo, D. D. (2014). Agency-Structure Relation in Social Sciences: Reflections on Policy Implementation, *Asian Social Science*, *10*(2), 18–26. http://dx.doi.org/10.5539/ass.v10n2p18
- Kissinger, H. A., Schmidt, E., & Huttenlocher, D. (2021). *The Age of A. I. And Our Human Future*. John Murray Publishers.
- Kisindžer, H., Šmit, E., Hatenloker, D. (2022). *Doba veštačke inteligencije i naša ljudska budućnost*. Klub PLUS.
- Kurt, S. (2023). *Connectivism Learning Theory.* Educational Technology. https://educationaltechnology.net/connectivism-learning-theory/
- Lukić, J., Ristić, M., & Blagdanić, S. (2020). Model Blumovog digitalnog točka u nastavi Prirode i društva. *Metodička praksa*, *1*, 61–74. https://doi.org/10.5937/metpra2001061L
- Maly, I. (2024). AI, power and sociolinguistics. *Journal of Sociolinguistics*, *28*(5), 11–15. https://doi.org/10.1111/josl.12681

- Martinez, S-A., Ali, S., & Mangusheva, K. (2025). Expertise in the Workplace:The Lifelong Pursuit of Eminence in Professional Practice. *Inovacije u nastavi*, *38*(1), 14–26. https://doi.org/10.5937/inovacije2501014M
- Orwell, G. (1946). *The Prevention of Literature*. https://www.orwell.ru/library/essays/prevention/english/e_plit
- Ovesni, K., Matović, N., & Radović, V. (2025). Lifelong Learning as a Research Topic in European Journals: Prevalence, Subjects, and Types of Research. *Inovacije u nastavi*, *38*(1), 59–76. https://doi.org/10.5937/inovacije2501059O
- Pitsoe, V. J., & Vlăduțescu, Ș. (2024). A critical analysis of Foucault's power and knowledge in Higher education research. *Social sciences and education research review*, *11*(1), 41–51. https://doi.org/10.5281/zenodo.15258133
- Reed, E., & Johnson, B. (2023). Overview of cultural capital theory's current impact and potential utility in academic libraries. *The Journal of Academic Librarianship*, *49*(6), 102782. https://doi.org/10.1016/j.acalib.2023.102782
- Ribarić, I. (2010). Globalizacija i ljudski um. *Facta universitatis – series: Philosophy, Sociology, Psychology and History*, *9*(1), 15–21.
- Rubenson, K. (2019). Assessing the status of lifelong learning: Issues with composite indexes and surveys on participation. *International Review of Education*, *65*(2), 295–317. https://doi.org/10.1007/s11159–019–09768–3
- Schwartz, S. H. (2012). An Overview of the Schwartz Theory of Basic Human Values. Online Readings in Psychology and Culture. *International Association for Cross-Cultural Psychology*, *2*(1), Article 11. https://doi.org/10.9707/2307-0919.1116
- Tanasijević, M., & Janković, N. (2021). The New Virtual Reality – Teachers' and Students' Perceptions and Experience in English Language Learning and Teaching Online. *Inovacije u nastavi*, *34*(4), 167–186. https://doi.org/10.5937/inovacije2104167T
- Tessema, D. (2021). Technological Determinism versus Social Determinism: A Critical Discussion. *Ethiopian Journal of Science and Sustainable Development*, *8*(2), 65–72. https://doi.org/10.20372/ejssdastu:v8.i2.2021.250
- Thapa, R. (2019). Art, Human Condition and Beyond. *Journal of the Institute of Engineering*, *15*(2), 231–235. https://doi.org/10.3126/jie.v15i2.27671
- Tuomi, I. (2018), The Impact of Artificial Intelligence on Learning, Teaching, and Education. In M. Cabrera Giraldez, R. Vuorikari, & Y. Punie (Eds.). *JRC Publications* (pp. 2–10). Publications Office of the European Union. https://doi.org/10.2760/12297
- Vernyuy, A. (2024). Impact of Technological Advancements on Human Existence. *International Journal of Philosophy*, *3*(2), 54–66. https://doi.org/10.47941/ijp.1874
- Vuletić, A. (2021). *English for Art and Design – A Sourcebook with Exercises.* Faculty of Applied Arts.
- Vuletić, A., & Janković, N. (2023) An outline of effective teaching strategies from tertiary level ESP classrooms: the reflective practitioners' perspective. *Education today – different approaches, same goal* (171–189). Teacher Education Faculty – State University of Applied Sciences.
- Vuletić, A., & Orašanin, A. (2022) Conservation Terms for Wall Paintings and Architectural Surfaces: Do We Have a Word in This Race? *Art and Science Applied: Experience and Vision, Smart Art*, *2*, 545–564. https://doi.org/10.18485/smartart.2022.2.ch29

- Wang, J., Jin, G., & Li, W. (2023). Changing perceptions of language in sociolinguistics. *Humanities and Social Sciencies Communications*, 10, Article 91. https://doi.org/10.1057/s41599-023-01574-5
- Wei, Y. (2022). Toward Technology-Based Education and English as a Foreign Language Motivation: A Review of Literature. *Frontiers in Psychology*, *13*.https://doi.org/10.3389/fpsyg.2022.870540
- Williams, L. (2017). Sociolinguistic Insights into Digital Communication. In S. Thorne, & S. May (Eds). *Language, Education and Technology. Encyclopedia of Language and Education*. Springer, Cham. https://doi.org/10.1007/978-3-319-02237-6_6

Наташа З. Јанковић
Универзитет у Београду, Факултет за образовање учитеља и васпитача, Београд, Србија

Александар Ђ. Вулетић
Универзитет уметности у Београду, Факултет примењених уметности, Београд, Србија

ОД УМЕТНОСТИ КАО ЉУДСКЕ ДЕЛАТНОСТИ ДО ВЕШТАЧКЕ ИНТЕЛИГЕНЦИЈЕ И НАЗАД: ПРАКТИЧНА ИСКУСТВА СА УНИВЕРЗИТЕТА

На универзитету се не стичу само знање, вештине и професионалне компетенције; то је интелектуални центар у коме се развија критичко мишљење и формирају основне људске вредности. Језик, уметност и култура нас одређују као друштвена бића. Овај рад испитује когнитивно-афективне, прагматичке и етичке аспекте примене алата вештачке интелигенције у настави Енглеског језика струке за уметнике, предмета од кључног значаја за њихова будућа занимања и међународну сарадњу. Она подразумева контекстуализовану примену језика путем посебно осмишљених материјала, активности и створених прилика. Циљ нашег истраживања био је испитивање образовних потенцијала, тј. предности и/или недостатака примене алата вештачке интелигенције (ВИ) у развоју комуникативне компетенције студената уметности у универзитетској настави Енглеског језика струке.

Реализовано у пет фаза, истраживање се заснива на комбинованом приступу. Спроведено је током академске 2023/2024. године и на самом почетку 2024/2025. Учесници су студенти Факултета драмских уметности и Факултета примењених уметности Универзитета уметности у Београду, као и студенти још два факултета уметности у последњој фази истраживања (N=192).

***Фаза 1** заснива се на вишекритеријумској анализи алата ВИ. Установили смо контролну листу са дванаест битних критеријума, која нам је помогла да оценимо и одаберемо следеће алате ВИ за експерименталну фазу: Twee, Perplexity, TTS Maker и Ginger Software за драмске уметности, односно Twee, Skybox AI Blockade Labs, TTS Natural Reader и Ginger Software за примењене уметности. Полуструктурисани интервју **Фазе 2** показао нам је да студенти експерименталне групе сматрају ВИ корисном, примамљивом и прагматичном, напомињући да и студенти и наставници треба умерено да је користе. Осим тога, желели смо да утврдимо да ли ће свест о употребљеним алатима ВИ у осмишљавању задатака бити условна варијабла, односно да ли ће чинити фактор разлике у односу на активност контролне групе. Емпиријском методом у **Фази 3** установили смо да су студенти и експерименталне и контролне групе једнако мотивисани да учествују у активностима. Мерили смо и ефикасност саме технологије поређени активности креиране уз помоћ алата ВИ са уобичајеним активностима у настави језика. На основу контролне листе из Фазе 1, четири критеријума су показала предност наставе обогаћене елементима ВИ, четири критеријума су произвела оцене сличне традиционалној настави језика, док су четири критеријума указала на предност стандардних језичких задатака. Додатно ангажовање наставника*

током планирања часова, припреме активности и њихове реализације свакако је допринело да часови буду разноврснији и динамичнији. Полуструктурисани интервју ***Фазе 4*** *потврдио је да су учесницима активности на овим часовима биле веома занимљиве, мотивишуће и корисне. Ипак, упркос томе што их сматрају препоручљивим, студенти не виде брзи напредак алата ВИ као предност. Према некима од њих, студенте треба учити како да се служе алатима ВИ на етички начин, без њихове прекомерне или погрешне употребе. И у овој фази чули су се коментари да алати ВИ не могу у потпуности да замене „људски фактор" у образовању „зато што су знање и искуство наставника од пресудног значаја".*

У ***Фази 5****, централној фази овог рада, студенти Факултета музичке уметности и Факултета ликовне уметности придружили су се колегама са Факултета драмских и Факултета примењених уметности и путем упитника изразили своје ставове (N=23) о примени ВИ у свету уметности, у образовању и свакодневном животу. У когнитивном домену, њихови одговори потврђују наше претходне налазе о корисности и ефикасности алата ВИ, при чему је ChatGPT омиљени избор многих испитаника, мада има и студената са мало искуства у њиховој употреби или оних које такви алати не занимају. Иако неке апликације сматрају прихватљивим из свакодневних прагматичних разлога или корисним у образовању (на пример, за потребе претраживања, писања есеја или провере граматике), разматрајући их и са етичке тачке гледишта, студенти показују уједно и склоност и резервисаност према употреби ВИ. Оно што је дало посебан тон овим налазима су сведочења студената у афективном домену. Као и у претходним фазама, већина ових младих уметника показује ненаклоност према ВИ када је у питању онај емоционални и инспирацијски, односно дубоко људски приступ уметности. Њихови рационални страхови и чврста аргументација подударају се и са теоријским разматрањима са почетка нашег рада.*

Водећи нас од уметности као људске делатности до вештачке интелигенције и назад, наше истраживање је истакло значај ове теме за будуће часове дискусије, нарочито на курсевима страног језика уметничке струке. Показало нам је, као рефлексивним практичарима, и којим областима треба да посветимо више пажње у свом раду. С обзиром на број учесника у овом испитивању, нарочито у Фази 5, наредна истраживања могла би да се заснивају на истим питањима са већим бројем испитаника – студената уметности или већ остварених уметника.

Овај рад потврђује да, уз умерену и промишљену примену, вештачка интелигенција може да буде додатна помоћ у свету уметности, у образовању и свакодневном животу. Куда нас води вештачка интелигенција – остаје да се види. Као амбасадори културе, чувари традиције и носиоци промена, уметници су свету дали нове облике и стилове, нове звукове и боје – управо оне одлике које је несумњиво, све до сада, могла да му подари само људска рука.

Кључне речи: *студенти уметности, интеракција, вештачка интелигенција (ВИ), високо образовање, Енглески као страни језик струке*