

Humanising Digital Language Education 5.0 through a Freirean Lens

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Abstract. The current paper employs the ontological and epistemological principles of critical pedagogy, namely Freire's approach, to contemporary foreign language education by aligning his key tenets to the requirements set for both teachers and students in AI Guidelines. Document analysis highlights opportunities and challenges that, in a Freirean sense, are required to defy the *banking concept* of education by yielding *conscientization* and *praxis* in order to diminish *student-teacher dichotomy* and reach *dialogue*. The present conceptual analysis reinvents Freirean insights to provide implications for a humanised approach towards GenAI employment for language teacher education and their continuous education renewal.

Keywords: foreign language education, AI guidelines, GenAI, Freire, critical pedagogy.

Humanizuoti skaitmeninį kalbų mokymą 5.0 per Freire'o prizmę

Santrauka. Šiame darbe pasitelkiami ontologiniai ir epistemologiniai kritinės pedagogikos principai, ypač Freire'o požiūris į šiuolaikinį užsienio kalbų mokymą, pritaikant pagrindinius principus su DI gairėse išryškinamais reikavimais mokytojams ir studentams. Dokumentų analizė pabrėžia galimybes ir iššūkius, kurie, Freire'o požiūriu, turi nepaisyti *bankinės švietimo* koncepcijos, siekiant *sąmoningumo*, *teoriją įgyvendinančios praktikos* tam, kad būtų sumažinta *mokinio ir mokytojo dichotomija* bei pasiektas *dialogas*. Šioje konceptualioje analizėje yra suteikiamas modernus žvilgsnis į Freir'o įžvalgas, kurios turi įtakos humanizuotam požiūriui į generatyviojo DI taikymą rengiant kalbų mokytojus bei jų išsilavinimui nuolat atnaujinti.

Pagrindiniai žodžiai: užsienio kalbų mokymas, DI gairės, generatyvusis DI, Freire, kritinė pedagogika

Introduction

The world and education have continuously been experiencing changes and advancements as a result of industrial revolutions which commenced in the 18th century with the first one (Industry 1.0), the second (Industry 2.0) from 1870 to 1914, the third (Industry 3.0) with the emergence of personal computers and the Internet, and developed up to the fourth industrial revolution (Industry 4.0) with its significant advancements in artificial intelligence (AI), robotics, virtual reality (VR), and blockchain (Meniado, 2023). In the sense of digital development, language education has always been education-technology

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advanced as a result of *Mobile-Assisted Language Learning* (MALL), *Computer-Assisted Language Learning* (CALL), and *Intelligent Computer-Assisted Language Learning* (ICALL) (Pokrivčáková, 2019). For the past few years, there have been major advancements, and some challenges have also arisen not only as a result of the COVID-19 pandemic, but also due to the release of OpenAI's *ChatGPT* at the end of 2022. Both the causes of the pandemic and the penetration of *Generative Artificial Intelligence* (GenAI) into educational processes have determined the emergence of new tools and practices to support a smooth shift from Industry 4.0 with its versatile educational processes to Industry 5.0 that requires sustainable actions by humans (European Commission, 2022; Meniado, 2023). Even though different versions of Industry 4.0 with its digital tools and practices have influenced the emergence of novel ways of learning, the adoption of innovative teaching and assessment technologies have also brought threats related to cyber-security, human welfare, and diminished students' critical thinking skills (Grabowska et al., 2022; Kildè, 2023; Meniado, 2023). Such an ongoing shift has raised doubts regarding the ways learners and teachers are trained, gain new knowledge, develop adaptable skills, and, most importantly, it has caused concerns towards the replacement of teachers by AI. According to the European Commission (2022), the drawbacks caused by the newly emerged and continuously penetrating technologies of Industry 4.0 pose a call for sustainable actions which would foster the transition to a new paradigm, which is Industry 5.0. A human-centric approach, inclusion, sustainability, and resilience are the key qualities not only of Industry 5.0, but also of Education 5.0 that corresponds to the technological developments of Industry 5.0 emphasised by a human-machine collaboration (Dixson-Declève et al., 2022; Meniado, 2023; Grabowska et al., 2022).

In order to cope with the challenges brought by AI-powered technologies as well as their penetration into educational processes, the European Commission (2022) released *Ethical Guidelines on the Use of Artificial Intelligence and Data in Teaching and Learning for Educators*. The aim of the Guidelines, which are also a part of the Digital Education Action Plan (2021–2027), is to provide adequate support for teachers and students in the process of teaching and learning. It has been highlighted that the processes of teaching, learning and assessment can be enhanced with the adoption of AI systems only if they are properly and attentively employed, as, otherwise, this could evoke detrimental consequences. As a result, it is urged in the Guidelines (2022) that educators would emerge in an incremental learning process with “questions whether AI systems they are using are reliable, fair, safe and trustworthy and that the management of educational data is secure, protects the privacy of individuals and is used for the common good” (p. 11). The purpose of these ethical guidelines on AI and data usage in teaching and learning is to aid educators in perceiving AI potentials in education and develop their understanding towards its risks, which would result in a more critical and ethical engagement.

Another significant and recently established document related to the regulations of AI is *The EU Artificial Intelligence Act* established by the European Parliament, which came into force in June, 2024, and which recognises a positive impact of AI by drawing attention to particular rules applicable for AI-enhanced environments. The documents of

which the main concern is the use and application of AI oblige educators to enhance their body of knowledge towards AI adoption that would serve not only innovative, but also ethical education. On top of the ever-lasting encouragement to apply cutting-edge technologies into teaching and learning processes since the emergence of MALL, CALL, and ICALL as well as an urge to react to technological advancement and acquire new knowledge and skills to adopt GenAI into educational processes, foreign language teachers might find themselves under a certain amount of pressure and confusion on how to conduct lessons in a human-centric, interactive, and ethical way. The question arises of how teachers navigate between the challenges, risks and barriers as well as the opportunities of cutting-edge AI technologies that would result in a humanised teaching and learning process.

The lens of Paulo Freire's critical pedagogy provides valuable insights towards a humanised approach when balancing between performing as innovative educators and responding to the challenges highlighted in the AI regulations and guidelines. Since AI is still considered to be a new concept, it raises concerns on how it will influence the overall language curriculum, including instruction and assessment in the post-pandemic digital age, a student-teacher relationship in the classroom, and what competencies pre-service and in-service language teachers are required to be able to implement it in their own language teaching contexts (Alm and Watanabe, 2023; Meniado, 2023; Grabowska et al., 2022). Foreign language teaching and learning contexts in particular present a huge number of opportunities for the employment of AI-driven technologies. It is argued that digital learning definitely increases access to education globally, but it has already raised concerns and contributed to the emergence of the problems described by Freire. The tenets of Freire's critical pedagogy arose mainly from his work *Pedagogy of the Oppressed* (1970), which is valued as one of the greatest educational theoretical works to have ever been written with the goal to humanise education by enhancing critical consciousness. North American education, for instance, has been obsessed with Freire's ideas that are applied as "the Freirean method in classrooms" that encompasses teachers' attempts to enhance interaction with students or "empower" them to freely express ideas (Aronowitz, 2012, p. 257). Corresponding to the spread of digitalisation, Freire's insights have been applied by researchers to increase educators' awareness on online learning, critical media literacy as well as teaching and learning peculiarities in the current digital age despite the fact that his ideas had emerged even before the pre-Internet era, in the times of Industry 2.0 (Alm and Watanabe, 2023; Boyd, 2016; Farag et al., 2021; Zuin and Rodrigues de Mello, 2024). In Lithuania, Freire's ideas were considered in the perspective of religious education (Duoblienė, 2008), ecopedagogy (Tuleikytė, 2022), applied linguistics, namely, Lithuanian language literacy (Vaicekauskienė et al., 2022). However, to the best of the author's knowledge, Freire's ideas have not been applied in the sense of qualitative document analysis in relation to *Digital Language Education 5.0*. As a result, the aim of this paper is to conceptually modernise the tenets of Freire's critical pedagogy throughout the AI guidelines that would serve as a humanised and state-of-the-art approach to language education. It is discussed how language teachers can enhance

and practically apply the tenets that would effectively deal with the barriers and risks caused by AI-powered technologies as well as resolve a classroom dichotomy between a teacher and a student, especially during the ongoing penetration of AI. Freire's concepts related to the enhancement of a mutual learning relationship determined by the notion of *conscientization*, critical consciousness, are further aligned with the core notions of the regulations and guidelines. The current analysis addresses Digital Language Teaching 5.0 with its AI penetration and implication into language education that enriches our understanding of required teacher responsibilities and competencies not only for successful AI-driven technology integration, but also develops a holistic and humanised approach that plays an important role for teacher education and their education renewal in Digital Language Teaching 5.0. Consequently, the present qualitative analysis aims to answer the following research questions:

1. How do the AI regulations and guidelines correspond to the tenets of Freire's critical pedagogy?
2. How does the reinvention of Freirean principles contribute to the enhanced perception of humanised language education?
3. What are the solutions to the arisen challenges based on a Freirean lens?

A qualitative research technique to overview the research literature as well as analyse the official AI regulations and guidelines is employed for conducting a qualitative content analysis in the present study. The sample of documents covered in this qualitative analysis comprises of the *EU Artificial Intelligence Act* (European Parliament, 2024), *Ethical Guidelines on the Use of Artificial Intelligence and Data in Teaching and Learning for Educators* (European Commission, 2022), and *Information and Communication Technologies Competency Framework for Teachers* (UNESCO, 2011).

Banking of Education for the Digitally Oppressed

The key tenet of Freire's critical pedagogy is a metaphorically described dehumanising educational process which was referred to as 'the banking of education' by portraying teachers as bank clerks who deposited information into students. A hierarchical process resembles the placement of a deposit into a bank, where students are treated as depositories and passive recipients, whereas teachers are visualised as depositors of knowledge (Alm and Watanabe, 2023; Farag et al., 2021; Tuleikytė, 2022). During Freire's time, it actually referred to the workers who "were converted into things by a work structure in which they were perpetually controlled by the landowners" (Tan, 2018, p. 371). The banking concept of education is treated as an eminent means of dehumanisation that is featured by "mechanical transference, machine-like memorisation, and reduction of students to 'containers' to be deposited by the teacher" (Tan, 2018, p. 371). By the notion of banking, Freire agitated for the enhancement of written literacy in order to be able to meaningfully participate in a political life. Nowadays the banking of education may refer to digital literacies as well as the education of the digitally oppressed due to an

increasing penetration of AI technology and the threats it poses related to discrimination and inequalities (Farag et al., 2021; Rettberg, 2022). The same prominence is noted in the following excerpt: *“Aside from the many beneficial uses of AI, it can also be misused and provide novel and powerful tools for manipulative, exploitative and social control practices. Such practices are particularly harmful and abusive and should be prohibited because they contradict Union values of respect for human dignity, freedom, equality, democracy and the rule of law and fundamental rights enshrined in the Charter, including the right to non-discrimination, to data protection and to privacy and the rights of the child”* (European Parliament, 2024).

Considering worldwide technological mediation through linguistic lenses, discrimination and inequalities arise due to linguistic hegemony caused by the prompts while using AI tools as these tools are created mainly in English, and thus they establish over-reliance on the values and customs of the Anglosphere without any adjustment to other cultures, which results in “monocultural biases associated with its Anglo-centric training data” (Alm and Watanabe, 2023, p. 20). The aforementioned monocultural biases represent the hierarchy of the global world languages of the main empires, including English, French, Spanish, Russian, Portuguese, Chinese, that also illustrate the possibilities to obstruct the described hegemony (Egan, 2020). Here, both teachers and learners are encouraged to adopt critical thinking while designing specific prompts when using different chatbots (Alm and Watanabe, 2023, p. 20). In terms of Digital Language Education 5.0, the benefits of interactive AI applications on learners’ productive and receptive language skills do not outweigh the risks of the training data, namely, prompts, as well as the spread of bias. Even though Freire never objected to technology integration for pedagogical purposes, the importance of adopting it for valuable and humanising purposes related to the enhancement of students’ communicative and critical thinking abilities was continuously highlighted (Kahn and Kellner, 2007). A similar notion can be observed in the following excerpt: *“The deployment of AI systems in education is important to promote high-quality digital education and training and to allow all learners and teachers to acquire and share the necessary digital skills and competences, including media literacy, and critical thinking, to take an active part in the economy, society, and in democratic processes”* (European Parliament, 2024).

A Dialogue to Diminish Student-Teacher Dichotomy

Freire strongly advocated against the teacher and student contradiction, which he referred to as dichotomy. He referred to a solution of this dichotomy by highlighting the need for the reconciliation of “the poles of the contradiction so that both are simultaneously teachers and students” (Freire, 1968, p. 46). He believed in an equal relationship of the two, where a teacher is assigned the activities of initiating dialogues and guiding students through them. Freire outlined it as a relationship that provokes a humanised educational experience by rejecting merely instrumental and monologic approaches to educational processes (Tuleikytė, 2022). Despite the fact that language teachers have

always been different from the teachers of other subjects as a result of continuous involvement in interaction with their learners (Yao and Slater, 2024), dialogue is still of the utmost importance in AI-powered settings. Moreover, even though there is a higher level of freedom that remains for students as a result of a diminished dichotomy, it should encourage a search for adequate balance between freedom and authority that would boost learners' willingness to "recreate knowledge and reconstruct reality" (Tan, 2018, p. 377).

In language education, the concept of the banking of education refers to a dichotomous educational process, where learners are simply provided with grammar rules, reading comprehension texts or lists of new words without any relevant context and asked to mechanically memorise all of these. This is the process that Freire would name "narration sickness", where teachers, as being narrators, turn their students into containers who are asked to "mechanically memorise the narrated content" (Freire, 1968, p. 62). In terms of *Digital Language Education 5.0*, vocabulary enhancement, grammar proficiency as well as the improvement of speaking and listening skills have appeared to be the perks of AI-powered technologies (Baker et al., 2019). AI-powered technologies are assessed to solve the issue of a conventional foreign language teaching process by fostering interactive and collaborative educational experiences, which can be exemplified by *ChatGPT* adoption in foreign language classes, where strategically appropriate prompts enable personalised and contextual tasks based on each learner's distinct experiences (Alm and Watanabe, 2023; Hong, 2023). By possessing a conversational capability, *ChatGPT* performs as an "independent agent" for classroom dialogues, where "the conversation with active users within a certain classroom context further becomes training data for *ChatGPT*, which allows it to grow accuracy and sensitivity in conversations by gaining a higher level of context-specific knowledge" (Swindell et al., 2024, p. 6). Such experiences evoke a dialogue between teachers, students, and technologies, where teachers strategically design AI-driven tasks by enabling a learner-centred approach. A dialogue that reduces "vertical, hierarchical relationships" (Tuleikytė, 2022, p. 154). This is in line with the *Global Education Agenda 2030*, where Sustainable Education goal 4 refers to inclusive, lifelong and equal learning opportunities for everyone. The dichotomy between teachers and students that usually appears as a result of conventional instruction methods can be diminished with the help of collaborative and interactive learning, as observed in the following excerpt: "*AI can help advance collaborative learning. One of the most revolutionary aspects of computer-supported collaborative learning is found in situations where learners are not physically in the same location. It provides students variable choices insofar as when and where they wish to study. In respect to computer-supported collaborative learning, online asynchronous discussion groups play a central role. Based on AI techniques such as machine learning and shallow text processing, AI systems are used to monitor asynchronous discussion groups, thus affording teachers with information about learners' discussions and support for guiding learners' engagement and learning*" (UNESCO, 2019, p. 12). It also aligns with the statement by Lina Markauskaite et al. (2022) who stress that, in an AI-powered classroom, personalised feedback on the application of certain learning practices, including AI-driven prompts,

and their effectiveness must be provided by teachers. In other words, teachers play a central role while striving for advanced collaborative learning experience.

Referring to AI in education, European Commission (2022) has distinguished three cases in which AI is adopted to facilitate teaching and learning, namely, student teaching, student supporting, and teacher supporting. The cases that nowadays provide room for, as Freire would call it, dialogue. However, it is noteworthy to highlight the point that overreliance on *ChatGPT* may decrease “opportunities for teacher-student interaction and the critical co-creation of knowledge (Alm and Watanabe, 2023, p. 23). In the context of student teaching in Digital Education 5.0, when AI is integrated to teach students, it entails language learning applications, such as different language courses, or dictionaries with the function to provide real-time automated feedback on pronunciation, comprehension, and fluency. When in search of a dialogue, teachers can integrate AI to support student learning by implementing AI-supported collaborative learning, where data on each learner’s distinct type of learning and previous performance can be used for assigning them into group work and monitored accordingly. Lastly, AI can be adopted to support teachers in writing assessment as vocabulary choice, grammar and sentence structures can be graded by certain AI systems and machine learning techniques (European Commission, 2022). These three cases exemplified by AI adoption in educational settings are in line with Freire’s encouragement to establish novel ways of instruction, methodologies, and new relationships between the ones who strive for knowledge and advanced technological developments (Boyd, 2016).

Despite such perks as a dialogue which positively influences collaboration, interaction and engagement, the risks posed by AI-powered technologies might hinder educators’ willingness to adopt them for educational purposes. Cyber-attacks negatively affecting data privacy and resulting in a loss of personal information are critical determinants here (Kildè, 2024; Kostka and Toncelli, 2023; Kushmar et al., 2022). As it can be seen in the following excerpt, cybersecurity, thus, must be ensured throughout the whole educational process: *“Cybersecurity plays a crucial role in ensuring that AI systems are resilient against attempts to alter their use, behaviour, performance or compromise their security properties by malicious third parties exploiting the system’s vulnerabilities. Cyberattacks against AI systems can leverage AI specific assets, such as training data sets (e.g. data poisoning) or trained models (e.g. adversarial attacks or membership inference), or exploit vulnerabilities in the AI system’s digital assets or the underlying ICT infrastructure. To ensure a level of cybersecurity appropriate to the risks, suitable measures, such as security controls, should therefore be taken by the providers of high-risk AI systems, also taking into account as appropriate the underlying ICT infrastructure”* (European Parliament, 2024, p. 76). It is pertinent to consider the digital competencies highlighted in the *Information and Communication Technologies Competency Framework for Teachers* that was established by UNESCO (2011), where digital literacy related to safety, which also enhances critical awareness, is directly linked with the responsibilities to ensure protection of personal data and privacy. Such digital literacies should be learnt in a holistic rather than in “a linear or sequential pattern” (Belshaw, 2014, as cited in

Farag et al., 2021). As it is also stressed by the European Commission (2022), remaining critical and ensuring security and data protection can be performed by developing awareness of the possible risks that are defined in the ethical guidelines on AI and data usage in teaching and learning, which contributes to critical and ethical adoption of AI systems.

When referring to AI-powered classroom settings, dichotomy between teachers and students can be diminished by remaining critical and ensuring security and data protection. Here, the dichotomy between the two shrinks also as a result of a continuous need for a teacher to be constantly involved in the process of learning. Considering the relationship between teachers and students in the age of AI, Alex Guilherme (2015) emphasises “the importance of the quality of relationships between students and teachers for issues of personal self-esteem, motivation to learn, and confidence in facing new challenges, all of which play a crucial role in overall academic achievement” (p. 48). Such a holistic learning experience also leads to a resolution of the teacher-student dichotomy by constructing dialogical relationships that were assessed as “indispensable to the capacity of cognitive actors to cooperate in perceiving the same cognizable object” (Freire, 1968, p. 56). Dialogue in the context of Digital Language Education 5.0 can be created through support and inclusion when specific expectations are set and a positive classroom atmosphere is established together with continuous feedback and encouragement through interactive quizzes and videos (Muliyah et al., 2024).

The development of digital literacies by adopting AI-powered technologies and conforming to the regulations to avoid threats is performed through dialogue, where the hierarchy exemplified by the teacher of the students and the students of the teacher ceases its existence by providing room for growth, which becomes a joint and mutual responsibility of all “cognitive actors” who strive for knowledge that “emerges only through invention and re-invention, through the restless, impatient, continuing, hopeful inquiry men pursue in the world, with the world, and with each other” (Freire, 1968, p. 46). Dialogue that opens room for communication without which there would be no education. Such is the process of Digital Language Education 5.0 – the one that evokes dialogue with committed involvement of both sides, the teachers and the students, and, thus, becomes an incremental learning process.

Conscientization as a Method to Humanise Pedagogy

Reaching pure dialogue is not feasible without critical thinking, which “discerns an invisible solidarity between the world and men admitting of no dichotomy between them” (Freire, 1968, p. 64). Such thinking treats reality not as a “static entity” but rather as a mutual relationship between the process and the continuous change and transformation, as Freire would call it.

Despite having identified common misconceptions of AI in education that relate with the challenges to comprehend its adoption possibilities and seeing it as a non-inclusive and untrustworthy threat that undermines teachers’ role, there is still an urge to maintain a critical point of view (European Commission, 2022). The risks that AI poses related

to data privacy and equal access, over-reliance on AI resulting in “a one-size-fits-all” approach also call for critical thinking (Darwin et al., 2023, p. 2). Freire (1968) sees it as the type of consciousness that rejects a “mechanic, static, naturalistic, spatialized” approach (p. 51). An approach that can be achieved through “exercising one’s capacities, having one’s voice heard, and acting with others to transform the world” (Frag et al., 2021, p. 3).

Ethical Guidelines on the Use of Artificial Intelligence (AI) and Data in Teaching and Learning for Educators (European Commission, 2022) stress four crucial elements, namely, human agency, fairness, humanity, and justified choice, that support ethical use of AI in teaching, learning, and assessment. These are also the factors that contribute to an incremental process of, as Freire calls it, *conscientization* in the process of applying AI in education, which might function as a supporter in teaching as well as a facilitator in learning. Especially this AI era, as it has already been previously mentioned, reinforces the enhancement of critical awareness – digital AI literacy, which emerged as a result of machine learning, robotics and AI itself is directly linked with the responsibilities to handle the arisen risks related to the emulation of human performance (Markauskaite et al., 2022).

Freire (1968) advocated against “obviate thinking” in educational processes containing “verbalistic lessons, reading requirements, the methods for evaluating knowledge, the distance between the teacher and the taught” (p. 50). Escaping from the narration that was treated as a detrimental factor of the banking of education was feasible by fostering “co-intentional education” with the application of a humanised pedagogy that is feasible as a result of consciousness. The process that requires continuous change and inner revolution, which, in the context of AI-enhanced educational settings, teachers experience with their shifting role that encourages them to become curriculum designers by maintaining student motivation and engagement, ensuring accessibility of learning materials as well as managing the peculiarities of virtual learning (Mulyah et al., 2024). Such potentials of AI to personalise learning experiences and provide relevant as well as real-time assessments result in distancing from the conventional class methods. However, as Antony Frag et al. (2021) state, Freire did not object to educational technology adoption as long as they promised a “liberatory effect”, and, similarly, Ivan Illich, a contemporary of Freire, was “very much concerned with the way in which tools introduce new possibilities for addressing a problem while simultaneously obscuring the goals for which the tool was designed to achieve” (p. 4). Being exposed to a variety of AI tools, teachers have to remain critical towards their suitability for educational purposes and choose the ones that help “the learner develop consciousness and awareness” (Frag et al., 2021, p. 5). This is in line with one of the four fundamental elements that support ethical use of AI in teaching, learning, and assessment defined by the European Commission (2022), namely, justified choice. The choice that leads to the “continuing transformation of reality, for the sake of the continuing humanization of men” (Freire, 1968, p. 65). The choice that involves deep comprehension of the limitations that AI systems evoke as well as the possession of prompting skills (Alm and Watanabe, 2023).

Developing a critical point of view in the context of *Digital Language Education 5.0* would mean constructing both students' and teachers' knowledge on how AI writing tools function, the biases they might arouse, as well as appropriate usage of prompts, which requires a comprehension on how to formulate suitable and careful prompts that would be in line with teaching and learning goals. Critical thinking in the AI-powered setting would involve testing *ChatGPT* from the perspective of locally tailored prompts on the topics where it still lacks certain information, and accordingly comparing the obtained texts with the human-generated ones, which would result in "conceptual critique and immediate technical proficiency" (Alm and Watanabe, 2023). "Co-intentional education", as Freire defines it, would be the definition of the activities in the AI-enhanced classroom, where students' agency is promoted instead of over-reliance on AI technology, namely, *ChatGPT*, that would, in this way, become as a "complement rather than an unquestioned authority" (Alm and Watanabe, 2023). The "co-intentional education" (Freire, 1968) is manifested where the reality is viewed critically with the process of re-creating knowledge through "common reflection and action" (p. 44). The reflection and action contribute to the enhancement of a humanised pedagogy in the AI-powered classroom, which aligns with Freire's statement noted in *Education for Critical Consciousness*: "The answer does not lie in the rejection of the machine but in the humanization of man" (Freire, 1973, as cited in Kahn and Kellner, 2007). Knowing and acting, the integration of the two, is the element for "the awakening of critical consciousness" when being "in a search of self-affirmation" (Tan, 2018, p. 371). Self-affirmation by both sides, teachers and students, in an AI-enhanced environment, where learning outcomes can be improved with the help of AI that delivers personal feedback, responds to distinct students' demands and allows teachers to dedicate their spare time to composing more distinct and engaging classroom activities (Markauskaite et al., 2022). Self-affirmation is achieved where the teachers free themselves from the role of "depositor, prescriber, domesticator" (Freire, 1968, p. 65) to emerge in and evoke cognition boosting activities, to emerge in and evoke *conscientization*.

Praxis and Doxa for Implications

"Education is thus constantly remade in the praxis. In order to be, it must become" (Freire, 1968, p. 57), and becoming during this age of AI penetration into education requires *praxis*, the action that is related to people's values. It encourages to alter AI-focused approaches by reimagining educational practices and pedagogies, as well as social interaction and values (Markauskaite et al., 2022). Freire (1968) treats reaching *praxis* by distancing from *doxa*, when a common belief in the beneficial uses of AI should lead to *logos*, which relates to a critical approach towards its use and misuse. The *doxa* that results in a common perception of losing human interaction as a result of AI should be led towards the *praxis*, which would require the adoption of critical means to maintain the process of humanisation in education (Farag et al., 2021). The *doxa* of treating AI-powered technologies as the ones that cause the drawbacks related to "technology

infrastructure limitations, resource access, teacher training needs, data privacy concerns, and pedagogical alignment with AI-driven tools” (Mananay, 2024, p. 363) should be moved beyond through looking for *praxis*, which would correspond to an active search for solutions to the arisen challenges. As Yao and Slater (2024) also confirm, it is fundamental not to take AI technologies for granted, and, in order to enhance teachers’ digital AI competencies, teacher training programs should be re-assessed to aid teachers in connecting their current knowledge with the new one. All the above-mentioned risks that might result in “a one-size-fits-all” approach as well as the *doxa* that arose due to the buzz of OpenAI’s *ChatGPT* back in 2022, calls for *logos*, the critical thinking (Darwin et al., 2023, p. 2). It all sums up into the *conscientization*, which “as praxis is a revolutionary action” (Nikolakaki, 2012, p. 24). A transformative movement, the *conscientization* it is, that is needed to critically assess the adoption of GenAI in educational processes.

Conclusion

To conclude, the current qualitative content analysis of the research literature as well as the official European Union documents related to AI that have been analysed through a Freirean lens has revealed that Freire’s critical pedagogy serves as a profound philosophical foundation for enhancing perception towards AI usage in education, particularly in *Digital Language Education 5.0*. A continuous penetration of AI into educational processes requires reimagination of the current pedagogies that can be successfully performed by applying the key tenets of Freire’s critical theory.

The analysis of the official European Union documents, where one of the main aims is to raise awareness and engagement with AI-powered technologies, has also shown the significance of the emerging digital skills and competencies needed for a critical approach towards the application of AI among educators. The challenges highlighted in the selected documents related to discrimination and inequalities, cyber-security attacks, and diminishing critical thinking abilities can be handled by promoting a learner-centred approach with the help of collaborative and interactive learning experiences with personalised feedback. For *Digital Language Education 5.0* specifically, GenAI serves as a potential to foster an even more interactive classroom work by establishing room for dialogue, a diminished student-teacher dichotomy, but only when it is striven to advance in critical thinking, the *conscientization*, which leads to humanising *Digital Language Education 5.0*.

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