

Research

Initial Perceptions of Pre-Service EFL Teachers on Generative AI in Education- Insights and Implications

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Abstract

Generative AI has upset the educational landscape, particularly among primary, high school and university educators who believe their approaches are becoming obsolete overnight. This new reality presents a special challenge for those involved in training pre-service English teachers, who must quickly adapt teacher training to a new generation of teachers who have ample access to AI powered tools. Rooted in the spirit of Action Research, this article briefly explores the perceptions of 17 pre-service EFL teachers enrolled in the second year of training at the Faculty of Arts and Humanities of the University of Porto, Portugal. The survey reveals that all students are using AI powered tools in their teaching practice, mainly to develop teaching materials and create language activities and believe topics regarding generative AI should be integrated in MA programmes for pre-service teachers.

Introduction

The impact of generative AI in the context of teacher training is an emerging area of interest among teachers of all levels of education. However, current research does not provide broad information specifically about generative AI's role among training pre-service or in-service teachers. It is well known that in the context English Language Teaching (ELT), since the launch of ChatGPT (November 2022), local and international conferences have included countless presentations on the potential of integrating AI powered tools, or the need of making a judicious use of generative AI, but most of what has been shared so far is based on commonsense notions and not on research. Given the speed that this technology is evolving and being integrated with popular educational technology, it is urgent to accelerate research in this field to establish a balance between theory and practice in English as a Foreign Language (EFL) teacher education and better share effective teaching skills and pedagogical knowledge. One way to achieve this is through Action Research. By engaging in Action Research, in-service and teacher trainers can reflect on their practices, identify areas for improvement, and implement changes to enhance their teaching effectiveness and learning outcomes. This process not only benefits the teachers and trainers but also sets a positive example for future educators, emphasizing the importance of continuous learning and adaptation in teaching practices (Nolen & Vander Putten, 2007; Hagevik, Aydeniz, & Rowell, 2012). As an educator heavily involved in training the next generation of EFL teachers within the Portuguese context, I am very concerned is fostering a reflective and context-sensitive approach to teacher training that values both theoretical understanding and practical application, hence why I decided to conduct a survey among my MA learners to better understand how pre-service teachers are using generative AI in their teaching initial practice. The following section will briefly explore the survey and its results and present some considerations regarding the data.

Survey

The survey's main aim was to gain insights on the perceptions of pre-service EFL teachers enrolled in the second year of training at the Faculty of Arts and Humanities of the University of Porto, in Portugal. 17 students replied to the survey during an in-person seminar in the first fortnight of February 2024. The respondents ages varied from 22 to 27; Regarding gender, 88,2% of participants identified as female and 11,8% as male.

The first section of the survey aimed to collect information on their usage of generative AI tools. Concerning the first question "How often do you use generative AI tools in your teaching practice?", 52,9% replied monthly, followed by 23,5% who answered weekly. 11,8% revealed they rarely use such tools, and the remaining answers revealed a daily usage.

Considering that the group surveyed does not teach classes of their own, but several lessons in different classes assigned to their cooperative teachers (or mentors) throughout the school year, the number of students who answered monthly reflect the type of training that they attend. However, and after further reflection, it would be insightful to know if the use of AI-powered tools would increase if they had classes of their own and taught on a weekly basis. The second question of this section required students to reveal the main purpose for which generative AI tools are used. In this context, 47,1% of students replied they primarily used them to develop teaching materials; 17,6 answered they use such tools to create language activities, while 23,5% revealed they use it for lesson planning and 11,8% for language assessment. Considering the significant number of students who use these tools for material development, it will be important to study how generative AI will impact the future of this field both as a practical undertaking and as a research field under the umbrella of applied linguistics. Researchers in this field may very well have to monitor how generative AI is impacting coursebook design or observe if it will lead to more in-service teachers adopting a DOGME style approach to ELT. To close this section, students were given a list of 20 AI tools and asked to identify the ones they have used. ChatGPT was among the most popular with 88,2%, followed by Grammarly with 29,4% and Canva Classroom Magic with 23,5%. Curiously, none of the respondents selected Microsoft's Copilot, Curipod or Magicschool.AI, 3 outlets that were mentioned during APAC's 2024 conference.

The next section of the survey focused on perceived benefits and challenges. The first question of this section asked the following question: "What benefits have you experienced from using generative AI?" The option most voted was "timesaving" with 76,5%, followed by enhanced creativity with 47,1%. How AI enhances teacher creativity is another potential area that requires meaningful study. Linguists such as Noam Chomsky have been very critical about this technology suggesting that it may negatively impact human cognition and the nature of understanding, oversimplifying complex ideas or encouraging passive consumption of information rather than active engagement and critical thinking. Regarding challenges, the majority of students, 88,2%, identified inaccuracies in content as the main concern, followed by 35,5% that suggested technical issues. Large language models often "hallucinate" (instances where the AI produces information or output that is either factually incorrect, nonsensical, or not grounded in the input provided or in reality). Such instances occur due to various factors, including limitations in the AI's training data. Training pre-service teachers to have a critical eye is paramount at this stage as they may incorporate incorrect or biased examples in their teaching practice.

The final portion of the survey focused on ethical consideration and future perspectives. It started by asking students if they had ethical concerns about using generative AI. 58,8% replied 'no', while 41,2% responded 'yes'. Ethical concerns with AI in the context of education are indeed significant and it is somewhat concerning that more than half of the respondents answered negatively, raising questions on how aware they are on areas such as data privacy and security, bias and fairness or accessibility and equity. The following question "How do you see the role of AI evolving in the context of ELT?" 58,8% replied increasing significantly and 41,8% increasing somewhat. This perception may align with broader trends such as automating administrative tasks or Michael Semanchik's position on AI integration. Semanchik speculates that in the future a lawyer that does not embrace AI will not be the most capable advocate for their client. Could such beliefs be adapted to the field of education? At this stage I am not completely confident that the best educator will be the one that fully embraces AI considering the challenges of teaching mixed-ability learners effectively and the importance of human like variables such as empathy, patience, passion, adaptability, creativity, emotional intelligence, fairness and respect. Concerning the question "Do you believe that topics regarding generative AI should be integrated in MA programmes such as this one?" the respondents unanimously replied 'yes', which requires current and future MAs to evaluate how to address this issue. Will the best pre-service teacher training programme be the one that best integrates and address AI in education? Lastly, students were asked to provide additional comments or suggestions about using AI in EFL teaching. Among those who replied, a noteworthy comment regards the previous question: "I believe we should be taught how to use AI effectively in our teaching practice, since we need to be up to date with what students have at their disposal." Another insightful comment includes: "I don't think society can run away from AI now so we should integrate it in a positive way." Much work is needed to integrate these topics in a principled way as opposed to a one-off seminar for the sake of claiming some attention was given to this area. However, effective, ethical, and thoughtful integration of AI tools in teacher education requires time and it is very difficult to keep up with the current pace of change.

Closing Thoughts

As AI evolves and becomes increasingly integrated in educational contexts, it is critical that teacher training programmes advance too providing comprehensive education on the effective, ethical, and conscientious integration of AI tools into contemporary EFL teaching approaches. The findings of this survey suggest the importance of closing the gap between academic knowledge and practical application in teacher education, potentially paving the way for a more informed, reflective, and technologically savvy generation of EFL educators. The practice of Action Research by teacher trainers and

in-service teachers of all levels of education is a crucial component of professional development that can lead to more effective understanding of what and how things are changing. At this stage, it is essential to differentiate between the use of AI as a tool to aid in various tasks and the uncritical acceptance of AI-generated content as an equivalent to human understanding and creativity. As I have written in a previous piece regarding teaching reading comprehension in the era of AI (2023), famous personalities such RuPaul would argue that teachers have a particular blend of “charisma, uniqueness, nerve, and talent” that is irreplaceable. While I agree that each teacher is undoubtedly unique, it is paramount to foster a culture of reflective practice to blossom as a teacher and thrive in these uncharted waters.

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About the author

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Carlos Lindade is a Portuguese Canadian ELT professional who is heavily involved in training future EFL teachers. He holds a PhD in Advanced English Studies from the University of Vigo and lectures at the Faculty of Arts and Humanities of the University of Porto (FLUP). He is a member of the Centre for English, Translation and Anglo-Portuguese Studies (CETAPS) and a regular speaker at APPI events. His research interests include ELT Material Development, TELL, CALL, MALL and EFL Teacher Education.

