EDITORIAL

This issue of Scripta Manent brings together a selection of papers that examine the role of Artificial Intelligence (AI) in shaping the future of Languages for Special Purposes (LSP). As the educational landscape evolves, the application and integration of technology in LSP contexts – such as the use of corpora, wikis, chat platforms, and blogs – have been widely explored (see Dashtestani & Stojković, 2015, for an overview). However, the efficacy of these technologies and their learning outcomes for LSP instruction are not always clear and remain insufficiently supported by experimental studies. This divergence emphasises the need for continuous investigation into how the potential of AI can be explored and effectively tailored to meet the specific demands of LSP education.

AI's potential in this domain is vast, and the four papers featured in this issue explore its innovative applications in LSP learning and teaching. Each paper addresses a distinct application of AI, such as generating mathematical word problems for LSP instruction, integrating AI-assisted mediation tools in teaching English for Specific Purposes, using AI to extract domain-specific terminology, and employing AI in professional translation education to ensure the authenticity of student translations. Together, these papers provide fresh insights into the opportunities and challenges that AI brings to LSP teaching and learning across various fields.

The rapid advancement of technology, particularly in AI, however, means that findings today may become outdated as early as the next day. This presents a significant limitation in many studies exploring the affordances (Gibson, 1979; Hutchby, 2001) of specific AI tools like ChatGPT. Put differently, as AI tools evolve at a swift pace, their capabilities, limitations, and potential applications in LSP contexts require continuous re-evaluation and adaptation of research methodologies and conclusions. In light of these rapid advancements, each paper in this issue contributes to an evolving understanding of how AI can be effectively harnessed in diverse LSP contexts.

The first paper by Karen Fleischhauer and Kate Friedrich titled "Factors determining the efficacy of AI-generated word problems for content-specific math language courses in higher education" explores the potential of AI tools to assist in generating word problems for math language courses in higher education. Based on insight gained through instruction of STEM students, the study investigates how AI-generated problems, which are assessed by content instructors, can help LSP educators, who often lack content-specific expertise, to develop relevant and diverse instructional materials. The study reveals that while AI-generated word problems can save time, they also present challenges related to accuracy and consistency. By analysing content experts' feedback through screencasting and semi-structured

interviews, the paper highlights both the strengths and limitations of using AI in this context. While AI proves helpful in creating varied problem sets, the study cautions against relying solely on these tools without careful oversight. The paper recommends integrating AI-generated materials into LSP courses but emphasises the need for further refinement and collaboration between content experts and language instructors to ensure quality and effectiveness.

The second paper by Barbara Majcenovič Kline and Melita Koletnik focuses on interlingual mediation, as defined in the CEFR model of communicative language activities and strategies, combined with the use of AI in teaching of English for Specific Purposes to healthcare and translation students. By exploring the vast and ever-growing landscape of available AI tools, it examines those that facilitate interlingual mediation for each group of students, and discusses their potential and challenges. While AI offers benefits such as accessibility, adaptability, instant feedback, and has motivational value, the challenges include, among others, biased representation of information, the loss of human interaction, excessive reliance on technology, and the overall "dehumanisation" of teaching (Aberšek, Flogie, & Kordigel Aberšek, 2023). Through two case studies, the paper then connects theoretical insights with practical AI applications and presents activities that involve the use of AI tools to enhance interlingual and intercultural mediation competences, offering a blueprint that educators can benefit from. The paper concludes that although digital tools can enhance efficiency, it is essential to maintaining interpersonal relationships with students, and to promote intercultural understanding and critical thinking.

The third paper by Katja Težak and Sara Orthaber examines how ChatGPT can be used to enhance terminology acquisition in a German language course for agricultural science students. As the study highlights, while ChatGPT has the potential to foster learning autonomy and ease the workload of educators, its use in self-learning raises important concerns. The research found that ChatGPT-3 often misidentifies terms, leading to potential misunderstandings, especially in specialised contexts like agricultural science. For example, everyday verbs like "wirken" were incorrectly tagged as technical terms, posing risks of limited or inaccurate vocabulary use by students. The paper suggests that while ChatGPT can serve as a valuable tool, it should be used with caution and preferably within a guided classroom environment. This recommendation applies not only to ChatGPT-3 but also to all future versions of ChatGPT, as the same concerns regarding accuracy and contextual understanding are likely to persist. This, in turn, allows students to critically assess the AI's output, discuss its errors with instructors, and better understand the nuances of domain-specific language. The study ultimately stresses the need for continued support from language instructors when using AI tools like ChatGPT, as well as the importance of refining these tools for effective use in LSP contexts.

The fourth paper by Nadja Dobnik investigates the impact of computer-assisted translation and machine translation tools on translator training and assessment. It addresses the challenges of authenticating student translations in the context of the COVID-19 pandemic, during which the widespread availability of generative AI tools has increased students' reliance on such technologies. Focusing on the French-Slovene language pair, the research compares student translations produced with and without computer assistance. The findings highlight the need for innovative approaches to ensure the authenticity of student translations while

preparing future translators for the dynamic and evolving demands of the translation industry of the future.

In conclusion, this issue of *Scripta Manent* highlights the growing influence of AI in LSP education, demonstrating its potential to transform teaching and learning across various domains. While AI offers promising tools for generating instructional materials, enhancing interlingual mediation, facilitating terminology acquisition, and reshaping translation training, its use requires careful supervision. The papers collectively stress the importance of continuous evaluation of AI tools to ensure they meet the specific demands of LSP education. As AI technology rapidly evolves, future research must keep pace to address emerging challenges and optimise its educational impact.

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Editors

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