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Navigating the Artificial Intelligence Era: A Qualitative Study on the Impact of Artificial Intelligence on Language for Specific Purposes Teachers' Well-Being

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Abstract

The integration of Artificial Intelligence (AI) into language education is reshaping the role of Language for Specific Purposes (LSP) educators, prompting a re-evaluation of their responsibilities and professional identity. Through in-depth interviews with university-level LSP teachers, this qualitative research explores how AI tools are transforming instructional practices and influencing teacher well-being. The findings reveal a dual impact: while AI facilitates material development, reduces workload, and enhances pedagogical flexibility, it also introduces challenges such as technostress, reduced creativity, and uncertainty about the future of the profession. The study highlights the importance of targeted professional development and institutional support to ensure that AI serves as a complement to, rather than a replacement for, human educators. These insights contribute to a deeper understanding of the digital transformation of language teaching and its implications for LSP professionals.

Keywords

artificial intelligence, language for specific purposes, teacher well-being, technostress

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Introduction

The rapid advancement of artificial intelligence (AI) is significantly transforming the educational landscape, particularly in language instruction. Language for Specific Purposes (LSP) teaching, which aims to equip learners with the linguistic competencies needed for professional and academic contexts, is also affected by these technological developments. As AI tools become more integrated into educational practice, they are not only changing instructional methods, but also reshaping the roles, responsibilities, and skill sets expected of language educators.

While AI offers promising benefits, such as automating routine tasks, generating customized materials, and supporting differentiated instruction, it also presents new challenges. Educators must navigate unfamiliar technologies, adapt to changing pedagogical paradigms, and manage the psychological and cognitive demands associated with digital transformation. These pressures are particularly pronounced in LSP contexts, where teachers often work with highly specialized content and diverse student populations, and where appropriate teaching resources are often limited.

Although the existing literature has begun to address the implications of AI in education, highlighting both its potential to enhance learning and its capacity to induce technostress, there remains a notable gap in empirical research focused specifically on LSP educators' experiences. This study aims to fill that gap by investigating how LSP teachers perceive and respond to the integration of AI in their professional practice. Drawing on qualitative interviews, the research explores the impact of AI on teaching practices, professional identity, and teacher well-being. The findings contribute to a deeper understanding of the evolving role of LSP educators in the digital era and offer insights into how institutions can better support them during this transition.

Literature Review. Language for Specific Purposes

Language for Specific Purposes (LSP) refers to the teaching of foreign languages tailored to meet specific, context-driven needs (Shalash, 2024; Trace et al., 2015). LSP courses are designed with methodologies, content, objectives, materials, and assessment practices that arise from clearly identified language uses based on specialized learner needs (Belyaeva, 2015). Examples include *Japanese for Business*, *Spanish for Doctors*, and *Mandarin for Tourism* (Trace et al., 2015). Unlike general language

instruction, which is often theory-driven, LSP is influenced by the context and the learners involved (Trace et al., 2015).

English for Specific Purposes (ESP) is a subset of LSP, focusing specifically on English instruction for targeted professional or academic purposes (Shalash, 2024; Trace et al., 2015). ESP, like LSP, incorporates both linguistic and content area knowledge specific to a particular context based on learner needs (Trace et al., 2015). The literature suggests that ESP has received more scholarly attention than LSP, likely due to English's global dominance and the large number of second-language English users (Shalash, 2024). Despite this focus on English, the fundamental principles of ESP—being needs-based, context-specific, and goal-oriented—also apply to LSP. Furthermore, ESP is often contrasted with Language for General Purposes (LGP) or Language for No Obvious Purpose (LNOP) (Trace et al., 2015).

LSP instruction is typically designed for adult learners in higher education or professional settings, though it can be adapted for secondary or beginner-level students (Belyaeva, 2015). Curriculum development often integrates content and skills aligned with national qualification standards. For example, the Polish Qualifications Framework requires learners to demonstrate B2+ proficiency in a foreign language, including specialized terminology (Chłoń-Domińczak et al., 2018). Effective syllabi combine professional communicative tasks with general language development (Matukhin & Gorkaltseva, 2015). Increasingly, LSP is recognized as a specialized domain that requires interdisciplinary knowledge and methodological autonomy (Kariyeva, 2024). Educators must define instructional goals and select appropriate linguistic content, supported by a broader understanding of communicative competence that encompasses sociolinguistic and strategic dimensions (Whyte, 2019).

Artificial Intelligence in Language Teaching

Artificial Intelligence (AI), originally a branch of computer science aimed at replicating human intelligence, has evolved significantly with advancements in computing power (Azamatova et al., 2023). In the context of language education, AI is increasingly being integrated into teaching methodologies to enhance both student learning and instructional practices. Examples of AI applications in foreign language education include adaptive learning platforms, Automatic Speech Recognition, Natural Language Processing, and generative AI chatbot technologies.

One of the most impactful applications of AI is the development of adaptive learning platforms that tailor content to individual learners' needs and abilities

(Yunina, 2023). These systems analyze student progress, identify strengths and weaknesses, and offer personalized materials and tasks.

Automatic Speech Recognition (ASR) is an AI-driven technology that enables machines to understand and produce spoken and written language (Son et al., 2023). ASR is used in intelligent personal assistants (IPAs), transcription tools, and language learning apps to provide feedback on pronunciation and intonation (Liu, 2023). Tools like Alexa and Google Assistant have demonstrated potential for improving speaking proficiency while reducing learner anxiety (Son et al., 2023).

Natural Language Processing (NLP) enables machines to interpret human language and is widely used in machine translation, feedback generation, and activity creation. NLP can also analyze authentic language data, helping students engage with real-world language use in more meaningful ways (Liu, 2023). Similarly, Automated Writing Evaluation (AWE) systems offer feedback on student writing by identifying errors and suggesting improvements (Son et al., 2023).

AI-powered chatbots serve as interactive conversational partners, providing learners with personalized and realistic language practice. Platforms such as Duolingo, Babbel, and Rosetta Stone incorporate chatbots to support speaking, listening, and comprehension skills (Buşe & Căbulea, 2023). While long-term studies are still needed, learners typically respond positively to these tools (Son et al., 2023).

From the instructor's perspective, tools like ChatGPT are increasingly used to generate content-specific instructional materials, saving time and providing real-world relevance. However, the accuracy and appropriateness of AI-generated content require careful review by educators (Fleischhauer & Friedrich, 2024).

Table 1 (as of May 2025) categorizes AI tools by their primary educational function, illustrating their widespread presence and the wide range of available options.

While AI tools offer significant benefits for language teaching and learning (Yunina, 2023), they also present challenges. These include the risk of over-reliance, which may hinder creativity and critical thinking, as well as the inability of AI to fully replicate human interaction, particularly in areas like emotional expression and nuanced communication (Liu, 2023). Ethical concerns—such as plagiarism, bias, data privacy, and security—must also be addressed (Yunina, 2023). Moreover, the effective use of AI requires adequate teacher training and institutional support (Liu, 2023).

Table 1: AI tools categorized by the primary educational function

Category	AI Tool Name	Primary Function
Instructional Planning	Edcafe AI Brisk Teaching Eduaide AI MagicSchool AI	Lesson planning, assessments, grading, and content creation
Grading and Assessment	Gradescope CoGrader ClassPoint AI Quiz Generator	AI-assisted grading and quiz generation
Student Engagement	Curipod ThingLink + Skybox Duolingo Quizlet with Q-Chat	Interactive learning, gamification, and immersive environments
Creation of Study Materials	ChatGPT Canva Apptwee Diffit	Content generation, graphic design, and differentiated reading materials

The Impact of AI on Teachers' Well-Being

The integration of AI and digital technologies into education is closely linked to the concept of technostress—a term used to describe the psychological and physiological strain individuals may experience due to the use of technology, particularly information and communication technologies (ICTs) (Asad et al., 2023; Pagán-Garbín et al., 2024; Pansini et al., 2023; Saleem et al., 2024; Sanjeeva Kumar, 2024). First introduced by Brod in 1984, technostress was defined as a "modern disease of adaptation caused by an inability to cope with new computer technologies in a healthy manner" (Bai et al., 2024; Ertiö et al., 2024; Nascimento et al., 2024; Pansini et al., 2023). This inability to adapt can lead to reduced productivity and effectiveness (Bai et al., 2024).

Over time, the concept has evolved to encompass any negative impact on cognition, attitudes, or psychological well-being resulting from the use of innovation and technology (Asad et al., 2023; Bartra-Rivero et al., 2024; Pansini et al., 2023; Sanjeeva Kumar, 2024). Technostress is characterized by a negative mental state (Mehmood et al., 2024) and can manifest as uneasiness, anxiety, frustration, feeling overwhelmed, mental fatigue, skepticism, a sense of ineffectiveness, disappointment,

restlessness, fear, irritability, memory disorders, and poor concentration (Asad et al., 2023; Bui & Duong, 2024; Sanjeeva Kumar, 2024; Toscano et al., 2024). It stems from the stressors experienced when individuals struggle to cope with the demands of IT use (Ertiö et al., 2024). Its effects can vary depending on the context in which individuals face challenges related to technology use (Asad et al., 2023).

Importantly, technostress is not exclusively negative. Depending on how individuals evaluate technological demands, it can also result in *techno-eustress*—a form of positive stress where technology is perceived as a challenge that stimulates growth and motivation (Nascimento et al., 2024; Pansini et al., 2023; Tarafdar et al., 2019).

Table 2 provides a comparative overview of *techno-distress* and *techno-eustress*, highlighting their respective causes, symptoms, and outcomes as experienced by educators in technology-integrated environments.

Table 2: Comparison of Techno-Distress and Techno-Eustress

Causes	Symptoms	Outcomes
	Techno-Distress	
Inability to cope with new technologies	Anxiety, frustration, mental fatigue	Burnout, reduced productivity
Lack of support and infrastructure	Memory disorders, poor concentration	Mental health issues
Demands of remote teaching	Feeling overwhelmed, reduced creativity	Work-life conflict
Techno-invasion (constant accessibility)	Physical symptoms (fatigue, headaches, eyestrain, muscle tension)	Decreased job satisfaction
	Techno-Eustress	
Technology seen as a challenge	Increased productivity and innovation	Professional growth and creativity
Adequate training and support	Enhanced job satisfaction	Better performance and engagement
Supportive environments	Motivation and professional growth	Positive mental health impact
Opportunities for professional growth	Improved performance in tech-integrated tasks	Higher job satisfaction

While research has extensively focused on techno-distress and its negative effects, the concept of techno-eustress is a more recent development that is receiving

growing attention (Nascimento et al., 2024; Tarafdar et al., 2019). It highlights the potential for technology use to serve as a source of motivation and beneficial effects at both individual and organizational levels (Nascimento et al., 2024; Pansini et al., 2023). Ongoing research aims to better understand and measure techno-eustress (Nascimento et al., 2024).

Among educators, technostress manifests in complex ways, appearing as either techno-distress—with negative psychological and physiological consequences—or techno-eustress, which can enhance performance and motivation. The type of stress experienced largely depends on how teachers appraise the technological demands they face: as threats or challenges (Nascimento et al., 2024; Sanjeeva Kumar, 2024).

The literature identifies a wide range of emotional and psychological effects associated with techno-distress in teachers. These include anxiety (Asad et al., 2023; Bartra-Rivero et al., 2024; Sanjeeva Kumar, 2024), uneasiness (Asad et al., 2023; Sanjeeva Kumar, 2024), distress (Ertiö et al., 2024; Sanjeeva Kumar, 2024), nervousness (Asad et al., 2023; Chang et al., 2024), frustration (Saleem et al., 2024), irritability, intolerance, despair (Ertiö et al., 2024), depression (Ertiö et al., 2024; Saleem et al., 2024; Sanjeeva Kumar, 2024), and guilt and shame (Toscano et al., 2024). Teachers may feel overwhelmed or unable to manage technology effectively, which can negatively impact their mental health and overall well-being (Asad et al., 2023; Saleem et al., 2024; Sanjeeva Kumar, 2024).

Technostress has also been linked to burnout syndrome among educators, which is characterized by anxiety regarding teaching methods, poor communication, and limited administrative support (Churampi-Cangalaya et al., 2024; Pagán-Garbín et al., 2024). Physiological symptoms such as fatigue, headaches, eyestrain, and muscle tension are frequently reported (Asad et al., 2023; Bartra-Rivero et al., 2024; Ertiö et al., 2024).

One particularly concerning aspect is techno-invasion—the pressure to remain constantly accessible outside of work hours—which contributes to work-life conflict and exacerbates techno-distress (Asad et al., 2023). Additional stressors include insufficient technical support, inadequate infrastructure, and the challenges of remote teaching, especially during crises like the COVID-19 pandemic (Nascimento et al., 2024; Toscano et al., 2024).

On the other hand, when teachers perceive technology as a challenge rather than a threat, they may experience techno-eustress. This positive form of stress can lead to increased effectiveness, innovation, and job satisfaction (Nascimento

et al., 2024; Tarafdar et al., 2019). Teachers who experience techno-eustress often report that technology enhances their productivity and helps them perform better in tech-integrated tasks (Chang et al., 2024; Sanjeeva Kumar, 2024). Moreover, AI and other digital tools can enhance student engagement and instructional quality (Nascimento et al., 2024). Importantly, research shows that improving teachers' digital competencies can significantly reduce technostress (Pagán-Garbín et al., 2024; Sanjeeva Kumar, 2024).

However, the introduction of AI into educational settings may amplify existing stressors unless adequate support systems are in place. Scholars argue that challenges related to technostress must be addressed before AI is widely adopted in schools to prevent overwhelming educators (Pagán-Garbín et al., 2024). Providing the education community with the necessary tools and support, such as technology training and assistance programs, is crucial for using AI effectively and safely (Pagán-Garbín et al., 2024; Sanjeeva Kumar, 2024; Tarafdar et al., 2019).

While the literature discusses the general relationship between technology and technostress among teachers, there is a notable lack of research specifically focused on English as a Second Language (ESL) or LSP teachers (Pagán-Garbín et al., 2024). Thus, this study aims to help fill that gap by exploring how AI affects the well-being of LSP educators.

Future Implications for the Role of the Teacher

According to the studied sources, the integration of AI into language education is expected not only to evoke technostress, but also to significantly reshape the role of teachers, transforming both their responsibilities and required skill sets (Aad & Hardey, 2025; Mwakapina, 2024). AI tools are increasingly capable of automating tasks traditionally performed by educators, such as providing personalized feedback, curating content, grading assignments, and generating instructional materials like quizzes and lesson plans (Aad & Hardey, 2025; Bukhari et al., 2023; Mwakapina, 2024; Okolo Chinwe Jane et al., 2024; Zimotti et al., 2024). Automated assessment and grading systems offer scalable, consistent evaluations and detailed feedback, thereby reducing the time and effort required from teachers (Aad & Hardey, 2025; Casillano, 2024; Hilal et al., 2025; Liando et al., 2025; Maity & Deroy, 2024; Mwakapina, 2024). In large classes, AI can serve as a virtual assistant, clarifying concepts and offering real-time feedback, thus enhancing instructional efficiency (Mwakapina, 2024). Additionally, AI contributes to the creation of interactive learning

environments, including gamified language activities and real-time translation tools (Casillano, 2024).

As a result, the teacher's role is shifting from being the primary source of knowledge to becoming a facilitator, mentor, and guide who leverages AI to enhance pedagogical effectiveness (Aad & Hardey, 2025; Bukhari et al., 2023; Hilal et al., 2025; Khan & Mishra, 2024; Mwakapina, 2024; Urbaite, 2025). This transformation requires educators to adapt their instructional approaches and develop new competencies for integrating AI into their teaching practices (Aad & Hardey, 2025; Bukhari et al., 2023; Rane, 2024).

To navigate this shift successfully, teachers need comprehensive training in AI tools, including their ethical implications, potential biases, and limitations (Aad & Hardey, 2025; Casillano, 2024; Khan & Mishra, 2024; Madjid, 2022; Mwakapina, 2024; Rane, 2024). Educators must also learn to critically evaluate AI-generated content and guide students in its responsible use, addressing concerns such as over-reliance and academic integrity (Aad & Hardey, 2025; Mwakapina, 2024; Rane, 2024; Urbaite, 2025; Zimotti et al., 2024).

Despite AI's ability to handle routine tasks and provide personalized learning experiences, human teachers remain essential for fostering critical thinking, creativity, emotional intelligence, cultural awareness, and nuanced communication—areas where AI still falls short (Aad & Hardey, 2025; Hilal et al., 2025; Khan & Mishra, 2024; Liando et al., 2025; Mwakapina, 2024; Rane, 2024; Urbaite, 2025). The optimal approach involves a balanced integration of AI, where technology supports rather than replaces educators, enabling them to focus on meaningful, interactive engagement with students (Casillano, 2024; Hilal et al., 2025; Khan & Mishra, 2024; Mwakapina, 2024; Rane, 2024; Urbaite, 2025; Zimotti et al., 2024).

Addressing teacher resistance to change and concerns about job security is crucial for the successful adoption of AI in language education (Aad & Hardey, 2025; Mwakapina, 2024; Zimotti et al., 2024). Institutional policies and professional development programs should prioritize both innovation and the preservation of the human element in teaching.

Methodology

Given the identified gap in the literature, this study investigates the impact of Artificial Intelligence on a specific group of Language for Specific Purposes educators, with particular attention to their professional well-being. Employing a qualitative

research design grounded in a phenomenological approach, the study seeks to explore and interpret the lived experiences of LSP teachers to gain a deeper understanding of how they perceive the integration of AI into their professional practice (Creswell, 2009). Specifically, the focus is on how university-level teachers of Languages for Specific Purposes experience and interpret the impact of AI on their roles and well-being.

Participants

Five LSP teachers specializing in English and/or German were purposefully selected for the study. Selection criteria included their practical experience with AI tools in both classroom and professional contexts, availability, willingness to participate, and expertise in teaching LSP courses. All participants had substantial experience teaching academic students across a range of LSP subjects and were active users of AI tools in their daily work. They shared essential characteristics that made them suitable for exploring the research problem, specifically their roles as university-level LSP instructors and their active engagement with AI-assisted teaching. Additionally, the group was sufficiently diverse to provide a range of perspectives, with teaching experience spanning from five to twenty years, involvement in both English and German instruction, and engagement with various disciplinary areas of LSP education.

A demographic and professional profile of the participants is presented in Table 3.

Data was collected through semi-structured interviews, chosen for a balance between structure and flexibility. This format allowed the interviewer to follow a pre-prepared guide while adapting questions based on participants' responses (Creswell, 2009). The conversational style of the interviews fostered a comfortable atmosphere and encouraged open dialogue while still focusing on key themes relevant to the research questions.

This method aligns with the study's interpretivist stance, which emphasizes the subjective nature of experience and the contextual construction of knowledge. Ethical considerations were observed throughout the interview and analysis processes, with efforts made to minimize interviewer bias.

Table 3: Demographic and professional profiles of the research participants

	Years of experience as an LSP teacher	Languages taught	Areas of teaching	AI tools used
Teacher 1 (T1)	8	English	Management, Pedagogy	Apptwee, ChatGPT
Teacher 2 (T2)	5	German	IT in Business, Management, Tourism	Gamma, ChatGPT, Napkin.ai, Heygen
Teacher 3 (T3)	18	German, English	Psychology in Business, IT in Business, Internal Safety	GPTs, NotebookLM, Gamma.ai, Brisk Teaching
Teacher 4 (T4)	20	English	Mechatronics, Electrical Engineering, Mechanics and Machine Design, Chemical Engineering, Human Nutrition Technology, Renewable Energy Engineering, Management	ChatGPT, Diffit, Brisk, Magicschool.ai, personalized GPTs, Perplexity, NotebookLM, Elevenlabs, Luvvoice, Heygen, Canva.ai
Teacher 5 (T5)	13	German	Finance and Accounting, Administration, Logistics, Management, Pedagogy, Marketing and Sales, Internal Security, Design in Business	ChatGPT, Claude, Copilot, Canva, Gamma.ai

Interview Guide

The interviews were structured around the following thematic areas:

1. *Experience and Professional Background*
   – How would you describe your current job as a specialist foreign language teacher or lecturer?
2. *Use of AI Tools*
   – What AI tools do you know of or use in your teaching work?
3. *Impact of AI on Well-Being*
   – How does the use of AI tools affect your well-being at work?
4. *Perceptions of the Future*
   – Do you have concerns about the development of AI in the context of your professional role?

Data Analysis

A thematic case study methodology was used to analyze the qualitative data, following the framework proposed by Braun and Clarke (2006). The analysis proceeded in several stages:

1. **Familiarization:** Interview transcripts were read and re-read to gain a deeper understanding of the content.
2. **Initial Coding:** Relevant words and phrases were clustered into initial codes aligned with the research focus. This stage was supported by the qualitative analysis software Atlas.ti.
3. **Theme Development:** Codes were reviewed and organized into broader categories based on the thematic areas outlined in the interview guide.
4. **Pattern Identification:** Relationships and recurring patterns were identified across participant narratives.

This structured approach enabled the researchers to extract meaningful insights into how LSP teachers experience the integration of AI in their professional lives.

Findings

The findings are organized according to the thematic areas outlined in the interview guide: professional background, use of AI tools, impact on well-being, and perceptions of the future role of teachers, as shown in Table 4.

Table 4: Research findings grouped according to the thematic areas

Thematic area	Code	Sample quotation
Experience and Professional Background	Teaching specialized content	*Specialized foreign language is mainly in their field of study; the majors I mainly teach are management, pedagogy, and now marketing and sales. – T1*
	Working with diverse student groups	*People with different levels of language competence are in mixed groups. Not only are they mixed majors and mixed academic areas, but they are also mixed levels. – T3*
	Material preparation	*…let's be honest—when it comes to specialized language classes, most of us have to prepare each lesson practically from scratch because we don't have textbooks for this type of course. – T4*
	Evolving role towards competence training	*I think with the lectureships that are now in place in universities, we are moving away from teaching strictly a foreign language. We are moving into teaching how to gain the tools to function in a multilingual environment. – T3*

Use of AI tools	Specific AI tools mentioned	*So, after nearly a year of using tools like Diffit, Magic School AI, Brisk, Twi, and, of course, ChatGPT, I ended up shifting almost entirely to ChatGPT. – T4*
	AI use: material preparation	*On the other hand, the Twee tool itself is the target tool for creating material, so it just helps and saves a lot of time. Instead of editing a file in Word and coming up with additional things elsewhere, we have practically ready-made exercises based on our guidelines. – T1*
	AI use: support for evaluation and feedback	*It just makes everything so much easier and faster—whether it's preparing materials, grading, or even creating educational content. – T5*
	AI use: student interaction and training	*I introduce them to GPTs, which are based on TED Talks and are capable of guiding students using the scaffolding method—from general ideas to specific ones—working with presentations, lectures, and mini-lectures. – T3*
	AI use: personal assistant role	*I now realize that apps like ChatGPT, Claude, or Copilot—yes, I even have the app on my phone—have become like personal assistants. – T5*
Impact of AI on well-being	Reduced stress and workload (for some)	*So in terms of stress, it's definitely lower. – T2*
	Increased satisfaction	*That's a huge gain in our profession. We can create our own materials, infused with our experience, and enter every class with something fresh—new content, new materials. That keeps us from getting tired or bored, and it benefits the students, too. – T3*
	Loss of creativity	*The only thing I've noticed is that I'm no longer tapping into that potential for creativity that I used to have to tap into because I used to have to nag myself to come up with an interesting activity. I would see an exercise and have to figure out on my own how to introduce it in a particular activity. – T2*
	Frustration from student misuse	*I was getting answers from a student, where I'm convinced, even 100% sure, that this person just returned my questions in the GPT chat and gave a chat answer, so it was such a bizarre situation. – T1*
	Uncertainty about time savings	*Now, does it actually save time? I'm not sure. – T3*
	Navigating constant change	*There are so many changes that I've just learned to deal with them. I tell myself, "Okay, let's sit down and figure this out." – T5*

Perceptions of your role as a learner in the future	Potential for AI to take over responsibilities and reduce the need for teachers	*Today, a lot of responsibilities have already taken over, so I think the future of our foreign language teachers will definitely look different. – T2*

Based on the interview data, Language for Specific Purposes (LSP) educators described their professional roles in multifaceted terms, highlighting their responsibilities, the diversity of their student populations, the specialized content they teach, and the evolving nature of their work in response to technological change. These educators teach foreign languages tailored to specific academic and professional domains, including management, pedagogy, marketing, sales, engineering, electrical and mechanical engineering, renewable energy, mechatronics, logistics, accounting, psychology, and business communication. Instruction involves not only specialized vocabulary and phraseology, but also the ability to discuss professional topics, describe processes, create instructions, and interpret technical documentation. To be effective, LSP teachers noted the importance of having foundational knowledge across these disciplines.

Teachers also highlighted the challenge of teaching diverse student groups, which often include both undergraduate and graduate learners with varying levels of language proficiency (ranging from A1 to C2) and different academic interests. This diversity necessitates additional preparation and pedagogical flexibility to accommodate varying competencies and expectations.

A central aspect of their work involves developing instructional materials, often customized for specific groups and proficiency levels. Due to the scarcity of appropriate textbooks for highly specialized subjects, educators frequently create lessons from scratch, drawing on authentic resources such as academic articles, technical manuals, and multimedia content. Consequently, their role extends beyond traditional language instruction to include facilitating multilingual competence and domain-specific communication. Many educators describe themselves as “competence trainers” or “facilitators” who support students in developing the communicative, cognitive, and analytical skills necessary for engaging with foreign language texts in their respective fields. This includes guiding students in organizing ideas, articulating discipline-specific concepts, and expressing themselves effectively in professional contexts.

The interview data indicates that Language for Specific Purposes (LSP) educators employ a wide range of artificial intelligence (AI) tools to support their professional practice. AI is used to streamline instructional processes and expedite tasks such as creating materials from scratch or adapting existing resources—an essential function given the scarcity of textbooks tailored to highly specialized fields. One teacher (T4) noted that AI facilitates the creation of instructional content that would otherwise be difficult to produce. Additionally, LSP teachers utilize AI to generate lesson ideas, search for relevant topics, and develop course programs, worksheets, scripts, and activities based on authentic texts or instructional guidelines. AI also assists educators in preparing for courses outside their disciplinary expertise, such as logistics, by providing foundational knowledge and clarity on concepts.

Approaches to grading and evaluation vary among teachers. While some teachers (T5 and T2) use AI tools to generate feedback, others (e.g., T4) intentionally avoid using AI in assessment tasks. Nevertheless, AI is commonly employed to create exercises for evaluation purposes (T1 and T2), reflecting diverse pedagogical attitudes toward its use. Notably, one educator (T3) reported actively introducing AI tools—such as GPTs based on TED Talks—to students, guiding them in using AI to extract substantive content and enhance their communicative competence. Another teacher (T5) described AI tools like ChatGPT, Claude, and Copilot as functioning like personal assistants, frequently used for quick information retrieval in various aspects of daily life.

The integration of artificial intelligence tools has influenced the well-being of Language for Specific Purposes (LSP) educators in multiple ways. Several teachers reported that AI has alleviated workload-related stress, particularly in material preparation. For instance, T4 noted that AI significantly reduced stress related to limited access to instructional resources, especially when preparing for substitute teaching. Similarly, T2 and T5 expressed feeling less burdened, as AI enabled them to develop and deliver course content more efficiently.

Moreover, the ability to curate high-quality, tailored materials for specialized subjects—where conventional textbooks are often unavailable—was linked to increased job satisfaction. Teachers emphasized that AI-supported content creation allowed them to incorporate personal expertise and introduce fresh materials in each class, helping to prevent professional fatigue and monotony. AI also empowered educators to teach courses they might have previously avoided due to limited subject-matter knowledge, as it facilitated thorough preparation.

However, concerns were also raised regarding the potential impact of AI on creativity. T2 observed a decline in their reliance on personal creative processes and noted an increased dependence on AI-generated suggestions. This shift was seen as a minor limitation, suggesting that while AI offers substantial support, it may also change the nature of pedagogical engagement.

While some educators viewed AI tools as making tasks shorter and more manageable, others expressed uncertainty about whether these technologies genuinely save time. Several teachers noted that although AI can expedite individual tasks, the overall time investment may increase due to the need to create, modify, and carefully verify AI-generated materials—especially when working with mixed-level student groups. T4 concluded that AI primarily streamlines instructional processes rather than significantly speeding them up.

The rapid development of AI tools and the accompanying shifts in professional expectations have introduced new sources of stress. Nevertheless, teachers reported adapting to these changes with resilience, viewing them as opportunities for personal growth and continued relevance in the evolving educational landscape. They acknowledged that AI has already taken on many responsibilities traditionally held by educators. For example, participants T2 and T5 cited AI's role in assessing language proficiency, which has reduced the workload for human instructors. T5 remarked, "Wherever AI can step in, it will," reflecting a broader sentiment about the inevitability of technological integration.

Although some educators expressed enthusiasm about transitioning into roles such as "competence trainers", others conveyed uncertainty about the future of their profession. Questions remain about how the role of the teacher will evolve over the next decade, particularly in light of advancements in robotics and automation. T1 voiced concern that institutional cost-saving measures driven by AI adoption could compromise educational quality by diminishing the essential human element for meaningful engagement and real-time interaction.

Discussion

The findings of this study highlight the multifaceted and evolving nature of Language for Specific Purposes teachers' professional roles—a view supported by the existing literature (Belyaeva, 2015; Fitria, 2020; Kariyeva, 2024; Shalash, 2024; Shalatska et al., 2020; Trace et al., 2015). Teachers consistently emphasized that their work goes far beyond traditional language instruction. Instead, it encompasses

a complex interplay of linguistic, disciplinary, and pedagogical competencies tailored to the specific needs of diverse student populations.

A defining feature of LSP teaching, as reported by the interviewees, is its discipline-specific orientation. Teachers are expected to deliver language instruction that is directly relevant to students' fields of study, such as engineering, psychology, logistics, and business communication. Consequently, LSP educators often become informal learners of these disciplines to ensure the relevance and accuracy of their instruction—an observation echoed in the literature (Belyaeva, 2015; Fitria, 2020; Kariyeva, 2024).

Another significant theme is the diversity of student groups, both in terms of language proficiency (ranging from A1 to C2) and academic interests. This variety presents a pedagogical challenge, requiring teachers to design lessons that are both inclusive and targeted. While the literature suggests that LSP courses are typically intended for intermediate or advanced learners, the interviews reveal that real-world classrooms often include students at widely differing proficiency levels—even within the same group.

A particularly demanding aspect of LSP teaching is material development, a challenge also discussed in the literature (Belyaeva, 2015; Fitria, 2020). Due to the lack of suitable textbooks for highly specialized domains, teachers often create custom materials using authentic sources such as academic articles, technical manuals, and multimedia content. This process is time-consuming and requires both creativity and a deep understanding of the target discipline.

This evolving role aligns with teachers' self-perception as "competence trainers" or facilitators of professional communication skills, rather than traditional language teachers. Their responsibilities now include fostering students' communicative, cognitive, and intercultural competencies to help them function effectively in multilingual and professional environments. Teachers described themselves as guides who assist students in organizing their thoughts, articulating domain-specific ideas, and navigating the linguistic demands of their future professions—an emerging perspective not yet widely reflected in the literature.

Teachers reported using AI to generate lesson materials such as worksheets, scripts, and course outlines, often based on authentic texts or specific guidelines. This not only streamlines lesson planning, but also enhances the customization and relevance of materials for diverse student groups. While this use of AI is supported by existing research (Aad & Hardey, 2025; Khan & Mishra, 2024; Madjid, 2022;

Rane, 2024; Zimotti et al., 2024), the interviews also highlight a novel application: AI as a knowledge bridge. Teachers use AI to understand unfamiliar subject matters, enabling them to prepare substantively for courses outside their expertise, which is an insight not yet widely discussed in the literature.

However, the findings also reveal divergent attitudes toward AI in assessment. Some teachers embrace AI for generating feedback or evaluation exercises, while others avoid it due to concerns about over-reliance or loss of pedagogical control. This variation reflects broader debates about the ethical and pedagogical implications of AI in education, particularly in contexts where human judgment is essential. While the literature often focuses on the technical benefits of AI-enabled grading, ethical concerns remain underexplored (Madjid, 2022; Rane, 2024).

Interestingly, some educators go beyond personal use and actively introduce AI tools to students, teaching them how to work with foreign language texts using AI to extract meaning and develop communicative competence. This approach positions AI not just as a teacher's aide, but as a student-facing learning tool, fostering digital literacy and autonomous learning strategies. This application of AI as a deliberately designed student assistant in the studying process is a novelty and requires further exploration.

The integration of AI into LSP teaching also reflects a dual impact on teacher well-being, aligning with the framework of technostress: techno-distress and techno-eustress. While the literature has traditionally emphasized the negative effects of technostress (Asad et al., 2023; Sanjeeva Kumar, 2024), recent research has begun to explore its more positive counterpart, techno-eustress, in which technology is viewed as a challenge that can enhance performance and motivation (Nascimento et al., 2024; Tarafdar et al., 2019).

A few teachers in this study reported experiencing techno-eustress. AI tools were perceived as reducing workload, particularly in material preparation, and boosting confidence in handling unfamiliar topics. These experiences align with findings that supportive and manageable technology use can lead to increased satisfaction, creativity, and professional growth (Nascimento et al., 2024).

At the same time, other teachers expressed ambivalence and signs of techno-distress. While AI streamlined certain tasks, the time required to generate, verify, and adapt AI-produced content—especially for mixed-level groups—was described as mentally taxing. One teacher noted a decline in creative engagement, feeling that reliance on AI had diminished their personal input. These reflections echo concerns

in the literature about cognitive overload and reduced autonomy when technology use misaligns with teaching values (Asad et al., 2023; Toscano et al., 2024).

Conclusion

In summary, the findings illustrate that AI can be both a relief and a burden for LSP teachers. While it has the potential to reduce stress and enhance teaching effectiveness, it also introduces new demands that may contribute to emotional strain. Recognizing and addressing this duality is essential to ensure that AI integration supports—rather than undermines—teacher well-being.

The integration of Artificial Intelligence (AI) into language education is reshaping the role of teachers. This shift is well-documented in the literature (Aad & Hardey, 2025; Mwakapina, 2024). This study demonstrates that LSP teachers are already experiencing this transformation, with AI taking over tasks such as lesson planning, assessment, and material creation. Teachers reported that AI reduces their workload and allows them to teach subjects they previously avoided due to a lack of expertise, supporting the idea that AI can enhance both efficiency and professional confidence (Casillano, 2024; Zimotti et al., 2024).

Consistent with the literature, teachers described a shift from being content providers to becoming facilitators and competence trainers (Urbaite, 2025). However, this transition is not without challenges. While some teachers embrace AI as a tool for growth, others express uncertainty about the future of the profession, including concerns about job security and the potential loss of the human element in education.

Although AI can support instruction, human teachers remain essential for fostering critical thinking, emotional intelligence, and meaningful interaction—qualities that AI cannot replicate. The key weaknesses of AI in LSP instruction include its inability to fully mimic human interaction, emotional expression, and nuanced communication (Liu, 2023), which impedes the development of essential human skills like critical thinking and creativity. Furthermore, AI raises ethical concerns such as plagiarism and bias (Yunina, 2023), introduces technostress from navigating constant change (Asad et al., 2023; Pagán-Garbín et al., 2024; Pansini et al., 2023; Saleem et al., 2024; Sanjeeva Kumar, 2024), and may not genuinely save time due to the need for educators to carefully verify and modify AI-generated content for specialized use. However, the study demonstrates that time savings are attainable with the proficient use of AI.

Importantly, the study reinforces the need for ongoing training to help both teachers and students avoid misusing AI (Bukhari et al., 2023; Rane, 2024). Since the accuracy and appropriateness of AI-generated content are not guaranteed, teachers must critically evaluate and carefully review all materials before classroom implementation (Fleischhauer & Friedrich, 2024). Furthermore, educators are obligated to proactively guide students in the responsible use of these tools, directly addressing challenges related to over-reliance and maintaining academic integrity when faced with submissions generated by AI chats.

In summary, AI is transforming the LSP teaching profession. To ensure this evolution is beneficial, institutions must support teachers with training, open dialogue, and policies that prioritize both technological innovation and the essential human aspect of education.

Research Ethics Statement

This study was conducted in accordance with established ethical research standards. Throughout the interview phase, the rights, dignity, and comfort of participants were fully respected. Participation was entirely voluntary and based on informed consent, and all personal information was kept confidential to protect the privacy and integrity of those involved. The data collected was used solely for academic purposes.

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