Human by Design:
Teacher Agency and Curated Crossings in the AI Era

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Abstract

The integration of artificial intelligence (AI) into higher education is compelling language teachers to renegotiate their professional identities. This study explores how tertiary-level English teachers in Israel perceive their professional identity during the pre-implementation phase of AI. Drawing on a dual framework of boundary space theory and the Intelligent-TPACK (i-TPACK) model, this qualitative study analyzes 29 in-depth interviews. Findings reveal four core themes: teachers positioned themselves as indispensable language knowers, providers of irreplaceable emotional care, supervisors of AI use, and AI-augmented pedagogues. Theoretically, this study extends boundary space theory by introducing "curated crossing"-teachers' active agency in designing the technological transition-and proposes an "identity-infused i-TPACK" model, demonstrating how professional identity directly shapes techno-pedagogical knowledge. Findings suggest that rather than displacing educators, AI integration functions as a boundary space for professional renewal, reaffirming teachers' unique value in an AI-augmented world.

Keywords: Artificial Intelligence (AI); Teacher Identity; Boundary Space Theory; Language Education; Curated Crossing.

Introduction

The rapid integration of artificial intelligence (AI) in higher education is fundamentally reshaping pedagogical practices and compelling educators to renegotiate their professional identities. This transformation is particularly acute in language education, where AI-powered tools challenge traditional teaching roles and create a context of structural ambivalence: AI offers pedagogical innovation while simultaneously questioning the very foundations of teacher expertise and

professional authority. This study investigates how tertiary-level English language teachers in Israel perceive their professional roles and navigate their identity during this critical technological transition.

The Israeli higher education context presents a particularly high-stakes environment for this inquiry. English proficiency is not merely an academic skill but a crucial gateway to international scholarship and professional mobility, positioning English Language Units (ELUs) as vital institutional bridges. The encroachment of AI, through both student use and institutional policy, destabilizes the professional roles of these teachers at a moment when their contribution is most vital. Understanding their perceptions during the pre-implementation phase-a period fraught with anticipation, concern, and hope-is therefore essential for designing professional development that can prepare both educators and their students for an AI-augmented future. This study, therefore, explores teachers' identity work as they stand at the precipice of a technology-induced professional shift, seeking to understand how they make sense of their roles in a rapidly changing educational landscape.

Theoretical Positioning

This study employs a dual theoretical lens to analyze teachers' identity work in the face of technological disruption. First, we draw on boundary space theory, which conceptualizes professional identity as a dynamic process negotiated during transitional periods (Beauchamp & Thomas, 2011). Originally describing the shift from student to novice teacher, we extend this concept to the technology-induced transition of AI integration. This creates a new boundary space where educators must renegotiate their roles, expertise, and professional values, balancing institutional expectations with their own agency. Treating AI integration as a boundary space reframes it from a mere technical shift to a consequential identity experience.

Second, to address the specific competencies required to navigate this transition, we utilize the Intelligent-TPACK (i-TPACK) framework (Celik, 2023). Extending Mishra and Koehler's (2006) original model, i-TPACK delineates the unique technological, pedagogical, content, and ethical knowledge teachers need to integrate AI responsibly. For language educators, this framework highlights the necessity of combining deep pedagogical knowledge with a critical understanding of AI's affordances and ethical risks, such as fairness and transparency. Together, boundary space theory illuminates the identity negotiation process, while i-TPACK specifies the knowledge domains required to enact it, providing a comprehensive framework for our investigation.

The Present Study

While research on AI in language education is growing, critical gaps remain. Scholarship has yet to fully examine how disruptive technologies mediate teacher identity, with most studies focusing on career-stage rather than technology-induced transitions (Rushton et al., 2023). Furthermore, while the potential of AI tools to support personalized learning is recognized (Jiang et al., 2022), the specific context of Israeli higher education-where English proficiency is a high-stakes requirement-remains underexplored.

This study addresses these gaps by examining how English language teachers in Israeli higher education perceive their professional roles during the pre-implementation phase of AI integration. Guided by the dual frameworks of boundary space theory and i-TPACK, the study seeks to answer the following central question: How do English language teachers at the tertiary level in Israel perceive their professional role in light of the potential integration of AI in language teaching? Sub-

questions explore their perceived responsibilities, their concerns and expectations, and how they envision their expertise relative to AI capabilities.

Methods

This study employed a qualitative design to explore teacher identity in the pre-implementation phase of AI integration at an academic college in Israel. The participants comprised the entire English Language Unit (ELU) faculty of 29 teachers, a cohort diverse in cultural background and professional experience (see Table 1). Data were collected through in-depth, semi-structured interviews lasting 45-60 minutes each. The interview protocol was designed to explore teachers' prior knowledge of AI, their attitudes and expectations regarding its integration, their beliefs about how AI might transform their professional role, and their needs for professional development. The interview transcripts were then analyzed using Maguire and Delahunt's (2017) six-phase thematic analysis process. This rigorous process began with familiarization with the data and inductive coding to identify meaningful units, followed by systematic theme development, review, and refinement to ensure the coherence and distinctiveness of the final thematic structure.

Table 1.   Participant Demographics

Variable	Categories	n	% / M (SD)
Gender	Female	24	82.8%
	Male	5	17.2%
First language	Hebrew Speakers	8	27.6%
	Arabic Speakers	14	48.3%
	English Speakers	5	17.2%
	Spanish Speakers	1	3.4%
	Dutch Speakers	1	3.4%
Age range	Range: 30-65	29	-
Educational level	Master's	21	72.4%
	Doctorate	8	27.6%
Position	Teacher	22	75.9%
	Teacher-coordinator	7	24.1%

Findings

The analysis revealed four core themes that capture how teachers perceive their professional roles in the age of AI. These themes illustrate a complex negotiation between preserving the irreplaceable human aspects of teaching and cautiously embracing new technological possibilities.

Theme 1: Teachers as Indispensable Language Knowers

First, teachers consistently positioned themselves as the primary source of linguistic and pedagogical knowledge, responsible for providing the foundational skills-grammar, vocabulary, and critical strategies-that are prerequisite for students' meaningful engagement with AI. They argued this expertise was crucial not only for academic success but for safeguarding vulnerable learners from AI dependency and for maintaining a "human-in-the-loop" approach to pedagogy. One teacher-coordinator stated, "I don't think we can give up on the foundation stones of language because no matter if we use AI or not, grammar and vocabulary are essential" (Emily).

This perspective was particularly pronounced when considering weaker students, whom teachers feared would use AI as an "escape" from learning, thereby deepening their disadvantages. Furthermore, teachers emphasized that their own professional expertise was the anchor of responsible AI use, allowing them to critically evaluate, reject, or accept AI-generated materials to ensure they align with pedagogical goals, as another teacher explained: "[Teachers] would come to me and ask how to phrase something or if a task matches the goal of the unit... so we still have a role that cannot be replaced" (Ashley).

Theme 2: Teachers as Providers of Irreplaceable Emotional Care

Second, teachers universally emphasized that their role extends far beyond cognitive instruction to include the provision of emotional and relational support. They asserted that the "human touch" is a dimension of teaching that AI cannot replicate. This theme had two facets. The first was the individual human connection, centered on empathy and encouragement. As one teacher explained, "the machine can never replace human interaction… these human capacities which I think help our students much more than the machine can" (Nicole).

The second facet was the cultivation of the classroom as a collective safe space, an environment where students feel secure enough to take risks and make mistakes. This was contrasted with the potentially isolating experience of learning with a machine. One teacher summarized this conviction: "[Students] need a face, to connect it to the material; they need a face to feel safe, to feel secure, to make mistakes" (Rania). For these educators, creating this environment of trust and belonging is a defining, and uniquely human, element of their professional identity.

Theme 3: Teachers as Supervisors of AI Use

Third, teachers described their evolving role as supervisors of AI integration, a journey that began with a protective, prohibitive stance and moved toward a model of critical guidance. Initially, their approach was driven by deep concerns for academic integrity and pedagogical equity, fearing that unregulated AI use would lead to plagiarism and cognitive dependency. As one teacher warned, quoting Chomsky, AI is "a tool for plagiarism" and its use "feels kind of like cheating" (Elias).

However, this defensive posture shifted toward a more proactive model of critical integration. Teachers began to see their responsibility not as gatekeepers, but as facilitators of digital judgment, actively training students in how to use AI tools ethically and effectively. This involved redesigning tasks to make AI use transparent and purposeful, thereby rendering cheating unproductive. As one faculty member noted, "how we structure a task makes cheating not useful. We're already giving you the option of using AI, so you don't need to cheat" (Ahmad).

Theme 4: Teachers as AI-Augmented Pedagogues

Finally, teachers envisioned themselves becoming AI-augmented pedagogues, integrating AI into their own professional lives while cultivating new literacies in their students. They described using AI

as a "co-pilot" in their professional practice to enhance efficiency in preparing materials, such as adapting complex texts for different proficiency levels or generating novel exercises. As one teacher shared, "it was really easy... it made it really fast" (Natalie).

Concurrently, they identified a new and crucial pedagogical responsibility: to cultivate students' critical AI literacy. This included not only teaching students to evaluate the accuracy and potential biases of AI outputs but also instructing them in the essential skill of prompt engineering. As one teacher articulated this new role, it is "to teach them how to use AI and then how to check AI" (Shira). This dual role positions teachers as lifelong learners who are themselves adapting to, and making sense of, a new technological reality.

Discussion

The findings position AI integration as a significant boundary space where teachers' professional identities are not merely disrupted, but actively and deliberately renegotiated. This aligns with Beauchamp and Thomas's (2011) original conception of boundary spaces as transitional arenas, yet it extends the theory by demonstrating that such spaces are not limited to career-stage shifts but can also be triggered by technological disruption, a gap previously noted in the literature (Rushton et al., 2023).

This study's primary theoretical contribution is twofold. First, it conceptualizes the process of "curated crossing". Teachers in this study did not passively react to technological change; they actively designed the terms of engagement. This agentic process, visible in their evolution from a protective stance (Theme 3) to the proactive design of pedagogical scaffolds, moves beyond general notions of teacher agency by highlighting the specific, design-oriented nature of their response. While scholars have long emphasized teachers' roles as active agents (Edwards, 2006), the concept of "curation" underscores a more deliberate and architectural role: teachers are not just responding to change but are actively constructing the very architecture of that change within their local context.

Second, the findings reveal that this crossing is navigated through an "identity-infused i-TPACK". Building on the foundational work of Mishra and Koehler (2006) and the AI-specific extension by Celik (2023), our study shows that the mobilization of techno-pedagogical knowledge is not a neutral act. It was directly filtered through teachers' core professional identities (Sachs, 2005). Their deep-seated commitment to being language knowers (Theme 1) and providers of emotional care (Theme 2) fundamentally shaped how they enacted their TPACK. This supports recent arguments that disciplinary culture is the very basis of a teacher's identity and underpins their use of digital tools (Starkey et al., 2023). Our findings give empirical weight to this idea, demonstrating that i-TPACK is not an abstract set of competencies but a framework that is lived and embodied through the professional self.

Together, these concepts provide a more dynamic model for understanding teacher adaptation to technological disruption, reframing it as a process of agentic design and identity affirmation, rather than one of passive reception or resistance.

Practical Implications

The findings of this study offer clear, actionable implications for stakeholders in higher education who are navigating the integration of AI.

For institutional policymakers: The study highlights the need to move beyond simple prohibitions or fear-based policies regarding AI. Instead, institutions should develop transparent "responsible use" policies that frame AI as a pedagogical tool. This involves creating clear guidelines on citation,

data privacy, and ethical use, thereby positioning the institution as a facilitator of critical digital citizenship rather than an enforcer of compliance.

For curriculum designers and coordinators: The responsibility for cultivating AI literacy cannot be an afterthought. Curricula, particularly in foundational courses, must be intentionally redesigned to incorporate critical AI literacy as a core competency. This means moving beyond teaching content alone and toward teaching students how to learn with AI. Assignments should be re-envisioned to render simple plagiarism unproductive; for example, by requiring students to submit AI-generated drafts alongside their own revisions with a reflective commentary, or by shifting assessment toward oral defenses and project-based work that demand higher-order thinking.

For professional development leaders: Adapting to AI is a process, not a one-time event. Professional development must be staged to align with teachers' journey through the boundary space. Initial workshops should focus on the ethical and equity dimensions of AI, addressing teachers' primary concerns. Subsequent sessions should provide hands-on, discipline-specific training in pedagogical design, demonstrating how to create "AI-proof" assignments and how to use AI as a "co-pilot" for their own work. This training must be collaborative and sustained, allowing teachers to build a community of practice around these new challenges.

Conclusion

This study concludes that the integration of AI into higher education is not a harbinger of teacher obsolescence, but rather a catalyst for profound professional renewal. By navigating the AI-induced boundary space through "curated crossing", educators are actively reaffirming their professional value. The practical implications of this are significant. At the institutional level, there is a clear imperative to move beyond fear-based prohibitions and instead develop transparent policies that treat AI as a tool for learning. Curricula must be redesigned to incorporate critical AI literacy as a core competency, and assignments re-envisioned to make plagiarism unproductive.

Furthermore, professional development must evolve to support this transition. It should be staged to align with teachers' needs, beginning with ethics and equity, moving to pedagogical design, and being delivered in a hands-on, collaborative, and discipline-specific manner. Ultimately, by leveraging AI as a co-pilot, teachers are not freed from their profession, but freed within it-to dedicate more energy to the uniquely human and irreplaceable aspects of their role: facilitating critical inquiry, providing mentorship, and designing meaningful learning experiences in an AI-augmented world.

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