



Castledown

 OPEN ACCESS

Technology in Language Teaching & Learning

ISSN 2652-1687

<https://www.castledown.com/journals/tltl/>

Technology in Language Teaching & Learning, 7(2), 103219 (2025)

<https://doi.org/10.29140/tltl.v7n2.103219>

Hype, Fear, and Everything in Between: A Critical Typology of Responses to AI and their Implications for Language Teacher Education



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Abstract

This article proposes a critical typology of five emerging responses to artificial intelligence (AI) in language education, from prohibition and hype to critical engagement, highlighting the assumptions, tensions, and possibilities each orientation embodies. This typology serves as a reflective tool to examine how educators and institutions are engaging with AI and what this means about the priorities shaping language teacher education (LTE). Building on this analysis, the article identifies seven implications for LTE, centred on reasserting pedagogical purpose: rethinking L2 writing, questioning neutrality, developing teacher discernment and transparency, problematising teacher preparedness, and engaging more deeply with digital pedagogy, teacher educator development, and ethical dilemmas. These directions call for sustained inquiry into how LTE can support teachers to navigate AI with clarity, agency, and purpose.

Keywords: language teacher education, artificial intelligence, language education, TESOL, digital pedagogy

Introduction

While much has been written about the pedagogical affordances of artificial intelligence (AI) in language education (Crompton et al., 2024), there has been less critical attention to how the field is actually responding and what this means for language teacher education (LTE). As AI becomes increasingly

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embedded in classroom practice, policy, and broader public debate (Sharples, 2025), language teacher educators are faced with the challenge of preparing teachers to navigate a fast-changing and contested landscape.

In this perspective article, I propose a critical typology of five prevalent responses to AI in language education, informed by published work and sustained professional observation. These responses are not formalised pedagogical models, nor are they presented as approaches to adopt or reject. Rather, they reflect observable trends and orientations in research, professional practice, and ongoing debates in the field. Each carries particular assumptions about the role of AI, raises distinct opportunities and limitations, and has implications for how teachers are prepared and supported. While additional responses to AI may be emerging, this paper focuses on five that recur most consistently across both scholarly discussions and professional practice, in order to offer a parsimonious and practical typology. This typology is, then, not intended to reduce a complex and evolving landscape into fixed categories. Educational contexts are fluid, and educators may be navigating multiple orientations at once or shift between them over time (Fawns, 2022). It is offered, instead, as an interpretive tool: a prompt for reflection and discussion about what values these responses embody and what educational possibilities they enable or constrain.

The term *AI* is used here to refer broadly to artificial intelligence technologies that assist with or generate language. While recent debates have focused on Generative AI (GenAI), especially since the public release of ChatGPT (Trust et al., 2023), other AI technologies, including machine translation and paraphrasing tools, have long mediated aspects of language use, particularly writing. These earlier tools had already raised pedagogical and ethical issues about authorship, feedback, and the boundaries of support (Groves & Mundt, 2021) that GenAI seems to intensify rather than introduce. Therefore, any meaningful discussion about AI benefits from being grounded in this longer trajectory of AI use in language education.

However, the scope of this perspective piece is not to evaluate specific tools. Building on the longer trajectory of AI in language education, it focuses on five recurring responses, each of which is discussed in terms of its orientation toward AI, the opportunities and limitations it presents, and its implications for LTE.

The Ban and Penalise Response

This response is characterised by prohibition of AI in student work. It typically involves institutional policies that forbid AI use in assignments, often accompanied by warnings about academic misconduct (Barrot, 2023; Zimotti et al., 2024). The core message of such bans is clear: use of AI constitutes a violation of academic norms and will result in penalties. Beyond bans, it is often enacted through the tightening of assessment controls, the use of AI detection tools, or even the shift from take-home tasks to in-class writing and oral assessments (Kern, 2024). All these measures are applied with the aim of reducing or deterring the use of AI.

Opportunities and Limitations

One advantage of the ban and penalise response is its clarity. It establishes clear boundaries between what is or is not allowed and sets explicit expectations for both students and teachers (Williamson et al., 2024). This can reduce ambiguity about academic integrity policies and offer a viable solution for institutions under pressure to act swiftly. In a climate of uncertainty, where both policy and practice are struggling to keep pace with technological change (Zimotti et al., 2024), such clarity can provide a sense of direction and control.

However, this response also presents significant limitations. First, attempts to detect or police AI usage are complicated by the limitations of AI detection tools, which remain largely unreliable (Warschauer et al., 2023). Multiple studies highlight that these tools may yield both false negatives and false positives, and may discriminate against L2 writers by incorrectly labelling human-produced text as AI-generated (Perkins, 2023); a pattern that can significantly disadvantage L2 students.

Importantly, banning AI may be difficult to enforce consistently, especially in contexts where students have ubiquitous access to AI technologies. For example, according to a survey, 75% of higher education students would continue to use GenAI even if their institutions banned the technology (Shaw et al., 2023). This raises the question of whether blanket bans are not only impractical, but also futile in a landscape where student use of AI is already widespread.

More broadly, this response risks missing important learning opportunities such as to engage students critically with technologies that are already reshaping communication, language, and writing (Kern, 2024). This, from a digital literacy perspective, may prevent students from developing the skills to use such technologies responsibly and reflectively (Mavridi, 2020), and may leave them unprepared for the digital demands of academic and professional life (Cardon et al., 2023).

Implications for Language Teacher Education

Rethinking L2 Writing

The preceding discussion brings to light important challenges for LTE, particularly around how L2 writing is conceptualised, approached, and supported.

A key implication is the need to prepare language educators to engage critically with institutional definitions of academic integrity, which often fail to account for how L2 writing develops. Research on L2 writing has long recognised that practices such as patchwriting (partial copying and paraphrasing as learners experiment with writing) are not necessarily attempts to deceive, but may reflect developing writing competence (Pecorari, 2003). Similar patterns are now emerging, where students may blend AI-generated text with their own language in ways that mirror patchwriting (Warschauer et al., 2023). The rigidity of banning and penalising AI may result in emerging writers being unfairly disciplined, even when their actions are driven by developmental practices rather than intent to cheat (Warschauer et al., 2023).

To protect the integrity of writing, some have called for a return to in-class, handwritten tasks. While such formats remain a standard feature of exam preparation classes where timed, handwritten tasks are required, their adoption as a safeguard against AI raises serious concerns. First, timed in-class writing may hinder the development of ideas for L2 writers who benefit from extended drafting, planning, and revision (Na & Yoon, 2016). Second, such modes of writing may disadvantage students with special needs (Tai et al., 2022) or language anxiety, who may struggle with handwriting and high-pressure conditions. More broadly, a return to handwritten tasks raises questions about relevance: in an era when most academic, professional, and civic writing occurs digitally, is in-class, pen-and-paper writing a meaningful mode? These concerns suggest that a return to traditional forms of writing is not a neutral move but one with implications for access, equity, and relevance. Teacher education must therefore support educators in critically evaluating not only the integrity of writing practices, but also their pedagogical and ethical impact.

A deeper question raised in educational debates (e.g., see participant responses in Moorhouse & Kohnke, 2024) is the role of writing itself in the age of AI. If machines can produce grammatically

accurate, well-structured texts in seconds, is there still a need to teach writing? This line of thinking, however, is not only flawed but potentially harmful, especially for L2 writers. Writing is, beyond doubt, central to language learning because it requires students to engage with language, articulate meaning, and clarify ideas. But just as importantly, writing also underpins students' ability to use AI effectively, because their capacity to benefit from these tools depends heavily on existing writing proficiency (Warschauer et al., 2023). Research suggests that stronger writers are more adept at using AI critically and selectively, while lower-proficiency ones tend to rely on it too heavily (Barrot, 2023; Koltovskaia, 2020). This is because stronger L2 writers are better able to prompt, evaluate, and meaningfully revise AI-generated text.

The answer, then, is not to abandon writing but to reimagine it in ways that are both pedagogically robust and relevant to AI-mediated realities. LTE has a vital role to play here by re-engaging with long-standing practices that take on new significance in the current context. One such practice is process-based writing. While hardly new to language education (Susser, 1994), it now gains fresh urgency. Process writing foregrounds drafting, feedback, and revision. It creates space for metacognitive reflection, language experimentation, and iterative improvement (Seow, 2002); all essential in preparing students to work meaningfully with and around AI.

Teachers should also be encouraged to design tasks that promote ownership and authentic purpose. When writing is framed solely as a product for the teacher's eyes only, students may be less invested in the process, and more likely to outsource the polished end-product to AI. By contrast, writing for real audiences (through reflective blogs, storytelling, or project-based tasks) helps students see writing as a communicative and purposeful act. This is not a new argument (Mavridi, 2020), but it gains new urgency in an AI-mediated context where formulaic outputs can easily replace thinking. As Chapelle et al. (2024) argue, task-based, genre-based, and project-based learning offer valuable ways to support meaningful language use in AI-mediated contexts. I extend this by suggesting that these pedagogies also provide a strong foundation for reimagining L2 writing in the age of AI. Their emphasis on process, audience, and contextualised meaning-making offers a meaningful alternative to the formulaic, product-oriented tasks that have long shaped language education and that GenAI replicates so easily.

The Ostrich Response

This response is characterised by avoidance, where AI is not banned but simply rendered invisible; for instance, omitted from classroom conversations, policy decisions, or professional development (Loock et al., 2022). It often reflects efforts to preserve stability or to avoid disrupting the status quo in the face of pedagogical and technological change. For example, some may believe that ignoring AI will limit its impact, while others may fear that confronting it will introduce more complexity or risk than what they feel prepared to handle. In many cases, this avoidance occurs despite widespread informal discussion among staff. In fact, AI may be frequently debated in staff rooms, but these conversations often fail to translate into concrete changes in curriculum, assessment, or professional development (Groves & Mundt, 2021). The avoidance, then, is not necessarily a lack of awareness, but may reflect a reluctance to engage with the complexity and uncertainty surrounding AI at the level of practice or institutional decision-making.

Opportunities and Limitations

The ostrich response may offer certain short-term advantages. Most notably, it can create space to pause and observe before committing to decisions about how to respond to rapidly evolving AI technologies. This may be justified in contexts where policy remains unsettled, empirical evidence is still emerging, or educators lack institutional support for experimentation (Kousa & Niemi, 2023).

In addition, some may argue that avoiding premature adoption can prevent the kind of uncritical enthusiasm associated with rapid implementation (Williamson et al., 2024). This can help teachers to focus their limited time and energy on existing pedagogical practices and technologies, rather than engaging with technologies they feel unprepared to evaluate. Given the competing demands teachers face, particularly in under-resourced or high-pressure environments, such a choice may reflect reasonable prioritisation rather than resistance to change. Therefore, the avoidance itself, may not be a passive position but an active choice.

However, the limitations of this response are considerable. While avoiding AI in formal instruction may appear to reduce risk, it leaves a pedagogical vacuum. Students may continue to use AI independently often without guidance on appropriate engagement (Warschauer et al., 2023). In L2 writing in particular, such tools are already reshaping how language is produced and evaluated (Chapelle et al., 2024), yet these shifts remain largely unexamined when educators sidestep AI in curriculum and assessment. This results in missed opportunities to critically engage with these tools or to explore whether, in specific contexts, they might offer support for feedback, scaffolding, or reflection (Chappelle et al., 2024).

A further risk lies in the lack of clarity surrounding acceptable use. In the absence of shared institutional guidance, decisions about AI are left to individual educators. While some may engage openly with students about their use of AI, others may avoid the topic altogether. This leads to fragmented and inconsistent practices that lack institutional cohesion and can be confusing for students (Groves & Mundt, 2021).

Implications for Language Teacher Education

Navigating Neutrality in the Age of AI

Avoiding AI may appear to be a neutral stance but doing nothing is itself a position; one that carries pedagogical significance. Historically, avoidance has not served educators well during periods of technological disruption. Past waves of educational technology have shown that avoiding engagement often leads to missed pedagogical opportunities, delayed institutional responses, and an increasing disconnect between student practices and formal instruction. For example, early iterations of spell checkers in Word processors were often dismissed as encouraging laziness or impeding skills development (Jinkerson, 1996). Yet, many educators avoided acknowledging their use, even when students relied extensively on them. A relevant parallel can be seen in the early application of machine translation. For years, Google Translate was the *elephant in the room* in language education contexts (Groves & Mundt, 2021): widely used by students, yet largely ignored in teaching and policy. This silence did not prevent use but left students without support or guidance for engaging critically.

LTE must help educators recognise when this kind of neutrality stems from reflective decision-making, and when it stems from unexamined assumptions or a reluctance to confront complexity. It has a responsibility to prompt critical reflection on the implications of avoidance, not to push for immediate adoption, but to help educators clarify the values and assumptions behind neutrality; particularly how silence or inaction can affect clarity, consistency, and informed decision-making in teaching practice.

The Teacher Support Response

This response positions AI primarily as a tool to support teachers with tasks such as materials creation, often to improve efficiency or reduce workload (Ahn et al., 2024). It can co-exist with other responses discussed in this paper; for example, teachers may use AI while student use is prohibited or left unaddressed.

Various studies document that some aspects of teachers' practices are already being delegated to AI (Edmett et al., 2024). For instance, teachers may use AI to generate worksheets, reading texts, grammar explanations, comprehension questions, and listening materials such as podcasts (Zimotti et al., 2024). They may also use it to ease the burden of creative tasks, such as inventing stories, mini-dialogues, or quizzes (Case et al., 2025). Chapelle et al. (2024) add the generation of genre-diverse texts (narratives, interviews, and dialogues) to develop genre awareness and expose students to varied discourse forms. Across these studies, AI is broadly perceived to streamline lesson planning, materials design, and assessment, enabling teachers to manage time more efficiently.

Opportunities and Limitations

There are clear practical benefits for educators, particularly in terms of workload management. By using AI to automate routine or labour-intensive tasks, teachers may be able to redirect time and attention toward more interactive or student-centred aspects of instruction. Some educators also find that AI can enhance creative output, enabling them to develop materials beyond their usual repertoire, especially under time pressure (Edmett et al., 2024). These opportunities should not be underestimated, especially given the considerable workload most teachers already carry.

Still, this response comes with its own set of limitations. First AI-generated materials may lack the contextual sensitivity, linguistic nuance, or developmental awareness required. This may result in materials that are superficial, inconsistent, or misaligned with intended learning outcomes if not critically adapted by the teacher (Case et al., 2025). For example, AI-generated comprehension questions have been shown to overlook basic principles of instructional design, such as alignment with learning objectives, clarity, or appropriate level of difficulty (Edmett et al., 2024). Such limitations suggest that, while AI may facilitate efficiency, it risks distancing the teacher from the pedagogical reasoning that underpins effective practice (Case et al., 2025).

A further concern relates to equity. When AI is integrated solely on the teacher's side while student use is banned or discouraged, the double standard is hard to ignore. If AI is good enough to support teaching, why is it a threat when students use it to support learning? This imbalance risks reinforcing unequal power dynamics in the classroom between teaching and learning which, in effect, widen digital divides and restrict opportunities to equitable support.

Implications for Language Teacher Education

Developing Discernment and Transparency in AI-Supported Teaching

What does it mean to delegate materials design to AI? One immediate implication for LTE is the need to equip teachers with the judgement to evaluate the pedagogical quality of AI-generated content. This is not something that can or should be left to the tool. Several studies argue that GenAI outputs often require close oversight and adaptation (Case et al., 2025; Li et al., 2024). The question, then, is not simply whether AI can help, but how teachers maintain their pedagogical voice and decision-making when working with AI. As Chapelle et al. (2024) stress, teachers need to critically review and adapt AI-generated materials to ensure they reflect learners' level, align with learning objectives, and are pedagogically meaningful. This points to the need for LTE to support the development of principled judgement about when, how, and whether to integrate AI into their practice.

An actionable first step, as highlighted in stakeholder interviews reported in a British Council study (Edmett et al., 2024), might be the development of a context-sensitive guide to core teacher activities, mapping where AI tools can usefully support practice, and where human involvement remains

pedagogically essential. This could take the form of an A–Z of language teaching tasks (e.g., lesson planning, materials design, feedback provision, grammar explanation), with an evidence-informed analysis of how and when AI might contribute. Such a resource should be adaptable to different teaching contexts, accounting for factors such as access to technology, levels of digital literacy, and teacher experience (Edmett et al., 2024).

Additionally, educators must be encouraged to think critically about the kinds of tasks they create using AI, and what forms of thinking and engagement these tasks promote. When AI is used to generate closed-ended tasks (e.g., multiple choice or factual recall), it is hardly surprising that students may turn to similar tools to generate answers. This results in limited opportunities for both sides. In contrast, open-ended tasks that require students to reflect, personalise content, or negotiate meaning are far less easy to delegate to AI (Awadallah Alkhouk & Khlaif, 2024). LTE should support the design of such tasks, not to reactively AI-proof them, but to promote learning experiences that invite creativity, interpretation, and meaningful student participation. This call extends beyond AI. Educational innovation is not about adopting new tools to do the same old things, but about using them to evolve our pedagogies. When technology is used to merely replicate outdated pedagogies, the result is not innovation but digitised inertia.

Finally, there is an urgent need for transparency around teachers' use of AI because it enables modelling. In the language classroom, teachers model all the time, whether consciously or not. They model language through the way they speak, write, and interact (Richards et al., 2012). They model values such as curiosity, fairness, and critical inquiry through the questions they ask, the feedback they give, and the practices they normalise (Wagner, 2022). So why not model responsible and transparent use of AI as well?

LTE must therefore support teachers to reflect on what their use of AI signals about pedagogy, authorship, and responsibility, and to communicate these choices clearly to students. This might involve simple practices, such as adding a note to materials (e.g. AI was used to help generate examples in this worksheet) followed by class discussion on the value and limitations of such tools. It is not enough to expect transparency from students in how they engage with AI. Teachers, too, must model this transparency to help shape more open, reflective, and ethically aware classroom norms around AI.

The Technocentric Response

This response is characterised by enthusiasm for AI technologies and a readiness to integrate them into teaching and learning. It is often fuelled by a wider climate of hype and, as Selwyn (2022) puts it, “extravagant promotion” (p. 621) and commercial agendas. More broadly, such orientations align with assumptions of technological determinism, which frame digital tools as inevitable or inherently beneficial for education (Kirkwood & Price, 2012; Rambe & Nel, 2014). They convey optimism about technology's potential and a tendency to adopt new tools as a natural progression in educational practice (Brennan, 2015). Professional development may focus on the features of popular tools, encouraging teachers to adopt them based on perceived novelty or impact (Satvati et al., 2025). In such cases, teachers may integrate a particular AI tool into their teaching, and only afterwards consider how to “fit the pedagogy into the tool” (Tsui & Tavares, 2020, p. 110).

Opportunities and Limitations

One potential advantage of the technocentric response lies in its capacity for early adoption, which can create institutional momentum and perceived alignment with broader trends in educational innovation. While this motivation is often superficial (Brennan, 2015), it may create opportunities for teachers

to access new tools and undertake digital experimentation. In some cases, this momentum can help develop more reflective or pedagogically grounded practice over time (Kostka & Toncelli, 2023). Another opportunity lies in exposing students to emerging AI tools that are increasingly embedded in academic and professional contexts. For L2 learners, engaging with these tools can open up valuable discussions about their functions, affordances, and implications for language use and learning.

At the same time, this response presents notable limitations, most significantly, the risk of prioritising functionality over pedagogical consideration (Rudolph et al., 2025). When AI tools are adopted primarily for their availability, popularity, or perceived efficiency, educators may miss the opportunity to critically consider whether, how, or when they align with language learning aims. In some contexts, the drive to appear technologically responsive can also create pressure to integrate tools quickly, which can distort curricula and undermine deeper educational aims.

This is not new or unique to AI. Similar patterns of tool-driven responses have been observed in earlier waves of educational technology. For instance, in the 2010s, the hype around Web 2.0 tools often promoted them as inherently transformative, with far less attention paid to their actual pedagogical value (Gouseti, 2010). Earlier still, television was often embraced in education not for *how* it could enhance learning, but on the assumption that its very presence would; a view that overstated the medium's influence and downplayed the role of pedagogy (Kirkwood & Price, 2012). Such patterns reflect a long-standing tendency to adopt technologies first and retrofit pedagogy after, what Sankey (2020) refers to as putting the “technology cart before the pedagogic horse” (p. 46). The current excitement around AI risks repeating this cycle: enthusiasm and uptake outpace pedagogical consideration, and pedagogy is once again left playing catch-up.

Implications for Language Teacher Education

Problematizing Teacher Readiness

The preceding discussion raises important questions about LTE. When technocentric responses are adopted by showcasing platforms, sharing tips, or encouraging quick tool uptake, what assumptions are being made about teachers' preparation to engage meaningfully with these tools? If we look at teacher readiness more broadly, the signs are not encouraging. Qayyum (2023), for instance, argues that educational technologies are often introduced without sufficient attention to teacher preparation and support. Moser et al. (2021) highlight the widespread unpreparedness of language teachers during the shift to online teaching in the pandemic. Similarly, Mavridi (2023) notes that expertise in digital learning remains underdeveloped in formal LTE, including in master's degree programmes in TESOL and Applied Linguistics. Are we repeating the same patterns with AI?

A lack of teacher preparation is always concerning but the stakes are even higher in the age of AI. Teachers are not only expected to integrate complex tools into the classroom, but also to guide students in using them ‘responsibly’, though what this entails is rarely unpacked. Yet, many teachers have had little time or space to explore core questions: Are we prepared to explain how these tools function? Are we asking students to use platforms that may compromise their data? Which brings us to a harder question: given the embedded risks associated with bias, labour exploitation, and environmental impact, can potentially unethical tools be used ethically in the classroom?

These questions point to the need for a deeper shift in teacher education. Too often, digital learning is approached as a matter of tool adoption rather than a pedagogical and epistemological process (Gouseti, 2010). However, preparing teachers for AI is not about adding one more tool to their kit. It is about supporting them to ask critical questions, see critical flaws, and consider how any use of

AI aligns with their pedagogical values. These priorities deserve more consistent attention across all forms of LTE, whether formal or informal, pre-service, in-service, or continuous professional development. Yet, in many teacher development contexts, the emphasis still leans towards showcasing ‘cool’ tools. For example, ELT participants in Edmett et al. (2024) note “the huge number of AI talks at conferences” focusing on practicalities over critical discussion (p. 58).

None of this is to suggest that teachers are incapable of developing critical insights on their own. The COVID-19 pandemic offered ample evidence to the contrary with teachers demonstrating remarkable adaptability to new modes of instruction. A British Council survey of 1,102 teachers across 49 countries found that, for many, this was a period of steep digital learning and growth (Mavridi, 2022). But, it also exposed systemic gaps: language teachers, all qualified through formal education, learned how to teach with technology while doing it; a situation that compromised both their experiences and student learning. The lessons learned from the past must not be forgotten. Rather than assuming readiness or leaving teachers to build it on the job, LTE must create space for deeper and more sustained engagement with digital learning.

Perhaps as a first step, LTE needs to recognise, and consistently support, that the expertise to teach in digital contexts is not a byproduct of using technology. It is not developed through professional development that simply showcases what tools can do, and it certainly does not come from marketing or research hype in AI (Bauer et al., 2025; Selwyn, 2022) that presents technology as a silver bullet. Teaching with technology is complex and framing it as inherently good (or bad) oversimplifies that complexity. Technology, like any tool, does not transform or enhance anything on its own; it mediates human activity (Engeström, 2014; Flavin, 2017). Whether that mediation is empowering or limiting depends on *how* we use it to support learning, under what conditions, and what role we let it play. The stakes are too high for this kind of critical engagement to remain optional, and LTE needs to respond with clarity and purpose.

The Critical Engagement Response

This response is characterised by a reflective and pedagogically informed orientation toward AI: open to innovation, but selective in uptake, with careful attention to how its use shapes teaching and learning (e.g., see Godwin-Jones, 2025). Critical engagement with AI does *not* necessitate adoption. Some teachers may choose to integrate AI into classroom practice where appropriate; others may decide to educate students *about* AI. This includes encouraging reflection on its potential benefits and limitations regarding language, society, culture, and ethics (UNESCO, 2024). In both cases, decisions are guided by deeper reasoning and, where possible, empirical research, their own or/and others’.

Critical engagement differs from what might be called *critical takes*, which may emphasise problematisation or scepticism without proposing actionable steps. This risks critique becoming an end in itself, rather than something translated into pedagogical practice. Without this grounding, even well-intentioned critique may become disconnected from the realities of language teaching, which remains deeply situated and practical. For example, concerns about bias or environmental impacts are reasonable but unless acted upon (e.g., through explicit discussion with students), they remain just that: concerns, not action.

Opportunities and Limitations

A key benefit of this response lies in its potential to support more informed pedagogical decision-making. When educators critically consider how AI may enhance or hinder learning, they are better positioned to evaluate its actual impact on the classroom (Selwyn, 2024). This creates space for

more intentional integration (or informed non-integration) of AI, depending on the teaching context. More informed pedagogical decisions can also facilitate deeper learning, particularly when students are invited to reflect on how AI impacts their learning (Warschauer et al., 2023). These discussions matter because they support the development of digital literacies (Mavridi, 2020). Even when AI is not used directly in class, they help students consider how such tools shape communication, authorship, and future workplace expectations.

Still, this response raises important limitations. Most notably, it can be time and resource-intensive, requiring sustained reflection, curricular alignment (Al-khresheh, 2024), and the willingness to engage with complexity and uncertainty (Fawns, 2022). These demands are not to be taken lightly, especially for teachers navigating packed syllabi or institutional expectations that leave little room for experimentation. And they will, almost certainly, entail curricular trade-offs. For example, time spent developing students' critical awareness of AI, or integrating AI into pedagogical practice, may reduce what is available for other core language teaching aims.

Implications for Language Education

This final orientation gives rise to three distinct implications that merit focused discussion: *digital pedagogy as a critical lens*; *educating the teacher educator*; and *negotiating ethical dilemmas*.

Digital Pedagogy as a Critical Lens

If there is one thing the preceding responses have made clear, it is this: teaching with AI cannot be reduced to questions of whether it is good or bad. The reality is far more complex, and the implications for LTE go deeper than training or tool adoption. What is needed is a critical perspective, one that recognises AI as part of a broader digital ecology and evaluates its use in light of pedagogical purpose. This is where digital pedagogy may offer a useful lens.

Existing definitions of digital pedagogy vary in scope but often revolve around the idea of using digital technologies to support teaching. Some focus on instructional methods; for example, Howell and McMaster (2022) define it as the study of how to teach using digital technologies. Others, such as Jisc (2023), take a broader view, describing it as the study of how digital technologies can be used to best effect in teaching and learning. For Tan and Subramaniam (2009), digital pedagogy means leveraging technological affordances to support instruction.

These definitions are particularly useful in establishing digital pedagogy as a field in its own right. Yet, they tend to frame it primarily in terms of instructional affordances or digitization. This risks reducing it to a set of implementation strategies of digital content delivery, rather than positioning it as a broader pedagogical and epistemological inquiry. In particular, such framings may overlook the need to critically examine the values, purposes, and assumptions that underpin digital practice, including when and why technology should (or should not) be used, and how it shapes instructional design, knowledge construction, and learner agency.

Building on these perspectives, I define digital pedagogy as the study of how, why, and importantly, whether digital technologies can enhance teaching and learning. Digital pedagogy is not a single method or prescriptive approach, but a branch of pedagogy concerned with the design, implementation, and critical evaluation of educational practice involving digital technologies. Much like *pedagogia* in its original Greek sense, it foregrounds teaching as a situated, critical, and reflective practice; one that bridges theory and practice to inform how technology-mediated instruction is shaped and enacted in context-specific ways. This is precisely why framing digital learning as a set of tools to be adopted

(or rejected) can be limiting. It also requires critical engagement with the purposes and principles that guide its use, as well as its broader social, cultural, and ethical implications.

In the context of language education, digital pedagogy also draws on language learning pedagogies and considers how digital technologies shape core dimensions of learning. This includes interaction (e.g., through synchronous and asynchronous digital communication), shifting notions of authorship (e.g., with collaborative or AI-assisted writing), expanding modalities of meaning-making (e.g., through video, podcasting, and multimodal text), and feedback (e.g., via automated tools or screencasting). Motivation and engagement are also reshaped, as digital environments create both new opportunities and challenges for learner autonomy or dependency.

In the age of AI, these shifts are further complicated by algorithmic mediation of language use and communication. This raises new ethical and epistemological questions that demand careful pedagogical judgement. For example:

- Who is the author when a student uses AI to generate or co-construct text?
- What counts as knowledge construction when students co-construct with AI?
- Does AI-assisted writing improve the writer or the essay?
- What does it mean to delegate meaning making to an algorithmic system?

While digital pedagogy offers a critical lens, this does not preclude the value of more skills-oriented models. The widely cited Technological Pedagogical and Content Knowledge (TPACK) framework (Mishra & Koehler, 2006), for instance, remains highly relevant in teacher education as it highlights the professional knowledge required to integrate technology into content-specific teaching, i.e., pedagogy, content, and technology as well as the intersections of these knowledge domains. Chapelle et al. (2024) highlight its continued relevance in teacher education, drawing on TPACK to discuss what new forms of knowledge language teachers may need in the age of GenAI. Yet, the focus of TPACK remains on *what* teachers need to know to teach effectively with technology. Digital pedagogy calls for a different (though complementary) line of inquiry: whether, why, and how the use of technology can assist learning, how it aligns with pedagogical aims, and what new forms of knowledge, agency, or digital inclusion it may support or limit. It invites reflection on the underlying purposes, assumptions, dilemmas, and implications of technology in teaching and learning, and as such it can usefully complement more skills-oriented models in teacher education.

Educating the Teacher Educator

If our approach to digital learning is to become more discerning, then those responsible for educating the teacher must also be equipped to lead that shift. Nearly two decades ago, Hubbard (2008) noted a shortage of teacher educators with specialised expertise in CALL (Computer Assisted Language Learning). More recently, Mavridi (2023) found that digital learning remains underrepresented in post-graduate programmes which are often a key route through which teacher educators gain their expertise, i.e., Master's in TESOL and Applied Linguistics. Deep knowledge of language pedagogy remains essential, but it is not sufficient for those preparing teachers for technology-mediated teaching. As Kessler (2016) argues, this role requires not just technical familiarity, but also deep pedagogical and theoretical expertise in educational technologies.

Without this grounding, teacher education may fall short in preparing teachers to navigate the complex and rapidly evolving AI landscape, and the demands it places on them (Moorhouse & Kohnke, 2024). We clearly rely on teachers to help students make informed, reflective use of AI and model thoughtful

engagement with these tools. Such work is deeply pedagogical and interpretive. It invites teachers to identify what matters in language education and to articulate what remains distinctly human in the age of AI (Kern, 2024). Put simply, the demands placed on teachers today are far from simple and this has direct implications for those educating them.

Preparing the teacher educator, not just the teacher, deepens the earlier call for digital pedagogy as a lens for approaching digital learning. Hopefully, it should be clear by now that such a call goes beyond knowing how to use tools. It requires the ability to situate these tools within language pedagogies, evaluate the shifts they introduce, and consider what those shifts mean for teaching and learning. LTE needs to equip teacher educators to promote such grounded, context-specific, and discerning responses to AI; responses shaped, but not dictated, by technological disruption.

This is not to suggest that LTE needs a complete overhaul, or that *every* teacher educator become an expert in AI or educational technology. However, those preparing teachers for critical engagement with AI need dual disciplinary expertise, language pedagogy and digital pedagogy, or TPACK. This kind of grounding needs to be systematically embedded in both formal programmes and ongoing CPD. How this is implemented will inevitably vary across contexts. One useful first step can be to acknowledge that this expertise matters, and to treat it as a priority rather than an optional extra.

Negotiating Ethical Dilemmas

Building on the need for deeper readiness, a third implication for LTE is the need to support teachers in acknowledging and actively working toward the unresolved ethical dilemmas surrounding AI in education. Recent studies highlight how AI ethics are often inconsistently understood or applied by language educators, with some relying on personal ethics in the absence of institutional guidelines (Kamali et al., 2024). These are not issues that can be addressed through institutional policy alone. They often relate to broader systemic questions about data privacy, algorithmic bias, labour exploitation, and environmental impact. While regulatory frameworks are beginning to emerge, there is currently no global consensus, and past attempts to regulate disruptive technologies, such as social media, have often been weak or delayed (Edmett et al., 2024). Initiatives such as UNESCO's Beijing Consensus (2019) offer a starting point, but it remains unclear whether they adequately address the specific challenges faced in language education.

These uncertainties create an uncomfortable reality for those who wish to leverage AI in the language classroom. Are we asking students to use technologies that collect and repurpose their data without transparency? Can we confidently integrate technologies that may be biased, exploitative, or environmentally harmful, and simply hope students will use them *ethically*?

These questions do not have easy answers, and that, in itself, *is* educational. Ethical ambiguity can be pedagogically productive when it becomes a space for open inquiry, not avoidance. As Kern usefully notes, teachers do not need to have predetermined “best practices” (p. 526). They can instead explore *with* students what these tools can and cannot do, and how their use intersects with learning, authorship, and fairness. This is a direction worth pursuing. But, it cannot be left to individual improvisation. LTE must offer structured support that equips teachers to engage with these dilemmas; not to resolve the issues themselves, but to enable students to make their *own* informed decisions. This means preparing teachers to foster classroom cultures where students take ownership of their engagement with AI, and where ethical ambiguity is not treated as a barrier to learning, but as part of the learning itself.

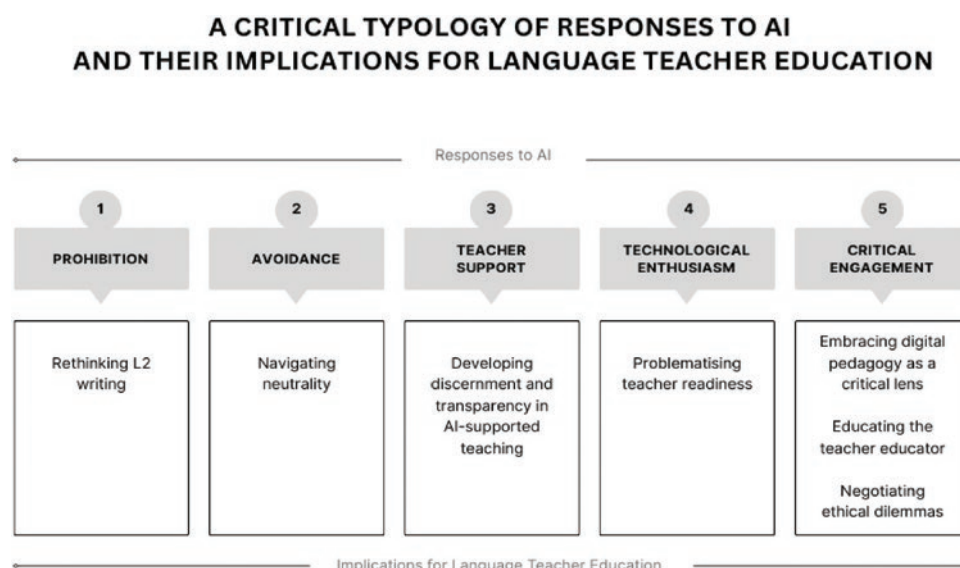


Figure 1 Responses to AI and their Implications for Language Teacher Education.

Conclusion

In this perspective article, I have drawn on literature and sustained professional observation to propose a critical typology of five responses to AI in language education. Together, these responses represent distinct orientations towards AI and can be summarised as *prohibition*, *avoidance*, *teacher support*, *technological enthusiasm*, and *critical engagement* (see Figure 1). These responses are not exhaustive nor mutually exclusive. Rather, they often overlap, capturing the complex and sometimes contradictory pressures that educators experience. The typology, then, is not intended to prescribe best practice but to offer a reflective tool; one that prompts deeper questions about the values our responses embody, the practices we normalise, and the educational possibilities we may be enabling or overlooking.

Taken together, these responses point to an overarching implication for LTE: the need to re-centre pedagogical purpose in how we think about and engage with AI. This moment is not about resisting or embracing change, but about asking what kind of teaching and learning we want AI to support and under what conditions. I have suggested seven directions for language teacher education: rethinking L2 writing, navigating neutrality, developing discernment and transparency in AI-supported teaching, problematising teacher preparedness, and engaging more deeply with digital pedagogy, teacher educator development, and ethical dilemmas (see Figure 1).

These directions do not claim to have all the answers. If anything, they point to how much more needs to be interrogated, debated, and researched. But it's a call, I hope, that opens the kinds of conversations language education urgently needs. If we continue to treat AI as either a threat to be addressed or a tool to be adopted, we risk reinforcing the very binaries that this moment calls into question. We need sustained inquiry into how teacher education can prepare teachers to navigate the dilemmas, contradictions, and shifting demands that AI entails, including when to adopt, question, limit, or reject it, and to do so with clarity and purpose.

What we choose to normalise, ignore, or resist in our engagement with AI will shape not just how we teach but what kind of language education we imagine possible, and what role, if any, we allow AI to play in that vision. As a step forward, LTE can invite educators to critically reflect on their own responses to AI: what drives them, what they enable, and what they may limit. This can be a powerful starting point.

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