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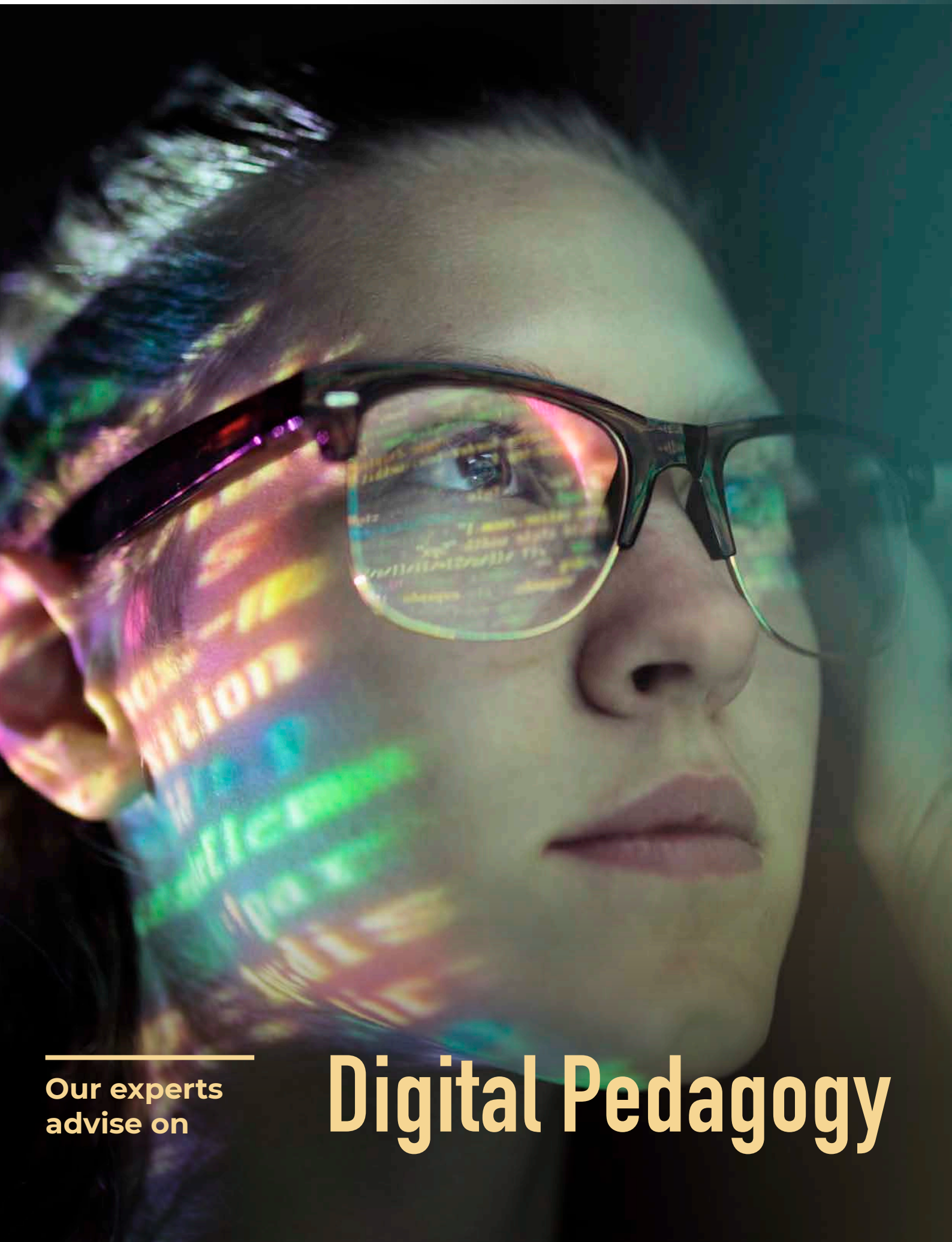


Our experts advise on

Digital Pedagogy

What is this paper about?

Teachers are increasingly required to use digital tools in the classroom for a wide variety of tasks. How does this change the learning that takes place? Is 'digital pedagogy' a different entity to pedagogy in general, and if so, what does this mean for teachers and learners?

So, what should happen next?

Digital pedagogy doesn't offer any quick answers, but it does offer an approach, and we must decide what kind of digital future we want to build for ourselves. Technology should serve learning – not the other way around.

Key takeaways

1

Digital pedagogy is more than tools.

It's a reflective approach to using technology in ways that genuinely enhance learning, promote learner agency, and support meaningful interaction. The impact of digital tools will vary depending on context.

2

Technology reshapes teacher–learner relationships.

Digital tools can empower learners but may also shift or obscure traditional roles. Teachers need to remain aware of how tools influence participation, autonomy, and authority in the classroom.

3

Critical thinking is essential.

Teachers and decision-makers should not assume that digital equals better. The choice to use a digital tool should be driven by pedagogical intent, not technological novelty.

4

Support teachers with digital pedagogical literacy.

This includes not just technical skills but also the capacity to make informed decisions about when and how to integrate technology—and when not to.

5

Pedagogy should lead technology.

The future of digital education depends on restoring and reinforcing teacher agency in decisions about how technology shapes learning.

Contents

Introduction

What does it mean to teach and learn English effectively in the **digital age**? This is the central question guiding this position paper. As digital tools have become increasingly embedded in the daily realities of English language teaching (ELT), many teachers find themselves navigating a rapidly evolving landscape. New **platforms**, **apps**, and **AI**-driven tools arrive with promises of engagement, efficiency, and even transformation. But amidst the buzz and potential innovation, a deeper, more urgent question remains: how can digital tools be used to genuinely support meaningful learning? And, crucially, what kind of approaches to teaching do these tools call for—or require?

Sections

1 ***What is digital pedagogy?***
This first section considers how we can best define digital pedagogy, bearing in mind that individual context may still call for different interpretations. We then look at how technology doesn't just support learning, it shapes how students learn.

2 ***Why is digital pedagogy important and useful?***
In this section, we discuss why digital pedagogy is so important and useful. Teaching delivery has changed since the pandemic, and now learning is often mobile-first and AI-driven. Learners' expectations have also changed and there is a growing need for critical **digital literacy** to choose digital tools wisely and use them well.

3 ***Problems and issues***
We look at the challenges connected with digital pedagogy, from the lack of shared definitions and frameworks to how digital tools change the way authority, interaction and responsibility are distributed in the learning process.

4 ***Ideas for implementing digital pedagogy in practice***
We consider ideas for implementing digital pedagogy, and how to design and support digital pedagogy in ways that are based on good pedagogical thinking.

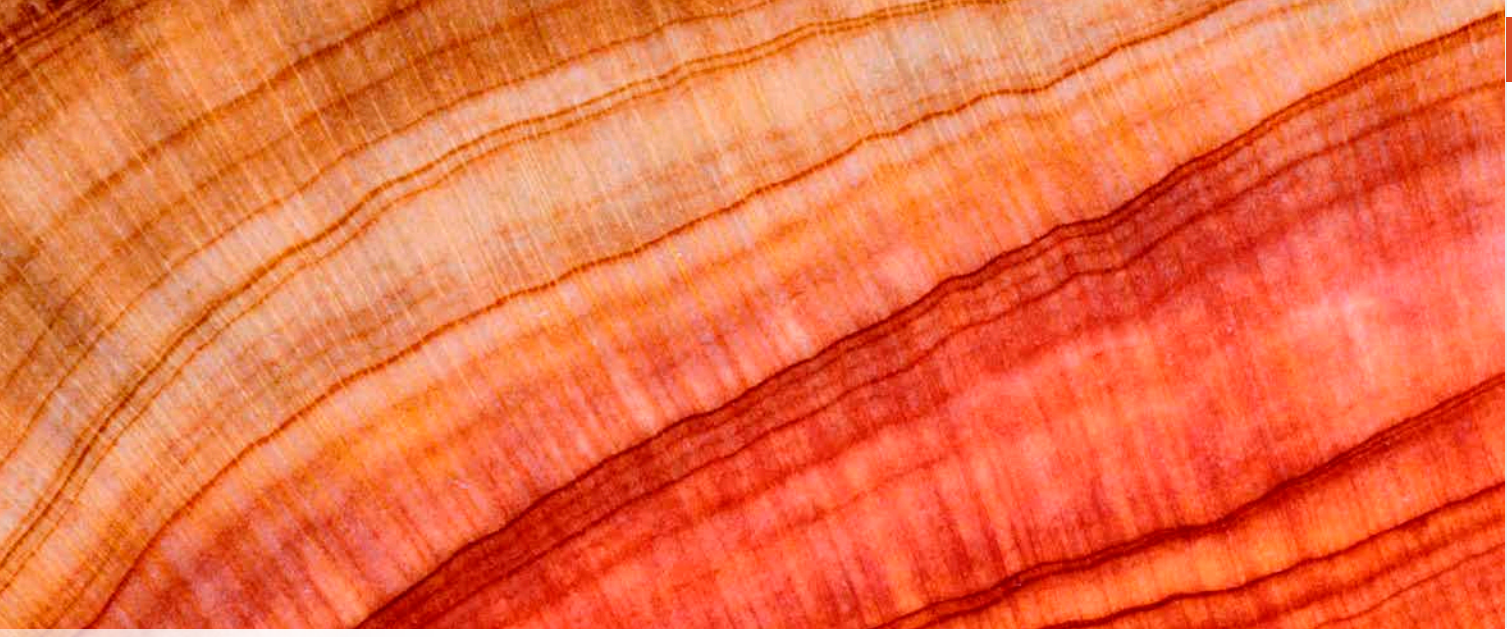
5 ***Final reflections and recommendations***
Finally, this section proposes some recommendations to enable teachers to teach thoughtfully in a digital world.

Conclusions

This paper argues that we need to make informed choices about the technology we use in the classroom, so that we can teach and learn effectively in the digital age. This requires reflection and critical engagement by teachers, institutions and policymakers.

Appendix, Glossary, Resources and References

Key terms in bold are explained in the Glossary.
Appendix, Further reading, resources and references can be found at the end of this paper.



1 What is digital pedagogy?

Digital pedagogy is a term that resists neat definition. For some, it represents a fundamentally new way of teaching—one shaped by new opportunities and entirely new teacher and learner behaviours. For others, it's simply our existing pedagogy applied in a digital context: the same core principles of good English teaching—managing **cognitive load**, providing meaningful feedback, fostering autonomy, and sustaining motivation—but now supported by digital tools.

This paper acknowledges this diversity of views and aims to provide a shared frame of reference. For us, digital pedagogy refers to the reflective, intentional use of digital tools to support effective teaching and learning. It is not simply about technology adoption, but about how that technology reshapes interaction, feedback, autonomy, and teacher decision-making. By digital pedagogy, we do not mean simply digitising existing materials, nor do we mean deferring pedagogical decision-making to platforms or algorithms. In this paper, we use it specifically to describe practices where pedagogy leads and technology follows—where tools are evaluated by their contribution to learning, not by their novelty or commercial promise. The term risks becoming ornamental if it is stretched to cover any technology use.

This working definition is used to guide the examples and principles shared throughout the paper, while recognizing that individual contexts may still call for different interpretations.

While definitions of digital pedagogy may differ, most share one important idea: digital tools are not neutral. Every tool we use—whether it's a video conferencing platform like Zoom, a language learning app like Duolingo, an AI-powered writing assistant like Grammarly, or a messaging app like WhatsApp—affects more than just the mechanics of learning. These tools shape what learning looks like, and they can also shift the dynamics between teachers and learners. For example, a platform might limit opportunities for open discussion or automate feedback that a teacher would otherwise give. This can influence who makes decisions in the classroom, how much control learners have over their learning, and how people interact with one another. In other words, digital tools don't just support teaching—they actively shape it. That's why, even if we can define digital pedagogy in different ways, the need to use technology thoughtfully, ethically, and in context is something most can probably agree on.

> Does the digital tool enhance the lesson? If it is just using tech for the sake of it, then I don't think it is best to use it, however when it runs smoothly, it can enhance the learning experience.
>
> **Gary, Head of A-levels, Malawi**

Understanding the contexts of digital pedagogy

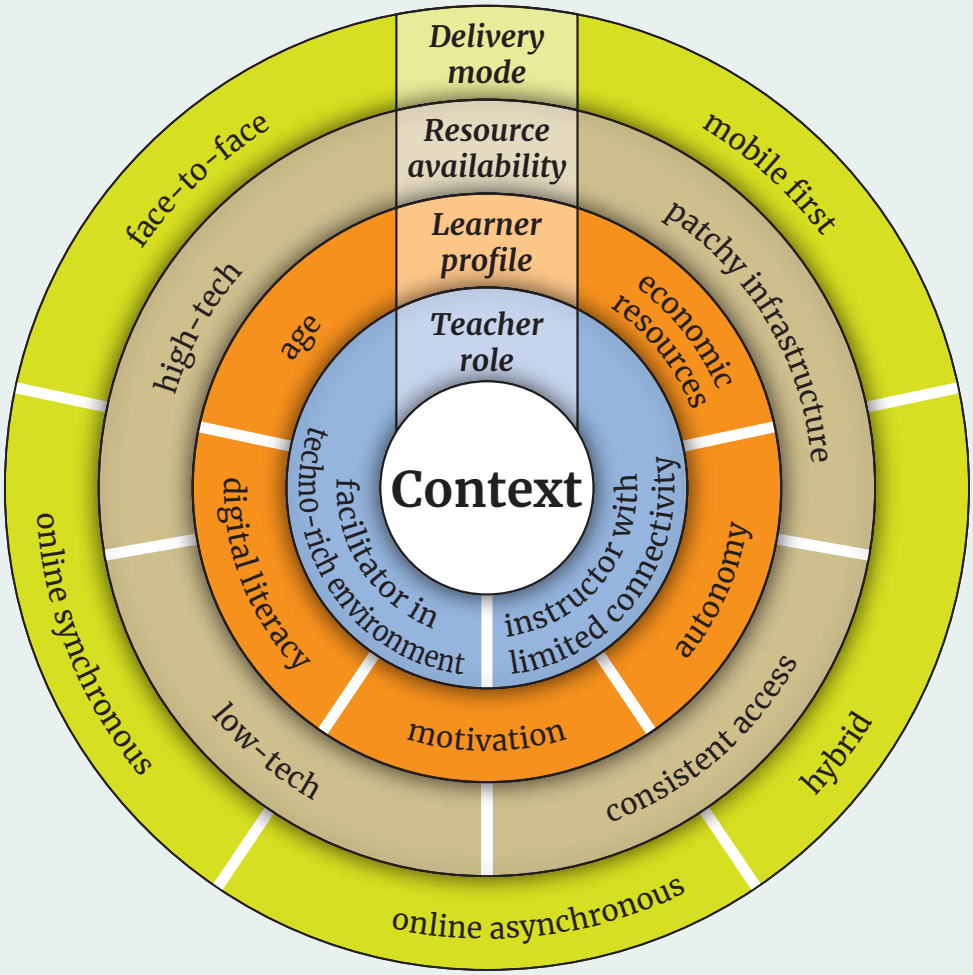
Digital pedagogy doesn't exist in a vacuum. To better understand its role and impact, we can start by exploring the teaching contexts in which it is applied. These can range from well-resourced online university programmes to large classes in rural schools with intermittent internet access. At one end of the spectrum, a teacher might design a **blended course**, maybe using an **adaptive learning** platform and a student analytics **dashboard**. At the other, a teacher might send voice notes via WhatsApp to students who can't attend class in person.

Digital pedagogy also extends beyond teacher-led contexts. Many learners now engage with digital platforms for self-study, whether through language learning apps, online video tutorials, or AI-powered tools. These experiences shape learners' expectations of what technology can (and cannot) do in more formal classroom settings and are, therefore, an important part of the wider digital learning landscape.

All this diversity of context matters. A digital tool that works well in a one-to-one online lesson may not translate effectively to a large, **hybrid** classroom. A platform that enhances learner autonomy in one context may encourage passivity in another. The effectiveness of digital pedagogy, then, is not only about the quality of the tool or the design of the lesson; it's also about the fit between tool, pedagogy, context, and learner need.

To help navigate this complexity, we can consider several dimensions of context.

- Delivery mode: face-to-face, online **synchronous**, online **asynchronous**, hybrid, or mobile-first
- Resource availability: high-tech vs low-tech, consistent access vs patchy infrastructure
- Learner profile: age, level of digital literacy, motivation, autonomy, and economic resources
- Teacher role: from facilitator in a tech-rich environment to sole instructor managing with limited connectivity.



Consider the following examples:

- In a face-to-face classroom, a teacher might use a collaborative writing app on tablets to co-construct texts with students, allowing for real-time peer feedback and revision.
- In an asynchronous online course, learners might watch recorded grammar lessons and then post voice responses using a discussion app—developing both receptive and productive skills.
- In a mobile-first context with **low bandwidth**, a teacher might set up weekly learning prompts via SMS or WhatsApp, encouraging students to complete micro-tasks offline and report back.

These are all examples of digital pedagogy. What distinguishes them isn't the technology itself, but how it's used to shape learning experiences—and whether those uses are intentional, inclusive, and responsive to learner needs and goals.

To revisit our earlier examples through this lens: Zoom can enable real-time interaction, but only when sessions are purposefully structured to foster engagement and participation. Duolingo may support learner autonomy through **gamified** practice, yet without guidance it can also lead to shallow or repetitive engagement. Grammarly offers instant feedback on writing, but if used uncritically, it might discourage risk-taking or deeper reflection on language. WhatsApp can connect learners and extend learning beyond the classroom—especially in low-resource or **mobile-first** contexts—but this depends on how intentionally it's used to support communication and access.

Digital tools have made the teacher-student relationship more interactive and equal. Tools turn students into active participants, not just passive listeners: they even create their own quizzes sometimes. Technology also helps us give instant feedback and adapt lessons to students' needs more easily. However, nothing replaces the trust and connection built through real conversations and shared experiences in the classroom.

Eleonora Valovičová,
Teacher, Slovakia

From tool to pedagogical agent

A key shift in digital teaching is that technology doesn't just support learning—sometimes, it actively shapes how students learn. That changes the dynamic between teacher, learner, and content. This shift aligns with **socio-material** perspectives on learning, which suggest that digital tools are not neutral intermediaries but co-constructors of learning activity (Orlikowski, 2000; Pea, 1993).

For example, in a teacher-led classroom, digital tools might simply support instruction: an **interactive whiteboard** used to display content or a digital quiz app to check or test understanding. But in a self-directed, app-based environment, a tool might take on some of the functions traditionally carried out by a teacher. It might provide feedback, sequence tasks, and even adapt instruction based on learner responses. These actions can appear autonomous—but they are always the result of pedagogical choices embedded by developers and designers. In this way, human intent remains present, even when the teacher is not.

This raises important pedagogical and ethical questions, including who provides feedback, how tasks are scaffolded, and whether learners retain agency in shaping their learning experience. Who—or what—is doing the teaching? And to what extent are the choices made by educators shaped—or even limited—by the tool itself?

Behind every digital tool are assumptions about what effective learning looks like, how progress should be measured, or what kinds of interaction matter. These are decisions made by designers and developers, not necessarily by teachers. So, what role remains for the teacher? These are not just theoretical concerns; they have practical implications for how we train educators, design curricula, and evaluate learning outcomes.

So, it's not just about using new tools. It's about responding thoughtfully to the challenges we've explored in this section—who holds agency, how feedback is given, and what assumptions are built into digital platforms. That means thinking carefully about what we use, why we're using it, and how it affects learners in the real world. It also means asking not only what

a technology can do, but what it should do. Ultimately, we need to prioritize learner agency, teacher expertise, and human connection—even in digitally mediated spaces.

Navigating tensions and trade-offs

The use of technology in ELT brings real opportunities but also significant tensions. And educators working with digital tools often find themselves caught in a web of competing priorities.

Consider the following:

- Promise vs Pitfalls: while digital tools can enable **personalized learning**, greater access, and real-time feedback, they can also overwhelm teachers (for example, when platforms generate excessive data that must be analysed), isolate learners (as when self-paced apps replace opportunities for collaboration), or introduce new distractions (notifications, gamified rewards).
- Empowerment vs Dependency: technology can support learner autonomy, but it can also create reliance on platforms or AI-driven systems, reducing opportunities for critical thinking or interpersonal learning.
- Equity vs Exclusion: while digital approaches can enhance access for many, they risk excluding learners who lack devices, reliable connectivity, or the **digital fluency** to participate meaningfully. Research consistently shows that without intentional support, digital tools can reinforce existing educational inequalities (Global Education Monitoring Report Team, 2020; Van Dijk, 2019). In addition to these issues of infrastructure and affordability, educators also face constraints that are regulatory rather than economic. In some countries, popular digital platforms are restricted or unavailable due to government policy. This means that teachers and learners cannot always choose the tool that best fits their pedagogical needs or socio-economic context; they may also have to navigate restrictions on what is legally accessible.

Recognizing these tensions is not a reason to reject digital tools, but a call to use them more consciously. Digital pedagogy offers powerful opportunities for reach, scalability, and access—but it also introduces new risks around equity, autonomy, and human connection. While these technologies can extend instruction in ways that individual teachers alone may not be able to, their purpose should not be to replace human teaching but to enhance it—and ensure that it remains inclusive, ethical, and effective.

> Technology doesn't just support learning. It actively shapes how students learn.
>
> Nick Robinson

What do I need to know?

Digital tools aren't neutral

They shape how learning happens and who holds the power in the process. It's not just about what tools do; it's about how they reconfigure roles, relationships, and opportunities in the classroom.

Context is everything

A tool that empowers in one context can disempower in another. Effective digital pedagogy requires a deep understanding of learner needs, resource realities, and teaching environments.

Pedagogy is the constant: technology is the variable

Whether you're using WhatsApp, Duolingo, or an AI writing assistant, your choices already reflect a pedagogical stance.

Why is digital pedagogy important and useful?

It's hard to imagine a conversation about ELT today that doesn't touch on digital tools in some way, directly or indirectly. The digital dimension of our industry has become inescapable. But this shift isn't just about the availability of new technology. It reflects deeper changes in how, where, and why people learn and use English. Digital pedagogy provides a lens to understand and navigate these changes with purpose, which is what we'll do in this section.

The post-pandemic shift

The Covid-19 pandemic forced education systems worldwide into emergency remote teaching—the rapid, temporary shift to online delivery in response to a crisis, not the result of deliberate instructional design. For some ELT practitioners, this period would have marked their first sustained experience of teaching online, often with minimal training or preparation. While this period was rarely an example of considered digital pedagogy, it undeniably changed expectations. Teachers built new skills under pressure. Learners became familiar with virtual platforms. Many institutions invested in infrastructure they once considered optional. As an industry, we 'crossed the chasm'.

Nowadays, even as face-to-face teaching has resumed, many teachers and institutions are actively seeking to retain the most effective digital practices developed during the pandemic, rather than returning wholesale to pre-pandemic models (Bozkurt, 2022; Hammond, 2021; OECD, 2021). A solid understanding of digital pedagogy helps educators move beyond emergency practices towards a more intentional, sustainable use of technology in teaching.

> Digital pedagogy is how we future-proof education—not by chasing tools, but by shaping how they're used.
>
> Geoff Stead

Mobile-first and AI-driven learning

In many contexts—particularly in parts of Asia, Africa, and Latin America—the smartphone is now the primary learning device (Broadband Commission for Sustainable Development, 2022). This mobile-first reality changes how learners engage with English. Short-form videos, **voice messaging** apps, gamified learning platforms, and AI-driven

chatbots are becoming part of learners' everyday routines. Meanwhile, AI-powered tools like Write & Improve, Grammarly, or adaptive quiz apps like Quizlet Learn are shaping the feedback learners receive. These tools can personalize input, suggest corrections, and offer real-time nudges—potentially increasing learner confidence and promoting independent study. Research shows that such **automated** feedback tools can improve surface-level accuracy and learner engagement, particularly when embedded in formative, goal-oriented tasks (Ranalli et al., 2017). For busy teachers, they can reduce the burden of marking and help students progress at their own pace.

However, the use of such tools also raises important pedagogical questions: what kind of language input are learners receiving? Are they developing critical awareness of language use and correction—such as understanding why a suggestion is made and whether it's appropriate in context—or simply clicking through corrections? And what role does the teacher play in mediating that experience?

Understanding digital pedagogy means being equipped to ask and answer these kinds of questions. It helps teachers and institutions use such tools not just as novelties or time-savers, but as part of a coherent learning experience.

> Digital tools allow students to be more autonomous and more responsible for their own learning, finding their own resources if they are motivated to do so. They also create an expectation for the teacher to use these sort of tools to be considered up to date and this can create a certain demand in the classroom.
>
> **Lucy McAuliffe, Owner/Teacher, Spain**

Learner expectations

Today's learners expect more than static worksheets and grammar drills (although admittedly many still like a reliable paper worksheet!). They are used to switching between **tabs**, consuming rich media, and interacting across platforms with well-designed **user experiences** (**UX**). Increasingly, they expect learning to be engaging, flexible, and, ideally, personalized, mirroring the personalized environments they already experience in their digital lives.

But this goes beyond preference. Research shows that technology-supported personalized learning can significantly improve engagement and outcomes, particularly in contexts with diverse learner needs or limited resources (Major et al., 2021). Adaptive platforms that deliver personalized feedback and AI-supported **learning pathways** are especially effective for learners with higher levels of digital literacy (Yaseen et al., 2025). Emerging studies also highlight how AI and analytics are being used to tailor learning in real time, supporting more responsive and adaptive pathways for students (Okolugbo & Okolugbo, 2025).

At the same time, findings are not always consistent. Some studies are small scale, conducted under controlled conditions, or funded by vendors. This means that while the potential is clear, more independent research is needed to understand how well personalization scales across different contexts. As Dörnyei and Ushioda (2011) remind us, learner motivation and engagement are shaped not only by design but by perceived autonomy, relevance, and interaction.

Personalization or just sequencing?

In this paper, we use 'personalization' to mean the tailoring of learning pathways, content, or feedback to an individual learner's needs and preferences—whether through teacher judgement, digital tools, or a combination of both. But not all tools labelled as 'personalized' deliver on this promise. In some cases, what is marketed as personalization is little more than **algorithmic** sequencing of pre-packaged content.

Questions for reflection:

- What exactly is being personalized—the pedagogy, the pace, or just the order of items?
- Does the personalization genuinely increase learner agency and deeper learning, or simply automate repetition?
- Whose interests are being served—the learner's, the teacher's, or the platform's?

For a more in-depth discussion of the role of personalization, adaptive learning, and much more technology-related issues in ELT, see Phillip Kerr's *Adaptive Learning in ELT* blog.[1]

I use digital tools when they make English learning more engaging and effective -- for example, to practise listening with authentic materials, review vocabulary interactively, or provide instant feedback. I avoid them when they distract from communication, when the focus is on speaking or personal interaction, or when technical issues could interrupt learning. Technology supports my teaching, but it never replaces real language use.

Maria Linares,
Head of English, Peru

All this doesn't mean every lesson needs tech or shiny features—but it does mean that if every student sees the same worksheet in the same way, some will switch off. As the learning design consultancy LearnJam once put it when describing bad **Learner Experience (or LX)**, 'Not only did you fail to learn something; you had a horrible time trying'.[2]

Digital pedagogy can help educators respond to these expectations in principled ways. For instance, a teacher might:

- Use a **flipped classroom** model, where learners watch a short video before class and come prepared to practise together. This shifts lower-order cognitive tasks—like content delivery and initial comprehension—to the individual learning space, allowing class time to focus on active application and peer collaboration (scaffolding and deeper engagement).
- Invite learners to record and share spoken reflections using a voice messaging tool like Vocaroo or Padlet, fostering autonomy and multimodal fluency.
- Set up a **discussion board** for asynchronous peer feedback, supporting collaboration beyond the live classroom, extending interaction time and supporting peer-to-peer feedback.

These examples illustrate purposeful integration that enhances learning through meaningful pedagogical design. They are pedagogically sound choices that meet learners' expectations, made possible by digital tools.

Transferable skills beyond the platform

One risk in digital teaching is becoming overly dependent on specific tools. A teacher may feel confident using one particular platform, only to struggle when it changes or becomes unavailable. Digital pedagogy supports a more resilient approach. Rather than focusing on tool-specific competence, it encourages the development of broader, transferable skills—such as how to design for **interactivity**, scaffold learner autonomy, or critically evaluate a platform's claims.

This is particularly valuable for teachers working across multiple contexts or moving between systems. A confident 'tech-pedagogue' is one who can adapt their principles across platforms, whether teaching on Zoom, Microsoft Teams, or WhatsApp. They are not defined by the tool, but by the pedagogy they bring to it.

The need for critical digital literacy

If we accept that digital tools are not neutral—that they shape what and how we teach—then it becomes important to support educators in thinking critically about how and why they use them. This includes:

- Asking who benefits from a tool's design
- Asking what problem it truly solves
- Evaluating its data practices and privacy implications
- Considering whether it reinforces or challenges existing hierarchies—who has access to devices, connectivity, learning support, or participation; whose knowledge is prioritized; whose voices are heard; and who holds control over content, data, and pedagogy
- Reflecting on how different tools can be combined to create meaningful learning experiences, and how teachers can actively orchestrate these to maximize engagement.

For example, some **EdTech** platforms prioritize sleek user interfaces and algorithmic personalization but offer little transparency about how learning pathways are constructed. Others may claim to 'boost fluency' but do so through decontextualized drilling.

Digital pedagogy fosters the kind of professional reflection needed to engage with such tools responsibly. It also supports institutional conversations about ethics, inclusion, and long-term learning goals.

Duolingo—engaging design, limited depth?

Duolingo is one of the world's most widely used language learning apps, praised for its slick user experience, gamified design, and ability to keep learners engaged through streaks, badges, and bite-sized lessons. As of Q1 2025, Duolingo reported 130 million monthly active users worldwide. Its 'stickiness' (its ability to retain users) is well documented,[3] and its accessibility and reach—especially in mobile-first contexts—are undeniable.

Yet the platform has also received critique for pedagogical limits. For instance, a systematic review of negative gamification effects notes that overuse of points, leaderboards, and badges is associated with worsened performance, motivational decline, or irrelevance in some learners (Almeida et al., 2023). And internal research on Duolingo itself suggests that while users often gain in receptive vocabulary and listening, these gains may not fully transfer to productive or communicative skills (Jiang et al., 2021).

That said, platforms like Duolingo can be valuable when used alongside more communicative, contextualized learning experiences that support deeper language development.

Why understanding digital pedagogy matters

Given all of the above, why should teachers invest time in developing a knowledge of digital pedagogy? Quite simply, because it helps them make better decisions.

Consider the following:

- Navigating complex technology choices: in a crowded EdTech marketplace, educators are regularly asked to evaluate new tools. Should they pay for a premium app, adopt a new Learning Management System (LMS), or recommend a **chatbot** tutor? A sound understanding of digital pedagogy helps them weigh not just cost and features, but also pedagogical fit and learner needs.
- Avoiding uncritical adoption: not all digital innovation is good innovation. Without a guiding framework, it's easy to fall into the trap of adopting tools for their novelty rather than their effectiveness. Digital pedagogy provides a compass—helping teachers stay grounded in principles even as they experiment.
- Designing inclusive and empowering experiences: perhaps most importantly, digital pedagogy can support more equitable teaching. By considering access, digital literacy, and learner agency, it helps teachers create learning experiences that are both empowering and inclusive—whether they're teaching with laptops in a well-equipped classroom or using shared mobile devices in a remote community centre.

A note on low-resource contexts

It's important to acknowledge that for many practitioners—particularly in low-resource or rural areas—digital pedagogy may seem out of reach or even irrelevant. Connectivity may be unreliable, devices may be shared or unavailable, and digital literacy may be low.

However, the authors of this paper take a broad view of what 'digital' means. It includes asynchronous learning via WhatsApp or Telegram, audio lessons shared on **SD cards**, or locally hosted resources that don't require constant internet access. Digital pedagogy is not about having the latest tools; it's about using any available tools in thoughtful, inclusive, and effective ways. In this sense, it is relevant to all educators, not just those in high-tech settings.

What do I need to know?

Digital pedagogy helps you teach more flexibly

Digital pedagogy supports different modes of learning—live, asynchronous, mobile—and helps you adapt to changing classroom realities.

It makes tech use more intentional

With so many tools available, digital pedagogy helps you focus on what really supports learning, not just what's new or popular.

It's essential for equity and access

When designed well, digital approaches can open up learning opportunities for students in remote, low-resource, or time-limited contexts—especially when learners can use their own familiar devices in ways that support long-term language use beyond the classroom.

3 Problems and issues

If digital pedagogy promises more inclusive, engaging, and responsive learning, why has its adoption often felt so fragmented, inequitable, or even controversial? The answer lies not in the tools themselves but in the broader challenges surrounding their use—challenges that are conceptual, structural, ethical, and practical. This section unpacks those issues, not to discourage the adoption of digital tools, but to highlight the need for a more critically informed and values-led approach.

The Sugata Mitra controversy

A widely debated moment in the recent history of digital pedagogy in ELT came with educational researcher Sugata Mitra's 2014 IATEFL conference plenary. Drawing on his well-known 'hole in the wall' experiments—where unsupervised groups of children in low-income communities were given access to internet-enabled computers—Mitra advocated for a 'minimally invasive' approach to education in which learners could organize their own learning with minimal teacher intervention.

His plenary sparked strong reactions. Supporters were inspired by the vision of learner autonomy, the critique of traditional schooling models, and the potential of technology to increase access in under-resourced settings. His ideas tapped into a growing interest in self-organized learning and challenged educators to reconsider the teacher's role.

However, many in the ELT community raised serious concerns—particularly around the lack of empirical rigour, the oversimplified narrative of teacher replacement, and the ethical implications of promoting self-directed digital learning without addressing structural inequalities. Critics questioned the over-reliance on anecdotal evidence and warned against using digital innovation as a justification for reducing investment in qualified educators. Evidence from follow-up studies of Mitra's initiative suggests that, in the absence of structured support, many of the hole-in-the-wall computers were either no longer functioning or were repurposed by children for playing games rather than educational explanation (Clark, 2013a; 2013b).

The debate highlighted deeper tensions in our field: the balance between innovation and evidence; autonomy and support; and scalability and quality.

Nordic reassessment of EdTech

Across parts of northern Europe, some of the world's most digitally advanced societies are now pulling back from the very technologies they once embraced in education.

In Sweden, a national shift is underway: printed books are returning to primary classrooms, screen time is being reduced, and funding for digital tools in early years has been cut. The Swedish Schools Minister recently announced that digital devices would no longer be central in early education, citing concerns over declining literacy and attention spans.

Finland has passed legislation restricting mobile phone use during the school day, while Denmark is introducing an outright ban on phones in schools and after-school clubs to protect children's well-being.

This 'digital rethink' is not a wholesale rejection of technology but a growing recognition that more digital doesn't always mean better learning. It prompts an important question for educators globally: are we critically evaluating the impact of digital tools—or simply keeping pace with innovation?

Lack of shared definitions and frameworks

At the heart of the digital pedagogy debate is a lack of consensus around its meaning. Is it a distinct pedagogical model, or simply good teaching applied through digital tools? Does it imply a shift in goals, or merely a change in method? Without shared definitions, educators may approach digital pedagogy from vastly different angles. For example, one may view digital pedagogy as simply using digital tools to enhance existing practices, while another might see it as requiring a fundamental shift in learning design. This can lead to misaligned expectations, inconsistent implementation, and confusion about what 'counts' as effective practice.

Several frameworks do exist to support digital pedagogy—such as TPACK, SAMR, and DigCompEdu (see Appendix)—yet none has achieved universal uptake. As a result, teachers often find themselves stitching together partial models or defaulting to what's available rather than what's appropriate.

Without a shared vocabulary or a common evaluative lens, it becomes harder to develop professional confidence, conduct research, or scale successful practices across contexts.

Director of Santa Claus?

At a LearnJam event during the IATEFL conference one year, an audience member drew laughs—and raised eyebrows—by quipping that calling someone a Director of Digital Pedagogy was 'like calling them Director of Santa Claus'. The joke implied that 'digital pedagogy' sounded too vague or imaginary to warrant an official title—as if it were something mythical rather than meaningful. The *target* of the joke was, in fact, a real Director of Digital Pedagogy for a major ELT publisher sitting on the panel at the time.

The remark—tongue-in-cheek though it was—captures a deeper unease: what exactly is digital pedagogy, and who gets to define it? When roles, responsibilities, and frameworks are unclear, the label risks becoming ornamental or performative. This kind of ambiguity not only fuels scepticism, but also undermines the very real work of designing, supporting, and evaluating effective digital teaching and learning.

Shifting roles, shifting relationships

Digital tools do more than deliver content—they change how authority, interaction, and responsibility are distributed in the learning process. On the one hand, this can be empowering. Learners may take more ownership through self-paced study, peer-to-peer collaboration, or AI-supported writing tools. Teachers may shift from 'knowledge deliverers' to facilitators or designers of learning experiences, and also benefit from the increased flexibility that remote teaching can sometimes offer.

> Students tend to turn to technology if they have to do a task, if they don't know the meaning of the word or if they cannot come up with the answer.
>
> Agnieszka Tyszkiewicz, Senior lecturer, Poland

But these shifts also raise difficult questions. When feedback is generated by an algorithm rather than a teacher, does the learner trust it? When chatbots take over vocabulary drills or grammar explanations, what becomes of the teacher's role? And when students spend more time interacting with content than with each other or their teacher, how does that impact motivation, identity, and community?

For teachers, digital pedagogy often brings increased demands—not only in terms of technical fluency, but also in preparation time, ongoing monitoring, and adapting to new classroom dynamics. In hybrid settings, for example, teachers may be expected to manage both in-person and online learners simultaneously, often with limited support or training.

These changing roles demand a rethink of professional development. Teachers need support not just in how to use tools, but in when and why—and in making principled choices that preserve pedagogical integrity and human connection.

When flexibility becomes precarity

As discussed above, the role of the teacher in digital contexts is evolving—but these shifts are not only pedagogical, they're professional and political. The *Guardian* reports[4] that many language teachers are being recast as **gig economy** workers. Rather than benefiting from the promised flexibility of digital delivery, they often face reduced job security, increased casualization, and diminished agency.

These structural changes mirror the classroom shifts described above: teachers become content moderators, data collectors, or online facilitators—often with fewer resources, less institutional support, and less recognition of their pedagogical expertise.

This trend raises critical questions. As we reimagine the teacher's role in a digital age, how do we ensure it remains a sustainable, respected and human profession? What safeguards are needed to prevent innovation from becoming exploitation?

Tool-led vs pedagogy-led decisions

Perhaps one of the most persistent challenges in digital education is the tendency for tools to drive practice, rather than the other way around. As Fawns (2022) describes, pedagogy and technology are deeply entangled, and technology can subtly direct how instruction unfolds. Similarly, Abedi (2024) points out that many educators end up using tech in ways that reinforce traditional methods, rather than transforming learning through student-centred approaches.

A school purchases tablets, so they must be used. A platform is recommended by a colleague, so it becomes the default. In some cases, this kind of reactive implementation—where the tool leads the decision—can result in surface-level engagement, frustration, or missed opportunities. But availability alone doesn't necessarily imply poor pedagogy. In many low-resource or time-constrained contexts, working with what's at hand can be a thoughtful, intentional choice that reflects pedagogical awareness and adaptability. The key distinction lies not in whether the tool is available, but in how and why it is used.

At the same time, another risk exists: dismissing new tools because they don't fit familiar pedagogies. Emerging technologies can enable new ways of teaching—ways that may better support multimodal learning, instant feedback, or learner autonomy. The challenge is to balance openness to innovation with pedagogical intent, separating genuine value from hype.

This is where research becomes critical. While there is a growing body of studies on **EdTech** and digital pedagogy in ELT, concerns remain about the quality, independence, and classroom relevance of much of this research. Educators are often forced to make decisions based on marketing claims, user reviews, or anecdotal evidence, rather than robust, context-sensitive evidence. This can make it harder to identify which tools genuinely support learning—and harder for policymakers to fund or scale promising interventions.

What's needed is not just more research, but more inclusive research. Studies that involve educators and learners in the design, evaluation, and iteration of tools are more likely to reflect real pedagogical needs and constraints. A participatory approach would help ensure that digital innovation responds to pedagogical realities, rather than dictating them. At the same time, research cannot be the only driver of innovation: teachers often learn fastest from one another, through peer groups, networks, and **communities of practice** that allow them to share experiences, test ideas, and co-learn around emerging tools.

> Most teachers are not sufficiently involved in the creation, testing, or development of digital tools, despite being the primary users and implementers. Teachers understand learner needs and classroom dynamics and their input could ensure that tools were educationally meaningful.
>
> **Jose Luis Polo Andrade, Teacher, Bolivia**

Not all evidence is equal

When evaluating studies on digital tools, ask:

1. Who funded the research?
2. Was it conducted in real classrooms or lab-like conditions?
3. What was measured: genuine learning outcomes or surface-level engagement?
4. Has the study been independently peer-reviewed?

Digital disarray and fragmentation

In many classrooms and institutions, digital pedagogy is experienced less as a coherent approach and more as a patchwork of disconnected platforms. A learner might submit homework via email, join a live class on Zoom, practise grammar on a third-party app, and get feedback through yet another system. While each tool may serve a function, the overall experience for both teacher and student can feel fragmented and inconsistent.

For teachers, navigating multiple tools and systems can create logistical headaches and increases cognitive load. For learners—especially those with limited digital literacy or access—this can be demotivating or exclusionary.

At the same time, some degree of fragmentation is inevitable—and even valuable. Just as teachers have long drawn on a range of materials, platforms today offer different strengths, allowing for creative, flexible, and personalized approaches to learning. The challenge arises when tools don't integrate at all, forcing educators to duplicate effort or learners to juggle incompatible systems without support.

One way to address this fragmentation is through **interoperable** systems—platforms that share data and allow for smoother transitions between tools. Rather than promoting a single platform, this approach supports variety while reducing the technical and cognitive burden on users. Institutions can play a role by pushing vendors toward shared standards and ensuring procurement processes include educator input.

Ultimately, fragmentation reflects deeper structural issues too. Budget constraints, lack of training, and limited teacher involvement in decision-making often shape the digital ecosystems in which we work. The goal isn't to eliminate all complexity, but to ensure that complexity doesn't fall solely on teachers and learners to manage—especially without the necessary support.

Technology is evolving rapidly, so which innovations truly support—or even enhance—our pedagogy, and which are merely hype? Digital pedagogy encourages us to pause and reflect on how each new tool aligns with our principles and the specific aims of learning within our teaching contexts.

Elizabeth Wonnacott

Commercial pressures

The EdTech landscape is heavily shaped by commercial imperatives. Many tools are designed not just to support learning, but to gain market share, appease investors, collect data, or lock users into **proprietary ecosystems**. These pressures are not accidental; they reflect the logic of a venture-capital (VC)-driven EdTech sector where investor returns often depend on data extraction, user retention, and rapid **scaling** rather than proven pedagogical impact. This dynamic can mean that tools are optimized for engagement metrics and **monetization** strategies, rather than for meaningful language learning. When pedagogy becomes secondary to growth models, teachers risk becoming consumers of products rather than co-creators of practice.

Of course, these dynamics aren't new. ELT publishers have long designed content and platforms to build brand loyalty and retain users within their ecosystems. What distinguishes EdTech today is the added layer of complexity: greater data extraction, tighter integrations between tools, and faster cycles of innovation—all of which can intensify these pressures and make them less visible to educators. This raises both pedagogical and ethical concerns.

For instance, a school may be offered an attractive discount to adopt a learning platform, only to discover that it lacks integration with their existing systems, or that it monetizes learner data in opaque ways. Alternatively, a teacher may rely on a free tool that suddenly introduces usage limits, prompting a rushed change of tool or lost functionality.

Open-source or public alternatives do exist, but they often lack the marketing reach or polished UX of commercial competitors. Educators must weigh cost, usability, and data ethics—a juggling act that's rarely straightforward.

The proliferation of paid, free, and open tools also contributes to inequity. Learners in well-resourced schools may access premium experiences, while others make do with inconsistent or ad-supported versions. Digital pedagogy requires not only technological literacy, but economic and ethical judgement.

Moodle: a long-standing, open-source alternative

Since its launch in 2002, Moodle has been one of the most widely adopted open-source learning management systems in ELT and beyond. Many teachers and institutions value it for its flexibility, community-driven development, and low cost. For countless educators, Moodle provided their first experience of running an online course, and it continues to underpin digital learning in schools and universities worldwide.

At the same time, Moodle's early design and user experience were often seen as functional rather than inspiring. Compared with newer EdTech tools such as Duolingo or commercial learning platforms, Moodle's interface has sometimes felt complex and unintuitive for both teachers and learners. This contrast highlights a broader challenge in digital pedagogy: balancing accessibility and affordability with usability and learner engagement.

Ethical concerns: surveillance, bias and inclusion

I think that teachers need to take a more visible role in designing digital tools.

Sandra Hortua,
English teacher, Colombia

The use of digital tools in education raises urgent ethical questions—many of which are still under-explored. For example:

- surveillance: monitoring software, **keystroke trackers**, or **facial recognition** tools may be introduced to prevent cheating or ensure attendance—but this can come at the cost of learner trust, autonomy, and self-expression. Constant monitoring can create a climate of suspicion, discourage risk-taking and participation, and undermine the development of responsible **digital citizenship**. Ethical concerns also

arise around consent, data privacy, and the long-term storage or use of learners' biometric and behavioural data.

- bias: AI-driven writing assistants or voice recognition software may perform poorly with non-standard varieties of English, reinforcing linguistic hierarchies or penalizing certain accents or non-standard ways of communicating. These issues are often symptoms of a deeper problem: AI systems are trained on large datasets that reflect existing societal biases. As a result, biased assumptions can be baked into the design and operation of these tools, affecting everything from grammar correction to speech recognition and automated assessment. Furthermore, digital systems risk encoding designers' assumptions about what constitutes 'normal' behaviour or performance. As Middleton (2025) notes, in the pursuit of measurability, essential but less tangible qualities—such as learners' capacity to navigate ambiguity—may be marginalized or excluded altogether.
- access: platforms that require constant connectivity or newer devices may exclude learners in low-resource settings, despite good pedagogical design.

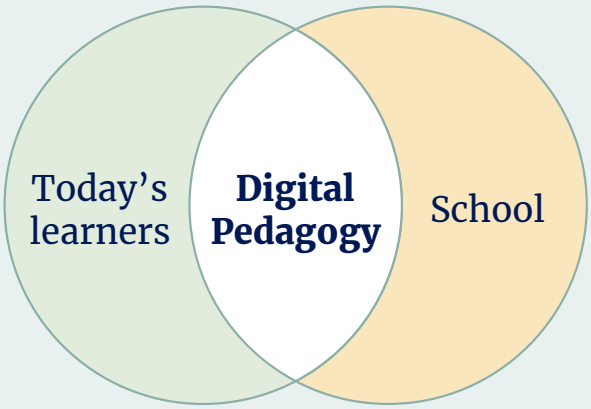
These are not just technical glitches—they are reflections of broader social inequities and cultural assumptions embedded in tool design. A values-led digital pedagogy must confront these issues head-on, advocating for inclusivity and transparency.

Intergenerational gaps and learning culture

One final issue is less about tools and more about culture. Today's learners—especially those in **K–12** settings—are growing up in a digital world that often feels disconnected from what happens in school. They consume knowledge in short-form videos, collaborate in online games, and access information through voice assistants. Yet classrooms often still rely on linear textbooks, top-down instruction, and fixed schedules.

This disconnect can lead to disengagement or resistance. Worse, it can create the impression that school-based learning is outdated or irrelevant. Teachers, in turn, may feel pressure to adopt digital practices they don't fully understand—or to resist them entirely.

Here, digital pedagogy offers a bridge. It invites educators to meet learners where they are—not by replicating TikTok in the classroom, but by recognizing new modes of communication, participation, and meaning-making. At its best, it fosters dialogue across generations and reflects the evolving ways that knowledge is constructed and shared.



Navigating digital pedagogy: risks vs opportunities

The table below summarizes key opportunities and risks associated with applying digital pedagogy in practice—that is, using technology in ways that are guided by pedagogical intent, rather than simply integrating tools. These risks do not stem from digital pedagogy itself, but from how it is interpreted, implemented, or constrained in real-world contexts.

Theme	Opportunities	Risks
Shifting teacher & learner roles	• Promotes learner autonomy • Frees up teacher time for facilitation • Supports differentiated learning	• Undermines teacher identity and autonomy • Reduces interaction • Requires significant upskilling
Tool-led decisions	• Introduces innovative practices • Challenges outdated methods	• Drives superficial adoption mismatched with pedagogical aims
Fragmentation of tools & platforms	• Encourages experimentation and choice	• Overwhelms teachers and learners • Reduces coherence of learning experience
Commercial pressures & business models	• Brings polished, user-friendly tools to market • Drives rapid innovation	• Encourages lock-in, upselling, or data harvesting • Marginalizes open-source or context-appropriate tools • Focuses on retention over learning, which may divert attention from educational progress
Feedback & personalisation technologies	• Increases learner confidence • Reduces teacher marking and feedback load • Provides instantaneous correction, giving learners feedback on errors immediately after they occur (something that teacher marking could never replicate) and supporting incremental adjustment of their linguistic systems • Enables adaptive personalization, tailoring practice to individual learner needs (though current systems vary in effectiveness)	• Feedback may be opaque or biased. • Can limit teachers' access to detailed insights on learner performance and progress
Ethical concerns (bias, surveillance, data use)	• Enables large-scale learning analytics • Supports safety and engagement tracking	• Can violate privacy • Embeds linguistic/cultural bias • Reduces learner trust
Generational shifts in learning culture	• Builds on learners' digital fluency • Enables multimodal, socially connected learning	• Risks disconnect with formal education • Increases pressure on teachers to 'keep up'
K–12 policy restrictions	• Encourages reflection on appropriate tech use • Reinforces balance with offline learning	• May lead to blanket bans • Reduces exposure to valuable digital skills
Lack of research & evaluation	• Space for participatory, teacher-led research	• Hard to distinguish effective tools from hype and marketing

What do I need to know?

Tools don't always work as promised

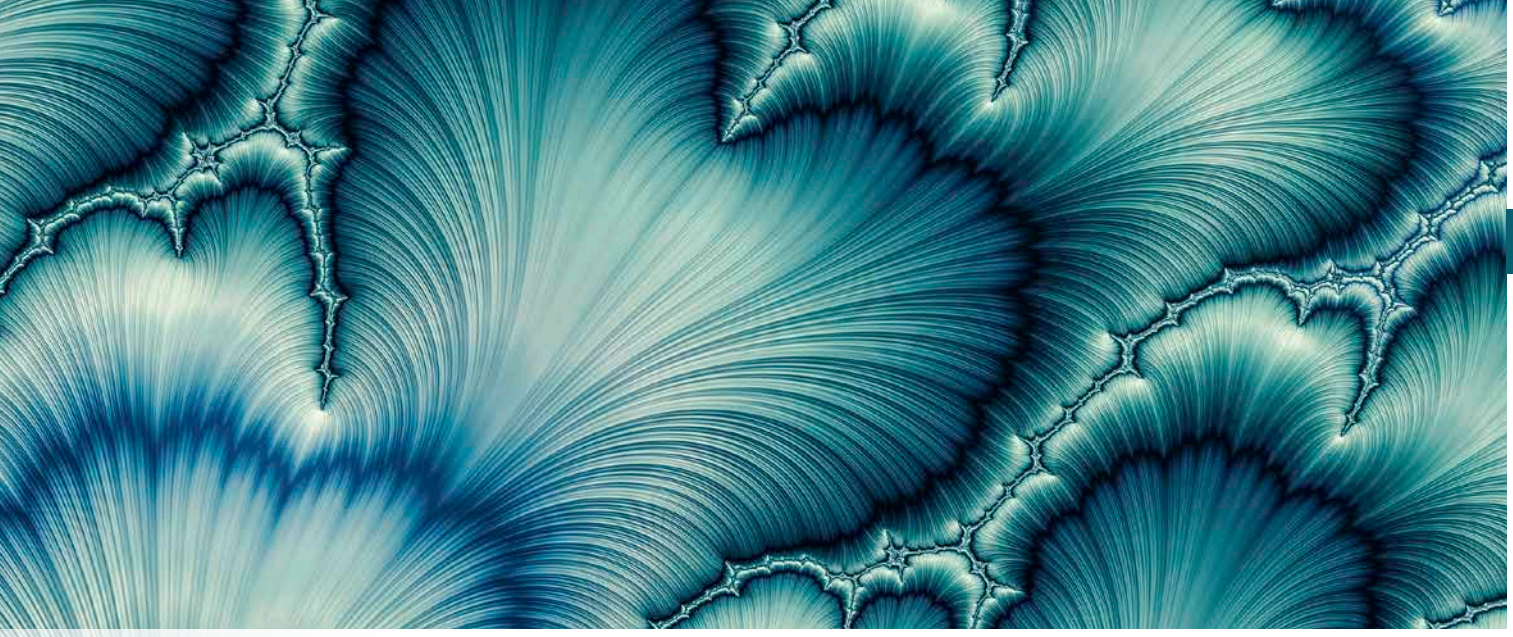
Digital platforms can be unreliable, biased, or poorly matched to your learners' needs. Always test and adapt with your context in mind.

More tech can mean more stress—at first

Without clear guidance, digital tools can overwhelm teachers and confuse learners. But with time, practice, and intentional implementation, tech can reduce stress by streamlining tasks and improving learning experiences. The key challenge is ensuring educators are supported to build confidence and maintain control, rather than feeling controlled by the technology.

Not all learners have equal access

Device access, data limits, and digital skills vary widely. Good digital pedagogy plans for inclusion, offering alternatives, offline options, or low-bandwidth workarounds.



Ideas for implementing digital pedagogy in practice

In the previous section, we explored some of the broader risks and opportunities that come with digital education. This section now turns to what we can do in practice—offering approaches that help navigate those tensions and put pedagogy first.

If digital pedagogy is to move from theory to meaningful practice, educators, managers, and institutions all need tools, strategies, and principles to guide implementation. We'll explore how to design and support digital pedagogy in ways that are purposeful, inclusive, and adaptable—not dependent on specific platforms but rooted in sound pedagogical thinking.

For teachers: designing digital learning with integrity

Designing effective digital learning is not about simply transplanting classroom content into a new medium; it requires understanding how technology shapes—and sometimes reshapes—pedagogical choices.

At its best, digital pedagogy might help teachers:

- Design for learner interaction and agency. Whether through discussion boards, collaborative documents, or voice-note exchanges, digital tools can open up new spaces for communication and co-construction of meaning.

- Use asynchronous activities to extend time-on-task. Learners might watch a short video before class, complete an online reflection, or post questions for peer response. These tasks reinforce key concepts and promote autonomy.
- Build fluency through mobile-based **micro-practice**. In mobile-first contexts, spaced repetition apps, short listening prompts, or speaking tasks via WhatsApp can be used to build fluency in manageable bursts.
- Expand opportunities for interactive speaking practice. Emerging technologies such as **large language models (LLMs)** and advances in speech recognition now make it possible for learners to engage in one-to-one conversations, role plays, and simulations with AI partners. These tools can provide learners with practice that closely approximates interaction with a proficient speaker—an opportunity that may be unavailable in many classrooms.
- Support self-assessment and reflection. Teachers can incorporate simple digital tools like polling apps, **digital exit tickets**, or self-check rubrics that help learners track their own progress.

'I use a QR code exit ticket which is near the exit to the classroom. I encourage students to scan it on the way out after a lesson. It links to a Google Form with questions such as: *Tell me one thing you learned today and one thing you're not sure about*, and *Do you have any questions about today?* This gives a voice to students who wouldn't necessarily say in class that they don't understand something and lets me gauge what I need to re-address in the next session.'

Shaun Wilden, ELT teacher, trainer, and author

One way teachers can ensure their use of technology stays rooted in strong pedagogy is by drawing on evidence-informed frameworks—such as *Oxford Principles of Language Learning*—to guide their design choices. While originally developed to support general classroom practice, this model is equally relevant in digital, blended, or mobile settings. It focuses on many of the factors most likely to support long-term learning: for example, activating prior knowledge; managing cognitive load; building motivation; reducing anxiety; and providing timely, relevant feedback.

In practice, this might mean beginning an online lesson with a visual recap or quiz that connects to previous learning (activating prior knowledge);

breaking video content into short, digestible segments with reflection tasks (managing cognitive load); or providing learners with choice in how they complete a task (increasing motivation). Teachers might also use digital exit tickets or anonymous polling tools to gauge understanding without raising anxiety, or set up platforms that enable quicker, more consistent feedback on work in progress.

What matters is not whether the learning is taking place online or in a physical classroom—but whether it is intentionally designed with these learning principles in mind. In this sense, digital pedagogy is less about adopting new tools, and more about applying what we know works in new and responsive ways. And it doesn't need to mean big changes. Even swapping one paper activity for a collaborative digital version—and reflecting on how it went—is a valid starting point.

It's worth remarking that all this work demands time, tech literacy, and reflective thinking. Teachers benefit from support to make pedagogically sound decisions that go beyond novelty or convenience. This is where the role of managers becomes essential.

For managers: supporting professional development and infrastructure

Managers play a vital role in enabling teachers to explore digital pedagogy confidently, through culture, guidance, and capacity-building.

Key actions might include:

- Providing time and space for experimentation. Teachers benefit from safe, supported opportunities to trial new tools, reflect on outcomes, and iterate. This could be through peer observations, **action research** cycles, or digital pedagogy working groups.
- Creating internal communities of practice. Schools or language centres can support tech-pedagogical development through informal meetups, tool showcases, or collaborative planning sessions.
- Investing in infrastructure and access. From bandwidth and classroom devices to technical support, institutional decisions about infrastructure shape what's possible in practice.
- Offering differentiated training pathways. Not all teachers need the same support. Providing tiered or modular Continuing Professional Development (CPD)—from foundational tech skills to design thinking for digital teaching—helps educators move forward from their current starting point. Of course, not all schools have formal CPD budgets or dedicated tech leads. But even short peer-sharing sessions or WhatsApp-based CPD groups can foster confidence and spark new ideas.

Top tip

Evidence shows that a teacher's attitude towards digital tools (the 'will') can be just as important as their technical skill or access to devices (the 'skill' and 'tool')—especially when adopting new practices. Nurture the will—then build the skill (Petko, 2012).

For institutions: embedding digital pedagogy in policy and curriculum

At the institutional level, sustainable digital pedagogy requires more than isolated innovations—it needs to be embedded into policy, curriculum, and assessment.

This might involve:

- Aligning curriculum design with digital opportunities. Rather than adding tech after the fact, institutions can design programmes that intentionally integrate digital tools to support key pedagogical principles—for example, asynchronous platforms can be purposefully used to promote reflection and dialogue in discussion-based learning, or to enable low-stakes, flexible formative assessment that supports learner autonomy.
- Creating digital pedagogy guidelines for educators, stakeholders, and students. Clear, values-led guidelines can provide educators with a shared reference point—offering clarity without prescribing specific tools. These can help mitigate confusion and foster alignment between practice, research, and institutional goals. School policies can also give teachers the support and freedom they need to try new ideas with technology—without feeling pressured to follow every trend or take on too much.
- Engaging learners in feedback and design. Learners' voices matter. Institutions can include student feedback loops in course evaluations or create opportunities for co-design, especially when introducing new tools or platforms.

Choosing tools: seeing past the shiny objects

One of the most practical challenges educators face is evaluating whether to adopt a new tool. Amid marketing claims and peer recommendations, how can teachers stay grounded in pedagogical purpose?

The process begins with pedagogical alignment: what learners need to achieve (goals), how they'll get there (methods), and how you'll know if they've succeeded (feedback and assessment). But this simple checklist can also help.

Checklist for evaluating a new digital tool

Question	Considerations
What pedagogical goal(s) does this tool support?	e.g. vocabulary development, collaboration, feedback, fluency
Does this tool substitute a non-digital task or create new learning opportunities?	Is it just digital flashcards, or does it allow peer feedback, spaced repetition, or authentic interaction?
Who benefits?	Consider how benefits and burdens are distributed: teacher workload, learner autonomy and access, and any commercial imperatives of the tool's creator.
How transparent is the tool?	Are algorithms, feedback criteria, or learning pathways visible to you and the learner?
What are the risks of using the tool?	e.g. **Data privacy:** Is learner data being stored, shared, or sold? Who owns the data, and can it be accessed or deleted? **Cognitive overload:** Does the tool require too many logins, frequent switching between platforms, or overwhelming interfaces? **Dependency:** Could learners or teachers become reliant on the tool at the expense of core skills or flexibility? **Teacher workload:** Will using this tool reduce or increase prep time, marking, or administrative tasks?
Is the tool accessible to all learners?	Does it work on mobile? Is it low-bandwidth compatible? Is it inclusive of diverse needs and levels?
How much time and effort will it take to become proficient with this tool?	Is the interface intuitive? What training or experimentation is needed before it becomes useful? Will the time invested pay off in saved effort or improved outcomes?
Can the tool work offline?	Does it require constant internet connectivity? Is there a downloadable or low-bandwidth version available? How will this affect learners in low-resource contexts?

No tool is perfect—but asking these questions promotes intentional, inclusive, and informed choices.

Teaching with AI: Integrating, not abdicating

Artificial intelligence (AI) has already surfaced throughout this paper—from adaptive feedback tools that personalize learning pathways to risks around bias, surveillance, and data privacy. We've considered how some AI systems may reinforce linguistic hierarchies, marginalize certain learners, generate inaccurate or misleading outputs, or collect sensitive data in opaque ways. In this section, we turn our focus to AI more directly, asking how it might be integrated intentionally, ethically, and in ways that support—rather than undermine—pedagogical integrity.

The reality is that AI is no longer an emerging trend—it's mainstream. Whether learners are using Grammarly, Write & Improve, ChatGPT, or quiz-generation tools, AI is reshaping what's possible in language teaching.

To integrate AI effectively, educators might:

- Use AI tools to model feedback. Show learners how AI-generated suggestions can be critiqued, accepted, or revised—building critical awareness and editing skills. This develops feedback literacy—the ability to interpret, evaluate, and act on feedback—and builds metacognitive awareness.

- Co-create prompts and explore biases. Work with students to generate AI prompts and evaluate the quality of the responses. This helps students understand how AI works—and gets them thinking critically about what it gets right, and where it goes wrong.
- Encourage AI as a brainstorming tool. Learners can use AI to generate vocabulary sets, dialogue starters, or summary drafts—which they can then refine collaboratively or with teacher input.
- Rehearse spoken dialogue. Learners can use AI chat tools to simulate conversation practice—helping them build fluency, confidence, and spontaneous language use in low-stakes environments.
- Generate personalized exercises or texts. Teachers or learners can prompt AI to create practice materials tailored to individual needs, topics of interest, or learning goals—making practice more engaging and relevant.

Remember that AI outputs can be overly confident, culturally biased, or opaque. Teachers are well placed to act as guides and mediators, helping learners make the most of tech without relying on it uncritically.

In particular, developing AI literacy is essential. This includes helping both educators and learners understand when and how to use AI tools effectively; recognize their limitations; and make informed decisions about trust, use, and adaptation. Teachers play a crucial role in modelling thoughtful AI use—knowing when AI enhances learning, and when it might distract, mislead, or disempower.

Building digital literacy and resilience

Digital pedagogy is not just about tool use; it's about cultivating transferable skills for lifelong learning.

This means designing learning experiences that:

- Develop learners' confidence navigating platforms and formats
- Include **metacognitive** tasks: e.g. 'How did this tool help you learn? What felt challenging?'
- Teach learners how to evaluate digital content and feedback
- Foster a growth mindset towards tech use—especially in contexts where digital anxiety or low self-efficacy exists.

These same principles apply to teachers. CPD should not be one-off, how-to sessions, but ongoing, supportive spaces that normalize learning, experimentation, and even failure.

Recognizing constraints, reimagining possibilities

As we've argued previously, digital pedagogy is not just for high-tech classrooms. Some of the most creative and impactful uses of technology come from resource-constrained contexts—where WhatsApp voice notes stand in for LMS discussion forums, or peer feedback happens through shared drives or SMS.

This paper affirms the importance of adapting pedagogical principles—like active engagement, scaffolded practice, and formative feedback—to whatever tools are available. Doing so requires flexibility, reflection, and a shared institutional commitment to values-led teaching.

What do I need to know?

Start with one small change

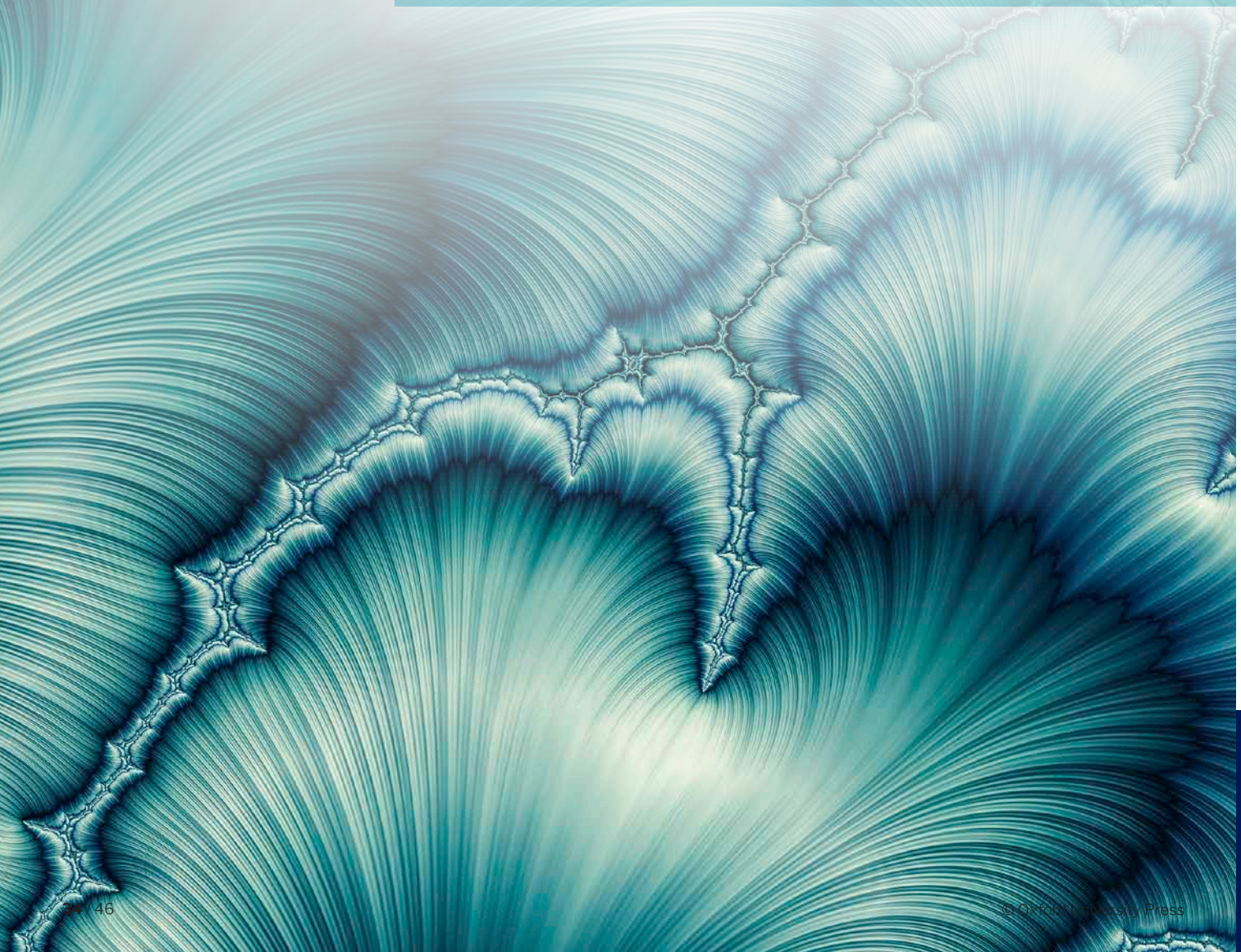
You don't need to redesign everything. Try one new digital element—like a voice note reflection or a low-stakes online quiz—and build from there.

Use tech to support, not replace, good teaching

Whether you're flipping a lesson or using AI for feedback, the goal is to deepen learning, not just digitize it.

Reflect, adapt, and share

Think about what worked, what didn't, and why. Then talk to colleagues—small conversations can lead to big improvements. Embracing a mindset of *always learning* not only helps teachers stay agile and responsive but also models lifelong learning for students.



5 Final reflections and recommendations

As we've explored in this paper, digital pedagogy is not simply about using tools; it's about teaching thoughtfully in a digital world. When used well, technology can deepen engagement, personalize learning, and expand access. But realizing these benefits depends on the decisions we make as educators, institutions, and policymakers. Those decisions need to be grounded in pedagogical principles, attuned to local contexts, and informed by a critical understanding of both risks and opportunities.

For teachers: start with pedagogy, stay with pedagogy

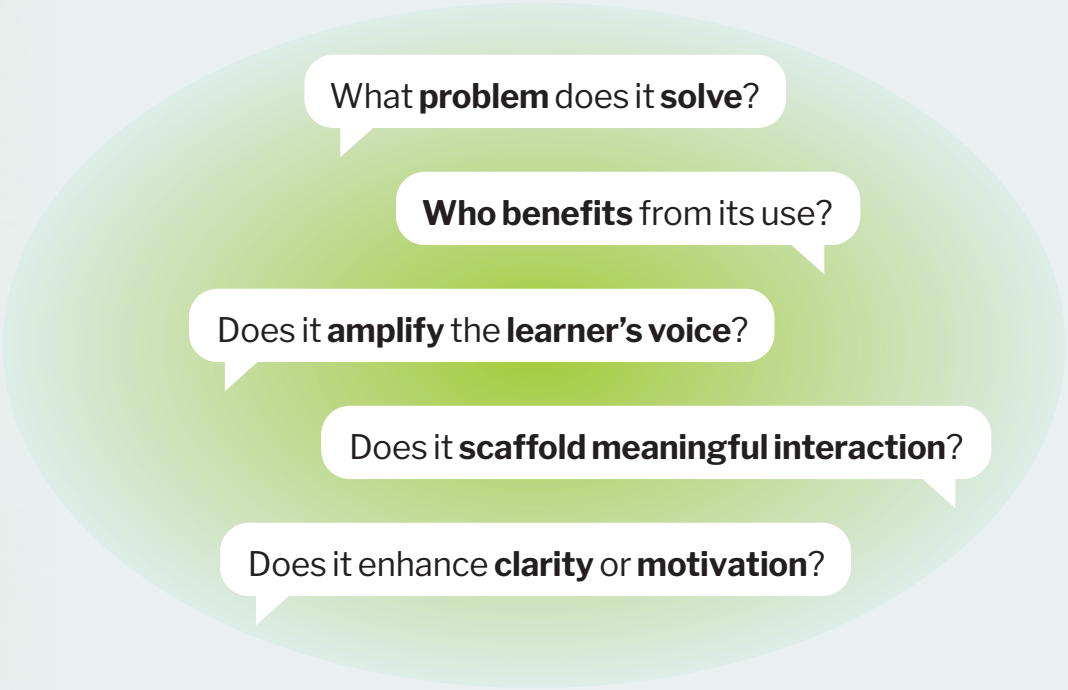
The heart of digital pedagogy lies in reflective practice. At every stage of implementation, it's worth asking: what problem does this tool solve, and who benefits from its use? Does it amplify the learner's voice? Does it scaffold meaningful interaction? Does it enhance clarity or motivation? Or is it simply digitizing an outdated or unhelpful practice? Of course, teachers are not always free to choose which tools they use; decisions may be made at institutional or government level. In such cases, reflective practice becomes even more important, helping teachers to adapt mandated tools in ways that still serve their learners' needs.

Just as importantly, educators should feel empowered to explore and adapt new technologies even before the landscape has settled—because it likely never will. Waiting for a final verdict on 'what works' means missing opportunities to co-create knowledge about what works in your classroom, with your learners, and within your constraints. As a profession, we have an opportunity to normalize responsible experimentation: trying out tools in small, targeted ways, reflecting on the results, and sharing what we learn.

To support this, it's vital that institutions give teachers the time and space to evaluate tools beyond the surface level—not just for ease of use, but for alignment with learning goals. Teachers can also draw on frameworks like OUP's evidence-informed pedagogy model, which emphasizes practices such as building on prior knowledge; managing cognitive load; reducing

> Digital or not, learning still runs on good teaching.
>
> Shaun Wilden

anxiety; and providing timely, actionable feedback. These aren't new ideas, and they remain as relevant as ever in digital contexts.



For institutions: trust teachers, not just tools

Institutions play a critical enabling role. Too often, digital transformation is framed around platforms and procurement, with less attention paid to people and pedagogy. But sustainable, impactful digital practice depends not just on the tools teachers are given but on the support they receive to use them meaningfully.

This support should come in the form of ongoing professional development, not one-off training. It means allocating time for reflective planning and collaborative experimentation and recognizing that time spent exploring and adapting tools is not 'lost'. And it means giving teachers agency: to choose what fits their learners, to adapt centrally chosen tools, and to provide feedback on what's working and what's not.

Crucially, schools themselves can empower teachers to become local digital 'gurus'—trusted experts who support peers, guide implementation, and shape practice over time. This kind of sustained, school-driven growth helps ensure that innovation is embedded, context-responsive, and future-ready.

Schools and universities can also model good digital citizenship. By embedding clear guidelines around privacy, ethics, and inclusivity—and by being transparent about procurement choices—institutions can help create a culture where digital pedagogy feels safe, purposeful, and aligned with shared values.

Institutions can also champion more participatory design models—involving teachers in the selection, trialling, and even co-creation of tools. This not only improves buy-in but ensures tools meet actual classroom needs.

Crucially, they can foster a culture where risk is permissible and **psychological safety** is high. Innovation demands trial and error. Teachers must feel that experimenting with a new approach—but then rejecting it—is a sign of professional rigour, not failure. Schools that foster this mindset don't just support individual growth—they build adaptive, forward-thinking teaching cultures essential for long-term institutional success.

For policymakers: embed ethics, fund research, promote equity

Policymakers can ensure digital pedagogy serves all learners by prioritizing three things: equity, ethics, and evidence.

Equity starts with infrastructure—for example, closing gaps in device access, connectivity, and digital literacy—but it doesn't end there. It also means investing in sustainable infrastructure—systems that can be maintained, updated, and supported over time, rather than one-off interventions that quickly become obsolete.

We must also ensure that the digital solutions promoted by governments serve diverse learner needs and contexts, not just market interests. That means scrutinizing who gets included and who gets left behind—and funding inclusive design processes that bring learners and educators into the innovation cycle.

Ethics must be built into policy frameworks, particularly as AI becomes mainstream. This includes clear standards around surveillance, algorithmic bias, and data use, as well as guidance on appropriate use in different age groups and educational stages—especially as some countries move to limit or ban digital tools in K–12 settings.[5]

However, ethical policy must also address the economic realities of classrooms. Free tools that rely on data extraction may be attractive where budgets are tight—but restricting their use without providing funded alternatives can place teachers in an impossible position. Sustainable, ethical procurement must include investment in tools that protect learner data and serve pedagogical goals, not just commercial ones.

Finally, policymakers must invest in independent, classroom-grounded research. Despite a proliferation of EdTech tools, there remains a dearth of reliable, comparative evidence on efficacy. We urgently need more independent studies that measure not only learner outcomes but also process variables such as attention, memory retention, and interaction quality. But just as importantly, we need agile systems that can translate research into practice and feed practice back into iterative product design—closing the loop between classroom, research, and tool. Essentially, teachers and institutions need more than vendor claims—they need trustworthy data on what's likely to work in their setting, with their learners.

What kind of digital future do we want to teach in?

The digital future is not fixed. Every choice we make—about platforms, practices, or priorities—plays a small part in shaping the digital future of ELT, even when those decisions are shaped by time constraints, resource gaps, or school policy. Every small, practical adaptation counts.

But choices aren't made in isolation. The future is shaped through ecosystems: procurement policies, product development cycles, interoperability standards, and educator voice in decision-making. Building a meaningful digital pedagogy requires collaboration across these layers—from teacher to technologist.

Digital pedagogy offers no quick fixes or universal templates. But it does offer an approach: reflective, responsive, and grounded in the belief that technology should serve learning—not the other way around.

The question for all of us—whether teacher, manager, policymaker, or product designer—is this:

What kind of digital future do we want to teach in? And what are we doing today to build it?

Conclusions

Digital pedagogy is not about adopting the newest tools for their own sake, but about making thoughtful choices that serve learning. It requires balancing opportunities with risks, recognizing that access and equity remain uneven, and understanding that responsibility lies with both teachers and institutions. When used critically and reflectively, digital technologies can support agency, inclusion, and creativity in language learning. As the digital age continues to reshape education, our task is to ensure that pedagogy—not technology—remains at the heart of how we teach and how learners learn.

Key takeaways

1 Digital pedagogy is more than tools

It's a reflective approach to using technology in ways that genuinely enhance learning, promote learner agency, and support meaningful interaction. The impact of digital tools will vary depending on context.

2 Technology reshapes teacher–learner relationships

Digital tools can empower learners but may also shift or obscure traditional roles. Teachers need to remain aware of how tools influence participation, autonomy, and authority in the classroom.

3 Critical thinking is essential

Teachers and decision-makers should not assume that digital equals better. The choice to use a digital tool should be driven by pedagogical intent, not technological novelty.

4 Support teachers with digital pedagogical literacy

This includes not just technical skills but also the capacity to make informed decisions about when and how to integrate technology—and when not to.

5 Pedagogy should lead technology

The future of digital education depends on restoring and reinforcing teacher agency in decisions about how technology shapes learning.

Appendix

Key frameworks for understanding digital pedagogy

This appendix introduces three widely cited frameworks that can help educators and institutions evaluate and enhance their use of digital tools in teaching: TPACK, SAMR, and DigCompEdu. These models offer complementary perspectives, ranging from theoretical integration of knowledge to practical stages of classroom implementation and institutional competence building.

TPACK (Technological Pedagogical Content Knowledge)

What is it?

- The TPACK framework (Mishra & Koehler, 2006) describes the types of knowledge educators need to integrate technology into their teaching effectively. It builds on Shulman's concept of pedagogical content knowledge (PCK) by adding a third domain: technology.

The three intersecting knowledge areas are:

- Content Knowledge (CK): what is being taught
- Pedagogical Knowledge (PK): how it is taught
- Technological Knowledge (TK): the tools used to teach it.

The power of TPACK lies in the overlap of these areas. Effective digital pedagogy sits at the intersection of all three, where teachers can make informed decisions about what, how, and with what tools they teach.

SAMR (Substitution, Augmentation, Modification, Redefinition)

What is it?

- Developed by Dr Ruben Puentedura, SAMR is a model for evaluating how technology changes (or doesn't change) teaching and learning practices.

The four levels are:

Level	Description
Substitution	Technology acts as a direct substitute, with no functional change.
Augmentation	Tech acts as a substitute with some functional improvement.
Modification	Tech allows for significant task redesign.
Redefinition	Tech allows for creation of new tasks previously inconceivable.

The power of SAMR is that it models the different stages of technology integration, often reflecting not just technical adoption but also a teacher's growing digital-pedagogical maturity.

DigCompEdu (European Framework for the Digital Competence of Educators)

What is it?

- DigCompEdu is a comprehensive framework developed by the European Commission to support the development of educators' digital competence.

It defines 22 competences across six areas, including:

- Professional engagement (e.g. digital collaboration)
- Digital resources (e.g. selecting and creating digital materials)
- Teaching and learning (e.g. integrating digital tools into pedagogical strategies)
- Assessment (e.g. using digital tools for formative assessment)
- Empowering learners (e.g. accessibility and inclusion)
- Facilitating learners' digital competence (e.g. supporting students' digital literacies).

Suggested usage in context

Each framework has its strengths.

Framework	Best used for...
TPACK	Planning and integrating pedagogy, content, and tech
SAMR	Evaluating depth of tech use in teaching practice
DigCompEdu	Assessing digital competence at an individual or system-wide level

Educators and institutions may benefit from using these frameworks not rigidly, but as reflective tools to guide implementation, assess gaps, and drive professional dialogue.

Glossary

action research
A reflective, cyclical process where educators identify a question or challenge in their practice, try out a strategy to address it, gather evidence, and reflect on the results.

adaptive learning
A technology-enhanced approach to education that uses data and algorithms to adjust the learning experience in real time based on a learner's needs, progress, or preferences.

AI
Short for 'artificial intelligence', AI refers to computer systems designed to perform tasks that typically require human intelligence, such as recognizing speech, making recommendations, or generating text.

algorithmic
Describes a process or system driven by algorithms—step-by-step instructions used by computers to make decisions, often based on data.

app
Short for 'application', an app is a piece of software designed to perform specific tasks on a mobile device or computer.

asynchronous
Where people log on when they're able to, potentially at different times.

automated
Describes a process or task carried out by technology with little or no human intervention.

blended course
One that combines face-to-face instruction with online components.

chatbot
A software tool that simulates conversation, often using pre-programmed rules or artificial intelligence.

cognitive load
The amount of mental effort required to process information.

community of practice
A group of people who share a common interest or profession and learn from one another through regular interaction.

crossing the chasm
A concept from innovation theory (Moore, 1991), which suggests a gap between early adopters of a new technology and the early majority. Crossing the chasm means that a technology or practice has moved beyond niche use into mainstream acceptance.

dashboard
A way of visualising data.

digital age
The period in history marked by the widespread use of digital technologies such as computers, smartphones, and the internet.

digital citizenship
The knowledge, skills, and attitudes needed to navigate the digital world safely, ethically, and responsibly.

digital exit ticket
A quick formative assessment tool used at the end of a lesson to check learners' understanding, gather feedback, or prompt reflection—but delivered via a digital platform instead of paper.

digital fluency
The ability to use digital tools confidently, effectively, and appropriately in a variety of contexts.

digital literacy
The ability to use digital tools and technologies confidently, critically, and responsibly.

discussion board
An online space where learners and teachers can post messages, respond to each other, and take part in asynchronous conversations around a topic or task.

EdTech
Short for 'educational technology', EdTech refers to the use of digital tools, platforms, and applications to support teaching and learning.

facial recognition
Technology that identifies or verifies individuals by analysing their facial features.

flipped classroom
A teaching approach where instructional content—such as lectures or explanations—is delivered outside the classroom, often through videos or readings, and class time is used for active learning tasks like discussion, problem-solving, or project work.

gamified
Describes a learning activity or environment that incorporates elements of game design—such as points, levels, badges, or challenges—to increase motivation and engagement.

gig economy
A labour market characterized by short-term, flexible jobs rather than permanent contracts—often mediated through digital platforms.

hybrid
A learning environment where some students are physically present and others join remotely.

interactive whiteboard
A large digital display that connects to a computer and allows users to control content directly by touching the screen or using a stylus.

interactivity
The degree to which learners can actively engage with content, tools, or other people in a learning experience.

interoperable
Describes digital tools or systems that can work together, share data, and communicate effectively across different platforms.

K–12
An abbreviation for 'kindergarten through 12th grade', referring to the primary and secondary education system in countries like the United States and Canada. It typically covers students from around ages 5 to 18.

keystroke trackers
Tools that record the keys a user presses on a keyboard, often used to monitor behaviour, detect cheating, or analyse writing patterns.

large language models (LLMs)
AI systems trained on vast amounts of text data to generate and understand human-like language.

learning pathways
Structured routes that guide learners through content, skills, or experiences in a sequence that supports their progress.

low bandwidth
A situation where internet connectivity is slow, limited, or unreliable, making it difficult to stream videos, join live sessions, or download large files.

LX
Short for 'learner experience'. The overall experience a learner has when engaging with a course, activity, or digital tool—including the content, design, interaction, and emotional response.

metacognitive
Relating to a learner's awareness and control of their own thinking and learning processes.

micro-practice
A learning activity or approach that focuses on brief, focused, and repetitive engagement with small units of language (e.g. individual words, phrases, or structures).

mobile-first
An educational setting where mobile devices—particularly smartphones—are the main or most reliable way for learners to access digital content and tools.

monetization
The ways a company turns a product or service into revenue.

monitoring software
A digital tool used to track and observe user activity—often applied in education to oversee student engagement, assess progress, or ensure academic integrity.

personalized learning
An approach to education that tailors learning experiences to individual learners' needs, interests, or progress.

platform
A digital environment or tool that supports specific functions such as communication, content delivery, assessment, or collaboration. In education, platforms can include learning management systems (e.g. Moodle, Google Classroom), video conferencing tools (e.g. Zoom), or social learning spaces (e.g. Padlet).

proprietary ecosystems
Closed digital environments controlled by a single company, where tools, content, and data are designed to work primarily within that company's products.

psychological safety
An environment where individuals feel safe to take intelligent risks, experiment, express ideas, ask questions, and admit mistakes without fear of embarrassment or punishment.

scaling
Refers to the process of expanding a tool, programme, or approach so that it can reach larger numbers of learners or institutions.

SD card
Short for 'secure digital card', an SD card is a small, portable memory device used to store data such as documents, images, audio, and video.

socio-material
A perspective that recognizes how social and material elements—people, tools, spaces, and technologies—are intertwined in shaping learning experiences.

synchronous
Where people join the lesson at the same, pre-arranged time.

tab
A clickable section in a digital interface—often part of a menu or navigation bar—that helps users move between different parts of an app, platform, or webpage.

UX
Short for 'user experience'. Refers to how a person feels when interacting with a digital product or system—including ease of use, accessibility, satisfaction, and efficiency.

voice messaging
A communication method that involves sending recorded spoken messages instead of written text.

Further reading and resources

Books

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Professional resources

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Free to download from:
www.oup.com/elt/expert

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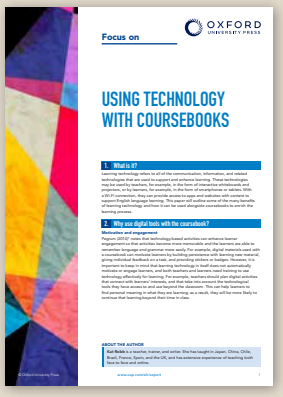

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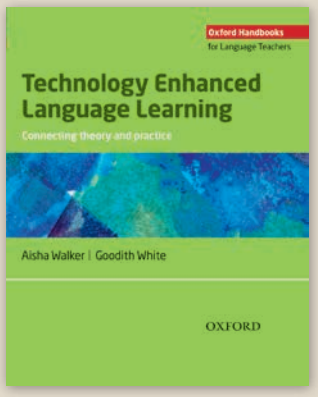

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www.oup.com/ohlt

Endnotes

1 adaptivelearninginelt.wordpress.com/

2 learnjam.com/learner-experience-design/

3 scrimmage.co/the-psychology-behind-duolingos-success

4 www.theguardian.com/business/2025/mar/15/british-council-teachers-gig-economy-tutors-exploiting

5 Several countries—including Luxembourg, Australia, Finland, Brazil, Hungary, France, and regions like Ontario—have recently passed policies restricting or banning smartphones and other devices in schools, reflecting growing concern over their impact on attention, mental health, and educational equity. UNESCO's *GEM Report* notes that approximately one in four countries have taken such action.

Acknowledgements

Illustrations by: Dominika Kowalska/Collaborate

The publisher would like to thank the following for permission to reproduce photographs: Alamy Stock Photo (Associated Press), Getty Images (Baac3nes, Dusan Stankovic, Jay's photo, oxygen, Sergey Ryumin, Stanislaw Pytel), Shutterstock (Andrei Armiagov, Drazen Zigic, Ground Picture, Rawpixel.com, Rudchenko Liliia, Rido, TheKingfisherPhotography).

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Robinson, N. (author), Stead, G. (consultant), Wilden, S. (consultant), Wonnacott, E. (consultant) (2025). *Digital Pedagogy* [PDF]. Oxford University Press. www.oup.com/elt/expert

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