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English Language Research

Human-centred AI: lessons for English learning and assessment

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Education forms part of our society. Society is always changing and, as educators, we have a duty to innovate in order to prepare learners for the future.

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Contents

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> **The education sector must lead the way in ethical AI practices to ensure smarter, fairer solutions for every learner.**

Joanna Pearson
Director of New Product Development, British Council

Introduction

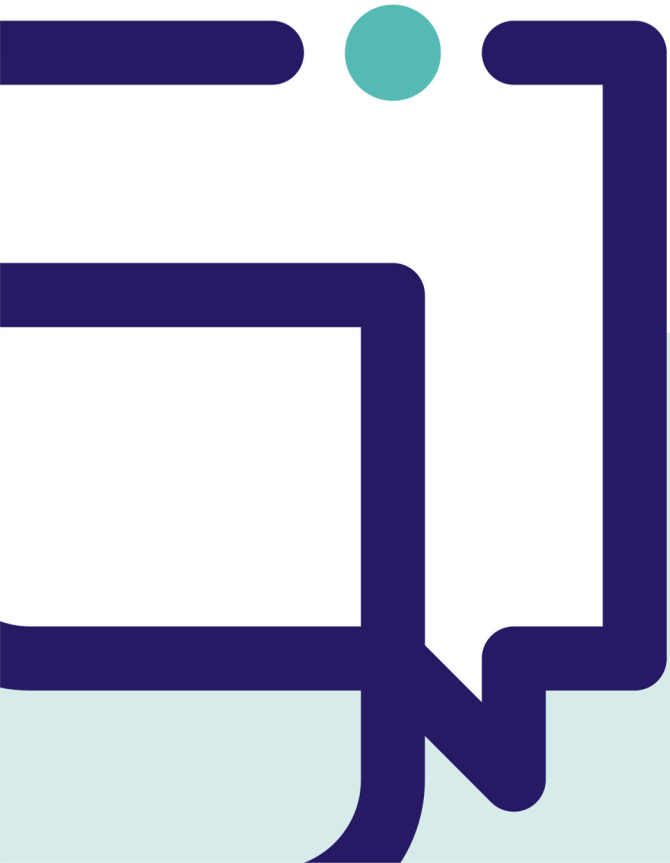
As artificial intelligence (AI) continues to transform education, organisations in the sector must develop strategies to cope with this change and learn to use new technologies to their advantage. While the increasingly powerful capabilities of AI may be seen as a threat by many, they also present an invaluable opportunity to innovate. In the context of language teaching, learning and assessment (TLA), AI can push the boundaries of what has been possible until today, enabling new approaches that can make the whole learning journey more engaging, personalised and efficient.

Organisations that fail to move with the times and harness this potential will find it increasingly difficult to stay in business, as individuals continue to prioritise faster, cheaper and more efficient ways of getting what they need. This does not mean, however, that technology should dictate the way we teach, learn or assess. The underlying principles and methods in TLA still hold. Without those, technology is just an empty shell.

As key players in the TLA landscape, we must resist the idea of using technology without a clear purpose or strategy. The integration of new technologies, such as AI, into teaching and assessment practices can be greatly beneficial, but only when built on solid theoretical pillars and empirical research. Thus, a crucial part of our commitment to all stakeholders is to ensure the validity of our assessment instruments, which should not be jeopardised by the inclusion of technology[1].

The seemingly intelligent capabilities of "Generative AI", and more precisely Large Language Models (LLMs) such as ChatGPT, cannot sweep away the body of knowledge and experience that educators and language experts have built over centuries. Our collective expertise cannot be replaced by an LLM, let alone be reduced to a "prompt". However, we cannot ignore that these tools have demonstrated a remarkable ability to complete complex tasks and produce high-quality output, so it would be a mistake not to use them today. The key is to use them critically and strategically. By adopting a balanced approach where we combine the best of AI with human expertise, we can make sure we deliver modern and efficient solutions that enhance the TLA experience for all stakeholders.

In what follows, we describe our current views and approach to incorporating AI into language learning and assessment, encouraging organisations and individuals to reflect on the importance of these principles in our field.



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Research and innovation at the British Council

The British Council has a long history of innovation in the field of English language education and assessment, from the introduction of gramophones in speaking tests in the early 1940s to the development of the Aptis testing service over a decade ago. In keeping with this pioneering spirit, we recognise the importance of AI in the modern world and enthusiastically embrace it to build the next generation of learning and assessment products.

Our use of technology is grounded in solid theoretical foundations and an ever-growing body of research, which underpin all our work in TLA. Our approach is human-centred and learner-first, prioritising the needs and well-being of all stakeholders, and learners in particular[2]. By using AI, we aim to help learners demonstrate their ability in ways that are more efficient, realistic, reliable, fairer and faster.

To ensure that technology becomes a facilitator and not a barrier to education, it must integrate seamlessly into the learning and assessment ecosystem. This implies identifying where and how it can add value, following best practices and demonstrating its effectiveness in the learning process[3].

At the British Council, we see the whole process of language education as a single integrated system, the Comprehensive Learning System (CLS)[4]. This CLS is made up of three elements: the curriculum, the delivery system and the assessment system (Figure 1).

Curriculum relates to the content being taught, the definition of the underlying constructs or traits to be studied. Delivery refers to all aspects of delivery of the curriculum, including teaching, materials and infrastructure. Assessment includes all assessment activities, both formative and summative.

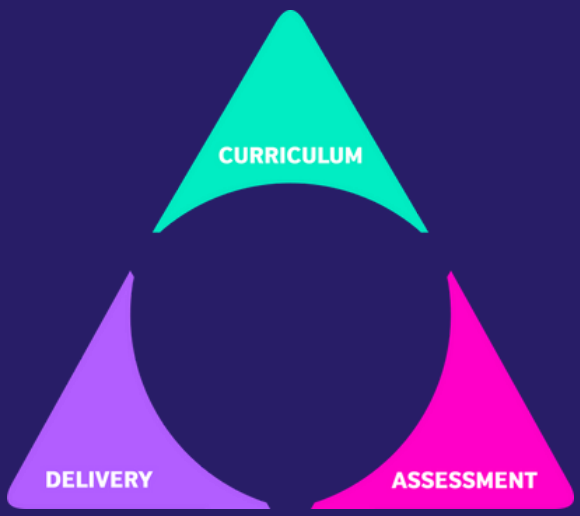


Figure 1

The CLS, like all other learning systems, operates within a context of use defined by its key stakeholders, with the learner recognised as the most important. This means placing the learner at the centre of everything we do, including our use of technology.

In this context, it would be unwise, and equally undesirable, to be tech-first. Again, technology should be seen as an enabler, not a driver. Digital assessment solutions must be the result of translating our assessment needs (contexts, tasks, constructs, measurements) into a strategic combination of technological tools (AI, hardware), and not the other way round. Starting from what technology can do and working backwards to define our assessment goals undermines the very principles of assessment, where the identification of the constructs (what we want to measure) must logically precede their operationalisation (how we will do it). Assessment goals cannot be dictated by technological capabilities[5]. Our commitment as leaders in education is to ensure that any digital solutions are built on solid theoretical foundations and align with clear learning goals from their inception.

In addition to learners, AI can also benefit the rest of the stakeholders in our context of use, as it has the potential to positively impact all the components of the CLS. Tools such as LLMs can help with curriculum design, content generation, item writing and feedback. Speech recognition and synthesis are instrumental in the design of natural virtual tutors. Auto-scoring models have made on-demand real-time assessments a reality. Possibilities are endless. However, we must always ensure we use the right tool for our purpose and carefully evaluate the impact of our solutions before and after deployment.

Preparing for success

The successful implementation of AI-powered systems for TLA largely depends on the creation of a suitable environment. Even the best systems are doomed to fail if the key players in our ecosystem are not prepared to embrace technology. Fear, scepticism and misconceptions can create strong resistance and hinder the success of an otherwise perfectly suitable system. Stakeholder attitudes towards technology cannot be underestimated nor taken for granted.

At the British Council, we believe any successful adoption of AI must be based on the following foundations:

AI Literacy

It is essential that all stakeholders learn fundamental concepts in AI, how it works, and how it is used in our digital products. The level of literacy required by different stakeholders will depend on what they need to know to make informed decisions in their role within the CLS and should empower them to critically assess tools before their adoption. For educators, this could mean assessing the suitability of an auto-scoring solution; for learners, deciding if a digital test can help them achieve their goals; for policymakers, evaluating if the use of specific tools could have unwanted consequences for the student population.

AI literacy is also essential in projects involving interdisciplinary teams, as they need to have a common understanding of concepts to communicate efficiently. Team members must be made aware of the capabilities, limitations and potential impact of AI so they can assess how this could affect their workflows. This understanding will give them a competitive edge and a critical mindset to approach AI with realistic expectations.

Since its initial forays into AI-powered assessment just a few years ago, the British Council has taken a very active role in the dissemination of its work and promotion of AI literacy. This includes conferences (such as New Directions), webinars, workshops, flagship events, training opportunities and public reports. We strongly believe that it is only with appropriate education that individuals can unlock the full potential of emerging technologies.

The successful implementation of AI-powered systems for teaching, learning and assessment largely depends on the creation of a suitable environment.

Expertise

In an age of constant technological change, it is challenging for non-experts to keep up with the latest developments. The complexities of modern technology and its implications demand expertise in different areas, which must converge to achieve optimal results. As we recognise the importance of different disciplines in shaping the future of education, we actively encourage interaction with experts inside and outside our field of expertise.

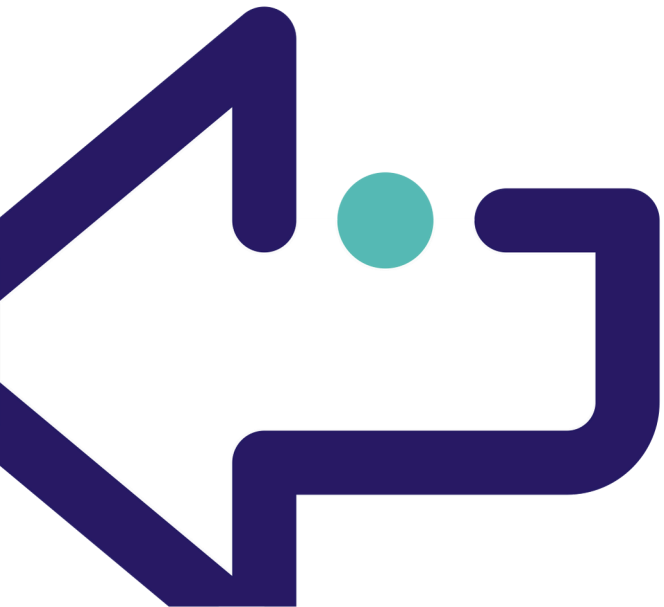
In line with its mission, the British Council fosters and thrives on collaborations with universities, companies, governments, organisations and highly talented individuals worldwide, working together to efficiently address the needs of today's English language learners. In fact, all our existing digital solutions are the result of collaborative work with experts across multiple disciplines.

Responsible use

Placing the learner at the heart of what we do means that we take a cautious approach to the use of technology, which minimises unwanted or unforeseen consequences. By prioritising the rights and well-being of individuals, we ensure that our digital solutions enhance the learning experience without compromising safety, privacy, or ethical standards.

While compliance with current laws and regulations plays a major role in protecting users, we also adopt ethical and safeguarding practices that reassure our commitment to reliable and fair assessments to all stakeholders. This approach ensures we remain aligned with our core values and provide solutions that everyone can trust.

One key aspect of ensuring that technology works as intended is by continuously testing our products during development. This is done through extensive simulations and user testing, where experts and potential users alike can test new products and provide feedback. The insights gained from these interactions are crucial in identifying potential issues and making sure that we do not violate ethical principles.



Human leadership and oversight

Adopting a human-centred approach is vital in ensuring that AI models align with our needs and values. By staying on top of decisions, we remain in control and can minimise any potentially harmful or dehumanising effects of machines.

Part of our responsibility as “humans in the loop” is to evaluate AI models before, during and after deployment, to ensure they work as expected. This continuous monitoring helps us to identify potential issues early and make any necessary adjustments to prevent unwanted consequences. Likewise, it is also crucial that we retain the ability to override the output of automated systems when necessary and sign off decisions in high-stakes scenarios.

These four principles provide the direction we need to use of AI in a way that is efficient, ethical and reliable, maximising our chances of success. In addition, a distinctive strength of our approach is the involvement of a diverse group of stakeholders at different stages of development. This allows us to gather insights from different perspectives, continually assess the validity and impact of our solutions, and make any necessary changes before a final product is publicly released.

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Our ethical commitment

In a world where technology is widely available and susceptible to misuse, it is vital that we identify and aim to minimise any potentially harmful effects on its users. As providers of solutions that use these technologies, we have a responsibility to ensure our products do not have a negative impact on its users or the environment. Failing to do so would not only undermine the trust in our products and organisation but also have legal consequences that could damage our reputation.

In order to prevent these issues, the British Council follows and advocates an "ethics by design" approach, which aims to identify and address potential ethical concerns from the early stages of development[6]. This framework is based on six principles (see next page).

Failing to follow these principles would render our systems unethical, so we must strive to uphold and integrate these values into our practices. One way to ensure adherence to these guidelines is through regular assessments during development followed by audits after deployment, ideally in collaboration with experts.

While this is not a legal framework, and hence there is no obligation to follow this practice by law, many of these precepts have recently been incorporated into national and international legislation and are now legal requirements. Nevertheless, ethical considerations should be a priority for us as providers and users of AI systems, as they encourage us to use technology in a way that is fair, safe and inclusive.

Respect for human agency

Systems should respect people's autonomy, dignity and freedom.

Privacy and data governance

Personal data must be processed according to law, in a way that is secure and can be audited by humans.

Fairness

Systems must treat all people equally, avoiding biases, discrimination and negative social impacts.

Individual, social and environmental impact

Systems should respect people's autonomy, dignity and freedom.

Transparency

Users must know whenever they are interacting with a computer system and any automated decisions must be explainable and traceable.

Accountability and oversight

Systems must have a "human in the loop" who is responsible for its monitoring and operation.

Ethical considerations should be a priority for us as providers and users of AI systems, as they encourage us to use technology in a way that is fair, safe and inclusive.

AI for all

In keeping with the ethical principles outlined above, we should recognise that it is the responsibility of individuals and organisations to design and implement AI tools so that they increase opportunities to access education. Certainly, AI has the potential to be an inclusive educational tool. By being both scalable to large numbers of learners, yet adaptable to individual learner needs, it provides the capability to engage learners who previously would not have the economic resources to access quality learning. However, there is a risk that the new wave of AI-powered applications may exacerbate the digital divide, and any broader participation in education is dependent on both access to the technology itself and the skills to use it. This means that we need to ensure that AI applications are available on devices and in forms which are widely accessible. Promoting digital literacy is also key to enabling equitable access to technology.

We must also ensure that AI is used to increase opportunity for the full diversity of international learners, particularly those with cognitive and physical disabilities. AI offers support through personalisation of different aspects of the learning and assessment journey and brings the capacity to enhance ways in which information is presented to learners and that learners can interact with learning systems. We should utilise this flexibility to increase multimodality of content and the opportunity to use assistive technology, ensuring more equitable access to learning and assessment, and levelling the playing field for those who may have previously been excluded from mainstream education.

We should also recognise that action needs to be taken to promote the benefits of AI for groups of people who are currently disadvantaged or underrepresented in society on grounds of gender, race, age, sexual identity, religion or other characteristics. In our commitment to fairness, it is essential that AI models are built using balanced and diverse datasets to ensure that different groups are represented without bias or discrimination. In addition, the design and application of AI should not be predicated only on the use of those who already occupy privileged positions in society but should be created to actively engage learners irrespective of their background.

By taking deliberate action to support access, we can use AI to increase learning opportunities and narrow rather than widen existing societal inequalities. It is also crucial that we conduct research to provide evidence that this is the case, by monitoring the impact of the AI systems and how different people interact with them. In this way, we can make improvements to AI systems and contribute to a continuous, informed debate about how AI can bring the most benefit to the most people.

AI could increase opportunity for the full diversity of international learners.

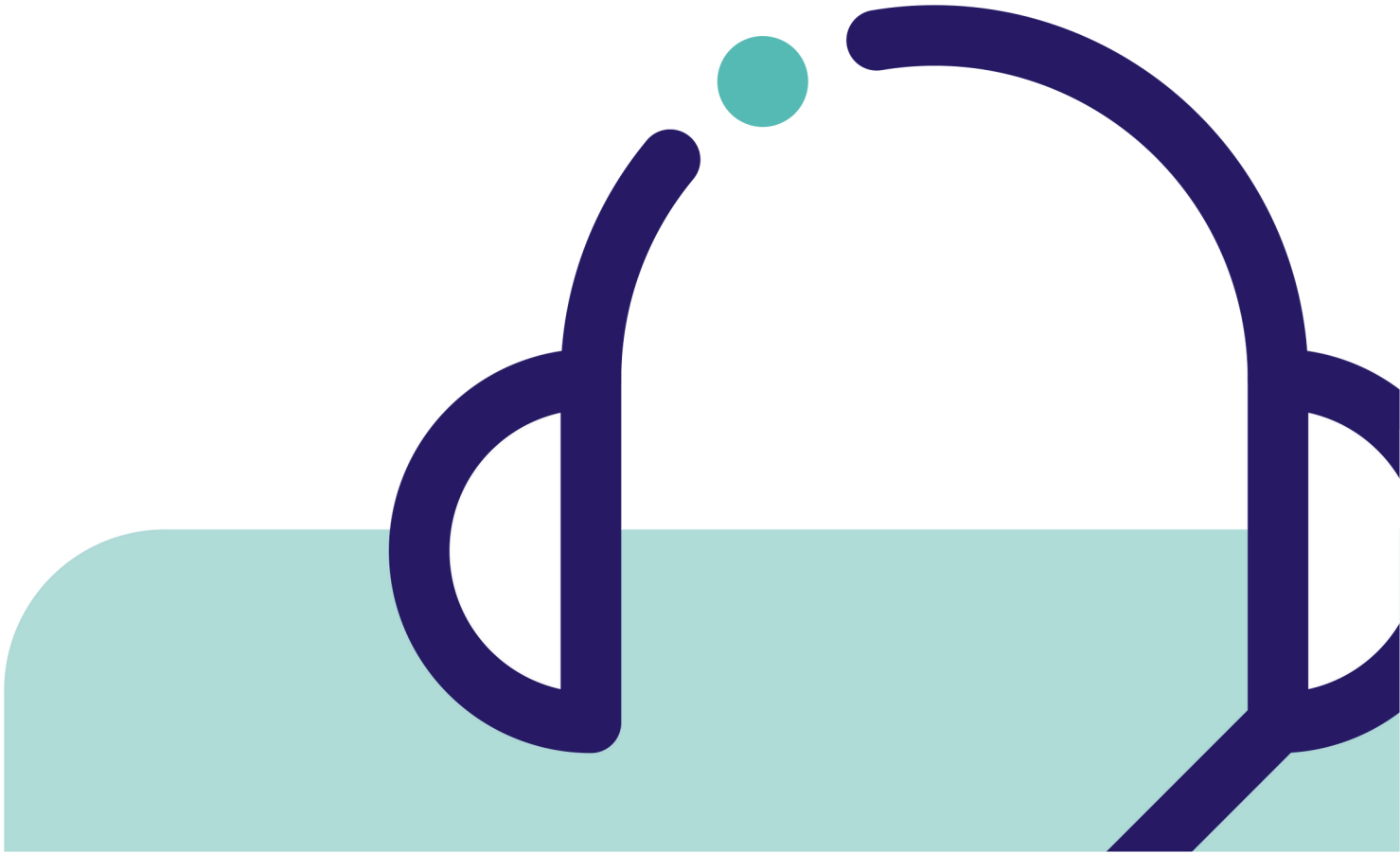
Our vision for the future

As AI continues to evolve and becomes omnipresent, we must acknowledge its importance and prepare to embrace it. In the last few years, AI has become an integral part of educational platforms and assessment solutions, which are likely to become more capable and widespread as technology continuously advances. AI is present and future.

In this scenario, we have an incredible opportunity to harness these new technologies and play a key role in shaping the future of education. Through the leadership of AI and language assessment experts and the participation of all stakeholders, we are ideally positioned to redefine assessment for the modern world using technology to our advantage. In fact, it is our duty as experts in these fields to do so, since we are the ones with the necessary knowledge and skills to drive this change responsibly.

As we have seen, AI has the potential to make language learning and assessment more accessible, efficient and reliable, in addition to enabling more realistic and engaging forms of interaction. This makes it an ideal ally to improve and streamline learning, which can benefit all stakeholders involved.

If we make a joint commitment to explore and use these new technologies responsibly, we will be collectively helping to shape the future of education.



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Further reading:

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