



HE WORLD OUTSIDE school walls has been disrupted as new artificial intelligence (AI) tools become available at a remarkable pace. AI is at everyone's fingertips. It is also very much on everyone's lips. Depending on who you ask, it will cause either revolution or ruination of education as we know it. Regardless of your point of view, there is a clear need to examine how AI should (and should not) be put to use to advance students' literacy learning.

Toward this end, the AI Literacy Network in Primary Education (AILIT) has brought together practitioners and researchers from around Europe to examine innovative AI applications in elementary classrooms.

Collaboration

AILIT was first proposed by a group of researchers at the Norwegian Reading Centre at the University of Stavanger. The initial proposal was an exciting one: How could AI be deployed to help children write for audiences across country borders, heightening their engagement with writing as a result? What has transpired is a genuinely partnership-based collective of universities and schools working together to put AI to use.

AILIT brings together several higher education institutions from the European Consortium of Innovative Universities and multiple partner schools. The partnership involves academics, teachers, and students from Norway, Ireland, Catalonia, the Netherlands, and Portugal. Supported by European Union Erasmus+ funding, the collective has met for brainstorming workshops in Aveiro and Dublin, with frequent online meetings in the interim.

This group has worked through a range of complex considerations relating to the platform design, piloting, data protection, and ethical considerations. Working in an emerging field and across linguistic, geographical, and cultural boundaries requires a shared commitment, in this case, to advancing students' literacy engagement (and ultimately, achievement). The focus is not necessarily AI as an outcome, but as a tool.

Research & Practice

AILIT: How the platform works

The AILIT prototype involves multiple strands to support children in planning and producing writing (be it a story, a poem, or a report) that they know will ultimately be read by another child, in another country, in another language. Imagine Siobhán, a somewhat reluctant 11-year-old writer attending primary school in Dublin. During the writing process, AILIT will support her in multiple ways:

- **Scaffolds:** A series of bespoke pedagogical scaffolds have been developed to support Siobhán (and her teacher) in the writing process. These include how to develop a character and how to appeal to the reader's senses. These are embedded as infographics and short videos on the AILIT platform.
- Generative AI: As Siobhán begins to write, she faces the issue encountered by many children and adults alike: writer's block. AILIT allows her to click a button to receive ideas on how to start or on what might happen next in her text. Generative AI (GenAI) will also help her to choose a cover image for her story.
- Machine translation: Siobhán drafts her story in English about a genius talking horse. Once she is happy with it, it is submitted for publishing on AILIT. In the background, machine translation translates the text, meaning it can be easily read by Per, a 12-year-old living in Norway.
- Recommender algorithms: Based on textual analysis of Siobhán's piece, it is recommended to Marta, in Barcelona, to read. Marta also enjoys stories about animals!

Together, these strands of support help students throughout the phases

Learn More

To learn more about the AILIT project, visit: uis.no/ailitproject

of the writing process, ensuring a real audience at the end.

Potential and pitfalls

We are at an early point of testing and developing the AILIT platform, yet a number of potentially important insights for the broader use of AI for literacy development are already apparent.

At the design and development stage, the ethical use of AI requires particular attention. The AI prompts underpinning the platform were designed to ensure students were not presented with inappropriate content when they sought help in the form of story starters. Furthermore, the sharing of children's data on the platform required particular attention. All partners subscribed to a data sharing protocol that ensured transparency in how and where data would be stored. When educators engage with AI, they must remember the importance of privacy and intellectual property.

While the primary goal is supporting children's motivation to write, and ultimately their writing achievement, there is the possibility that over-use of GenAI scaffolds could lead children to write less and think less about what they are writing.

Donald Murray, one of the first and foremost thinkers on the writing process, stated, "We share with our

students the continual excitement of choosing one word instead of another, of searching for the one true word." If GenAI does this "searching," then is some of that excitement removed? Or do children revel in avoiding some of the more "taxing" aspects of writing? And even if they do, it is perhaps precisely the confrontation with such challenges that will make children grow as writers. Leapfrogging past them might not be such a good idea. Also, the readers of their text might not perceive it as an authentic one if they know these difficulties have been avoided.

The precipice

GenAI has significant implications for how we think about the process of writing, many of which we seek to explore further in the AILIT project.

Despite the affordances offered by AI, the AILIT project has reminded us of the importance of people at the heart of teaching, learning, and communicating. Students write for other students as an audience. Teachers remain a crucial determinant in student success. AI cannot replace this.

In many ways, it feels like we are at the precipice of a huge paradigm shift in how technology supports literacy learning. The AILIT project demonstrates just one application of how AI might help rather than hinder student literacy development.



Patrick Burke (patrick.i.burke@dcu.ie), an ILA member since 2014. is an assistant professor in the School of Language, Literacy, and Early Childhood Education at Dublin City University Institute of Education. He previously worked as an elementary school teacher and professional development advisor. He serves as the incoming president of the Literacy Association of Ireland.



Arild Michel Bakken (arild.m.bakken@uis.no) is an associate professor in Literacy Studies at the Norwegian Reading Centre, University of Stavanger. His research interests include AI and learning technology in literacy instruction, literature work in school, and early literacy instruction.



Eithne Kennedy (eithne.kennedy@dcu.ie), an ILA member since 1999, is an associate professor in the School of Language, Literacy, and Early Childhood Education at Dublin City University Institute of Education. She serves as director of Write to Read and as program chair for the MEd in Literacy Professional Practice program.