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Rethinking literacy and pedagogic agency in the Fourth Industrial Revolution

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We are pleased to present the Special Collection issue of *Reading & Writing*. This edition of the journal contributes and brings together four thought-provoking articles that explore how literacy pedagogic agency is reconsidered in the fourth industrial revolution (4IR).

Recent global events and shifts in thinking have catapulted education and education practices into the digital age. This demanded rapid adaptation and transformation of practices for meaningful learning to continue in education settings. Teachers, teacher educators, those working in tertiary institutions and community organisations, as well as parents and learners, faced unprecedented challenges, especially in terms of their approaches to learning. The theme for this collection also embraced *pedagogic agency*, a term that refers to the teacher's ability to make informed instructional decisions based on learning needs and reflective considerations. Digitalisation and the 4IR demanded that conceptions of classroom configurations shift and transform. This special collection aimed to capture how the education sector considers literacy education in a world that is increasingly immersed in technology, data and the knowledge economy.

In terms of this theme, we aimed to explore what the future of literacy teaching might be? Key emerging questions included, are we adequately prepared for it? And how can those working in literacy instruction be supported to shift from traditional approaches to methods that will meet future needs? To this end, we welcomed original research articles that captured literacy instruction in the digital age, showcasing new pedagogical approaches and blended learning. We also welcomed original research focused on teacher development, reflective practice and teachers as agents of change showcasing the classroom as a learning laboratory and the development and accessibility of resources in the 21st century.

Collectively, the articles highlight the shift of reading and writing instruction to the use of more digital technologies. The first two articles in this collection offer glimpses into how to deal with issues related to teacher education practices positioned within higher education. The first article highlights pre-service teachers' perceptions of practice-based opportunities in a mixed-reality simulation environment, while the second article explores and unpacks the influence of technological literacy on teachers' adoption of a blended learning approach.

In the third article the impact is analysed of the Primary School Reading Improvement Program (PSRIP) on learner performance in English First Additional Language (EFAL) in the Intermediate Phase (IP) and it showcases teachers' ability to make informed instructional decisions based on learning needs and reflective considerations raising an important aspect of our theme, pedagogic agency. In the fourth article the impact is examined of the 4IR on literacy pedagogy and Grade 8 EFAL learners' access and reading motivation. In the study reported on in the latter article the influence of access to reading materials in a traditional classroom setting and online reading platforms are compared.

The first article, entitled 'Pre-service teachers' perceptions of practice-based opportunities to elicit learners' background knowledge within a mixed reality simulation environment', by Carisma Nel and Elma Marais, focuses on pre-service teachers' perceptions of practice-based opportunities in a mixed-reality simulation environment. Discussed is the potential of mixed-reality simulations to transform initial teacher education and provide pre-service teachers with realistic and challenging practice opportunities. They argue that mixed-reality simulations have the potential to transform initial teacher education by providing pre-service teachers with deliberate practice-based opportunities to master core reading practices. In addition, the authors emphasise that mixed-reality simulations create realistic, challenging but risk-free practice opportunities, which can help

to address concerns about the variability and quality of pre-service teacher preparation, specifically as it pertains to reading literacy.

In the second article, 'Technological literacy and its influence on teachers' adopton of a blended learning approach', Florah Teane explores the influence of technological literacy on teachers' adoption of a blended learning approach. A qualitative research approach is used that employs observations, interviews and focus group discussions to gather data. The aim was to gain a comprehensive and deep understanding of how the University of South Africa's technology training has helped teachers to improve their teaching and learning methods and if it leads to better learner performance in schools. The findings shed light on the acquisition of technological skills and indicate that such development does not happen at the same pace for all students. In addition, it also showed that not all students reached the level of being competent at the end of the training. Teane argues that the acquisition of technological literacy and skills by teachers is essential for the adoption of a blended learning approach as it can lead to improved performance in schools. Teane also highlights the importance of practical technology education during teacher training, as well as in schools and the need for inter-institutional partnerships to mitigate the challenges of implementing technology in schools. The third article, 'A quantitative analysis of learner performance in Intermediate Phase (IP) English First Additional Language (FAL)', by Bongiwe Mtambo and Lindiwe Tshuma, explores the impact of the PSRIP on learner performance in EFAL in the IP (Grades 4–6) in a Johannesburg West District. The authors argue that the PSRIP can improve learner performance in EFAL in the IP (Grades 4–6) in this Johannesburg West District. They emphasise that the PSRIP could improve reading skills and increase learner performance in EFAL as it is an effective programme that can be used to promote reading and improve learner performance in EFAL. The study infers and suggests that the PSRIP should be implemented in other schools and taken to scale in South Africa to promote reading and improve learner performance in EFAL.

The fourth article, 'Rethinking literacy pedagogy in the context of 4IR: Grade 8 EFAL learners' access and reading motivation', developed and written by Florence Olifant, Madoda Cekiso and Naomi Boakye. The authors argue that the shift towards the 4IR in the education sector impacts learners' access to reading materials and reading motivation. The aim with that study was to determine whether Grade 8 EFAL learners' motivation to read is best influenced by access to reading materials in a traditional classroom setting or on online reading platforms, comparing the influence of access to reading materials in a traditional classroom setting versus online reading platforms. The findings reveal distinct patterns in how access to reading materials affected learners' reading motivation in different settings.

Overall, the articles presented in this special collection of *Reading & Writing* provide valuable insights into how literacy pedagogic agency is reconsidered and conceptualised in the technological era. They address the challenges and opportunities associated with teacher development, reflective practice, teachers as agents of change and the innovations in literacy practices in tertiary institutions. By engaging with different theoretical frameworks and employing various research methodologies, these papers contribute insights as to how literacy is defined, enacted and promoted in a range of institutional, socio-cultural and disciplinary contexts.

The editorial group of *Reading & Writing* would like to extend their collective thanks to all the authors and reviewers (national and international) who have contributed to making this a stimulating and thought-provoking special collection.