Writing to communicate meaningfully with technology challenges teachers to think differently about their pedagogy. In the context of Australian writing classrooms it can be understood that a teacher uses new and different types of technology with limited professional development. This study provides insight into how seven individual primary school teachers harnessed the potential of a new digital technology - text-to-speech technology to transform their pedagogy through the design of learning experiences.

The study used an ethnographic inquiry within an interpretive framework to observe, analyse and interpret the teachers' pedagogy and instructional procedures when using new text-to-speech technology in writing lessons. The study also identified the level of technology integration adopted by the teachers and students and the factors that influenced the use of technology during the writing process. An ethnographic conceptual framework operationalised the field work within each teacher's writing classrooms using multiple data collection tools. The TPACK Framework, the SAMR Model and ratings of teacher instructional competencies when teaching with technology were used as theoretical guides to analyse and interpret how the teachers and students used the new digital technology.

The role of the teacher was significant in mediating the relationship between writing instruction and technology. The teachers designed instructional procedures where discussions on the potential use of text-to-speech technology acted as a catalyst for them to think differently about their pedagogy. The integration process showed how the teachers focused their pedagogy on facilitating good writing instruction rather than making student learning in the writing process more technologically enabled. The teachers who focussed on the relationship between the reader and the writer when composing texts with technology, redefined their pedagogy and generated rich learning to write experiences and innovative instructional procedures for both novice and more experienced writers. Not all the teachers did this to the same extent.

Students' explorations to integrate digital technology were also influenced by how well teachers transformed their own practices. The study shows that some students designed their own instructional procedures, moving beyond a teacher's traditional pedagogy.

The findings of the study suggest that some of the teachers promoted an openness in the interrelationships between the teacher and students for writing with technology, resulting in a 'deprivatisation' of teacher practices. The study provides insight into the differences between how successful individual teachers were and how a range of factors beyond their control impacted on the teaching and learning process.

An outcome of the study's interpretive analysis showed a pedagogical transformation for teachers when they drew on the strengths of an explicit teaching philosophy and a socially-engaging learning culture. The findings suggest that it was how a teacher interprets the potential of new technology as a stimulus to think differently about their pedagogy that benefitted students to write as global authors.