

Book Review

Education and new technologies - Perils and promises for learners

edited by Kieron Sheehy and Andrew Holliman

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As adults and children alike continue to teach and learn in a technology rich 21st century, *Education and New Technologies- Perils and Promises for Learners*, sets out to answer and challenge future implications and benefits for andragogy and pedagogy. The book covers a range of relevant issues within the education sector namely online learning, culture, literary, collaboration and relationships, as well as ethical considerations and surveillance. The creditable, international authors address a range of technology topics that effect humans from before birth until after death in an age whereby connection to technology is 24 hours, seven days a week and a routine part of living and being.

The book edited by Sheehy and Holliman, is divided into three sections. There are 12 topics covered throughout these sections that weave effortlessly with each other. Readers can read this book in any order and once finishing the book will be left with a new found awareness of technology within education in the present and questions for future implications.

The first section of this book explores early engagement with new technologies. It highlights engagement with technology as well as explores in depth how young children, including those in infancy are digesting a digital diet from much earlier on in their lives than ever before. Authors within this section begin to look at current research surrounding the technology occupied early education system. There is strong discussion throughout this section surrounding the future of print technology as trends show that traditional print books are being replaced with e-books. Another consideration within this section is the future of legible handwriting in future generations. Authors highlight that a third of young children (under five) are learning to use a keyboard, typically on touch screen devices before they are holding pencils. This makes this section particularly interesting and useful to early childhood professionals.

Section two introduces how technology can support and promote inclusive practice within the education sector. Exploring learning challenges such as hearing, visual and language impairments as well as autism, the authors seek to address concerns and highlight benefits of using technology to create an inclusive and engaging learning environment that supports all learners in participating fully within the classroom. This section also discusses how the areas of science, technology, engineering and mathematics (STEM) interplay with technology within education. Dialogue is introduced surrounding game based learning within the classroom as a tool to support students in constructing knowledge. The authors highlight that students are more likely to be extrinsically motivated by virtual rewards to engage with a practical application of STEM learning concepts. Although game based learning is still evolving, this section highlights potential benefits such as students ultimately increasing their knowledge and understanding of concepts that they might not have understood with face-to-face teaching. This leaves readers curious about the role of technology and game-based learning within modern classrooms.

The last section addresses global and cultural considerations as well as safety surrounding the use of technology within education. Through highlighting that poverty and access are some of the biggest barriers to education, the authors extend on game-based learning to discuss how robots and online classrooms could be used to address a worldwide shortage of teachers. This section highlights in more depth the concept of Massive Open Online Courses (MOOCs)

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which have been used within the tertiary sector to upskill adults who don't have access to face-to-face teaching. The authors emphasise the importance and social value of interaction and collaboration in successful learning, which leaves readers with a new found awareness of how significantly different teaching and learning could be in the future. While the discussion is balanced, the section goes further to highlight ability expectations and offers a retrospect look at how machines have replaced humans in the past due to them being cheaper and faster in their productivity. Another significant area within this section is the safety of being online, in particular, the issue of cyber bullying and data collection. As addressed in the first section of the book, a concern for the future is that as children and adults alike are becoming connected and reliant on technology within their lives. A key question that is raised is how do users protect themselves against the sometimes unknown data collection and increased digital footprints they grow every day through engagement with technology.

While this book challenges the status quo of education, the authors throughout hold strong ground that while technology could ultimately replace teachers and printed books, technology cannot replace human interaction and teaching. Authors throughout this book critique sociocultural theory as well as behaviourist theory to critically reflect on the value of technology and the humans who use and make it to form a composed discussion throughout. This book and the chapters within it, ultimately provide the knowledge that technology supports educators with data and tools. With understanding and knowledge of this, today's teachers are in a powerful position to challenge "what counts as learning, and who decides, in an age of digital fluency?" (Salvin-Baden, as cited in Sheehy & Holliman, 2018, p. 159).

Education and New technologies - Perils and Promises for Learners, provides readers with insightful knowledge to challenge, adapt and develop their teaching and learning to ensure that they are using technology to benefit teaching and learning, and that they are also aware of their important role as humans and as teachers. This text holds relevant information for technology focused early childhood professionals who seek to understand what current technologies are being used globally within education and where early childhood education could transpire to in the not so distant future.

Reference

Sheehy, K. & Holliman, A. (Eds.). (2018). *Education and new technologies - Perils and promises for learners*. New York, NY: Routledge.