Journal of Open, Flexible and Distance Learning

Editorial: Inhabiting the Multiple Places, Spaces, and Time for Learning

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Abstract

This editorial of the *Journal of Open, Flexible and Distance Learning* (*JOFDL*) provides an overview of the FLANZ2018 biennial conference held at Massey University, Palmerston North, New Zealand, 9–11 April, 2018. The conference theme, *From Inception to Infinity: Inhabiting the Multiple Places, Spaces and Time for Learning* provided the context for the five keynote speakers to explore the opportunities for learning that are emerging from the rapidly changing world of digital technologies. An overview of their presentations is discussed below. These, in addition to the two extended conference papers in the issue, offer insights into emerging learning opportunities. The other contributions in this issue extend our understanding of how digital technologies are influencing learning and teaching in different contexts.

Keywords: FLANZ2018 conference; digital technologies; openness and flexibility, new technologies and related pedagogies

Introduction

This issue of the *Journal of Open, Flexible and Distance Learning* (*JOFDL*) includes two extended papers presented at the FLANZ2018 biennial conference held at Massey University, Palmerston North, New Zealand, 9–11 April, 2018. The conference theme, *From Inception to Infinity: Inhabiting the Multiple Places, Spaces and Time for Learning,* investigated the opportunities for learning that are emerging from the rapidly changing world of digital technologies. "Inception" signifies the beginning of the journey (i.e., where we have come from), and recognises the early stages of the learning journey. "Infinity" simply means that we are not there yet. Where will our changing environment take us to next? How can we best use technologies to meet society's increasing need for ongoing education?

The conference brought together keynote speakers from Europe, the United States, and Australia as well as presenters from New Zealand. This year's conference was notable for the number of school-sector presenters and attendees in addition to colleagues from the tertiary sector.

Given the inclusion of the two extended conference papers, the conference committee have had the privilege of editing this issue. While the focus of the editorial is to report back to readers about the conference, the other papers in this issue complement the conference theme and the

overall focus on the changing nature of learning. Additional extended 2018 conference papers will be included in future issues of the journal as they become available.

FLANZ 2018 conference overview

The conference theme invited attendees to explore how digital technologies are enabling multiple opportunities in our rapidly changing world.

The focus was on four sub-themes:

1. Innovations in designs for learning
2. Equity, access, openness and flexibility
3. Emerging teaching and learning strategies, assessment models
4. New tools (technologies and related pedagogies) for learning

The first sub-theme, "Innovations in designs for learning", raised discussions about learning spaces, acknowledging their evolving nature to accommodate complex configurations of tasks, tools and people. Through this theme, attendees questioned how learning technologies are transforming people's experiences of physical and virtual spaces. This sub-theme included research about innovative designs associated with online, open, blended, and flexible teaching and learning; in formal, informal, and non-formal learning situations; and in digital-enhanced physical spaces or hybrid spaces.

The second sub-theme was "Equity, access, openness and flexibility". Discussions on this sub-theme acknowledged openness as removing barriers of access to education and addressed inclusiveness for all learners across the globe. This sub-theme covered a range of dimensions such as open educational resources (OER), open educational practices (OEP), open learning, open scholarship, open policy, open-source software and open teaching. Open practices are considered to enable flexibility, but they can also present challenges (such as equity of access) that are still prevalent in modern societies. This sub-theme invited discussions about learners' experiences and personalised pathways; ownership of learning data/content; digital inclusion/equity including Māori, migrants, refugees, disabilities, remote communities, disadvantaged; open and public participation; and the changing role of traditional institutions.

The third sub-theme, "Emerging teaching and learning strategies, assessment models", focused on emerging trends in education and the pedagogical strategies that might best prepare our learners for lifelong, life-wide, and life-deep learning. This sub-theme acknowledged that modern workplaces require people to engage with complex, ill-defined, challenging problems, and so they need to develop skills and attributes such as adaptability, good social and communication skills, and digital and information literacies. This sub-theme invited conference attendees to reflect on teaching and learning practices in the digital age, as well as ways of measuring, analysing, and reporting on data about learners. It addressed topics related to pedagogies for a digital age; learning analytics; digital badges/micro-credentialling, nano degrees, and using digital technologies to evaluate informal and non-formal learning.

The fourth sub-theme, "New tools (technologies and related pedagogies) for learning", focused on emerging digital tools and their potential for empowering learners (e.g., by allowing greater control over access, creation, and sharing of knowledge). This sub-theme included discussions about digital tools (and associated pedagogies) such as virtual and augmented reality, affective computing, artificial intelligence (AI), robotics, gaming and simulations, and mobile and ubiquitous technologies.

Keynotes

In his keynote, *"*Human and Machine Intelligence: Implications for the Future of Education*"*, which reflected the "New tools for learning" strand, George Siemens from Athabasca University took us on a fast-paced journey through technological change—from the steam engine, through the internet of things and big data, to artificial intelligence, machine learning and, finally, to the current state—neural networks and deep learning. All of this set the scene for the question: What does the nexus of artificial and human intelligence mean for education? Artificial intelligence could be our last great invention, as "AI never forgets and it knows all the things" and it grows at an exponential rate. So the next question is: What is the point of difference of being a human, rather than a robot? It turns out that humans are way more complex than robots. We have a state of "being" as well as knowing or doing, because people are not only "beings", but are articulate and engage in multiple ways of knowing and doing.

In education, for example, AI can, and already is, automating mundane activities, providing student support by answering frequently asked questions, and contributing to adaptive and personalised learning. However, there are a lot of unknowns, and perhaps the key focus should be on the importance of being human in education (i.e., wellness and reasonableness) rather than factual information or knowledge transmission. Siemens suggested that now is the time to work towards a networked approach to education that encourages learners to develop the transdisciplinary "soft skills" needed to make sense of the complex world we live in, rather than learn factual information—because computers can already do that better than humans. The high rate of mental stress and illness in higher education students is of concern to us all, so what is the role of the higher education institutions in better preparing our learners for a world where human intelligence and AI collide?

We need to be working on solving the complex problems affecting our modern world (problems that go beyond discipline silos), and so it is more important that our learners understand relationships—between ideas, disciplines, and people—than spend their time memorising facts. Siemens questions the need to assess students' ability to recall factual data when AI is doing that so well, and suggests that we should instead be assessing the "human" elements of education. Educators should be leading the development and integration of these skills into the curriculum, rather than assuming students will develop these skills by osmosis or that someone else will teach them the soft skills of critical thinking, reasoning and being reasonable, working with others across disciplines, sense-making, and communication. In Siemen's view, AI is here and not going away, so we—as humans—need to establish our place in a world that is increasingly automated.

"Near future teaching" and building, collectively, the vision for digital education at Edinburgh University, was the focus of Professor Siân Bayne's keynote. Bayne introduced the audience to a project for developing vision and strategy for digital education at Edinburgh University. Rather than using a traditional approach (committees and taskforces) to develop strategy and vision, Bayne described a bottom-up approach in which students and academics develop the vision and strategy. The project, Near Future Teaching, was described as a collaborative approach using academics and student voices, with design thinking and futures studies methods, to develop the vision and strategy for digital education at Edinburgh University. The futures studies method was of interest to Bayne. The relevance of this method was outlined, with Bayne emphasising that, rather than trying to predict the future, future studies is about shaping and creating the future in a co-produced, participatory way. Bayne then explained why the Near Future Teaching project was so important. She argued that educators were subject to "contrasting imaginaries" about what the future of education might look like as education moved further into the digital, data-led world. These futures, often presented by people with a stake in the future of educational technology, can be difficult for educators to reconcile with how they would like universities to be. To navigate

these competing futures, Bayne expressed the need for educators, university leaders, and strategists to focus on developing the values on which to base the future of digital education. A values-based approach was the key feature of the Near Future Teaching project.

Bayne described some of the futures she had alluded to. Some of these were described as "sociotechnical imaginaries" that "conceived citizens computationally in terms of their neurobiological malleability and amenability to algorithmic optimization" (Williamson, 2016). Other examples included emotion recognition technology and facial recognition technology to track student attendance—data can then be shared with government agencies, including student loan providers. Bayne described the implications associated with these technologies, and although (in her opinion) research into the implications does not match the speed at which the technology is being developed, emerging research in areas such as the relationship between human rights and neuroscience will be very relevant to digital education and educational technology contexts in the coming decades.

Bayne contextualised the Near Future Teaching project by providing a range of examples from universities that had undertaken similar exercises. The project was inspired by this previous work but differed in that it was agnostic of mode or level of education, and instead focused on the entire digital education piece. Key aspects of the Near Future Teaching project included the creation of four principles that were created to capture the complex interplay between technological change, and social, cultural, political and human agency factors. Bayne described the work that had taken place in the project to date. This included a series of short interviews, with students and staff, that focused on the value of digital education, and community and university events. This work, described as part of the "foresight" phase of the project, also included two tight literature reviews. The reviews focused on the scientific/technical and educational/social aspects that were likely to affect the future of digital education. Three other phases of the project were described. These were scenario development, testing and surfacing challenges; insights and recommendations; and, finally, translation into policy and action. Although the Near Future Teaching project is still a work in progress, Bayne presented the planned outputs from the project and re-emphasised that the project would deliver co-produced values and evidence-based positions on futures for investment in key areas for the university, in the hope that the values would endure for at least a decade.

Mark Brown, Director of the National Institute for Digital Learning at Dublin City University, built further on the conference theme with his presentation "Taking the Craic: From Inception to Infinity and Back Again". Brown charted his family's immigration to New Zealand in the 1870s and his own recent return to Ireland, and discussed the need to take agency for our own educational future. The key message was that flexible learning is implicitly related to lifelong learning. Within flexible learning there are opportunities and pathways for life, educational opportunities, equity, and a fairer and more socially just society. All educational change is not neutral, there are powerful forces at work and, as educators, we need to take agency and influence and shape those forces because they determine who controls the future. As Mark said, "If we let those who controlled the past continue to control the future, we will continue to get what we've always been given."

Three cornerstone concepts of access, cost, and quality were highlighted with John Daniel's Iron Triangle model. Educational models can address two of these things but it has so far proved impossible to do all three. We can increase the access to education, and potentially reduce the costs in doing so, but the quality isn't there. In contrast, high-quality courses with increased opportunities for access usually have an associated cost increase.

When it comes to quality, there is a need to challenge the thinking of policy makers that face-to-face teaching is the gold standard by which all new models must be measured. There are many

examples of poor face-to-face teaching, so does the high-quality label always apply? There is no significant difference aligned to the mode of delivery; it's what's done through that mode that counts. Edinburgh University was cited as one institution where change has been made and face to face isn't what it used to be. There is a blurring of the lines between what is on campus, off campus, in class, and out of class, and digital is part of that. Brown suggests that this blurring across modes is the new norm.

Cost, another side on the iron triangle, was unpacked by way of student fees, education systems, and debt levels. Investment in higher education benefits both the public good and the private good. The benefits of higher education are conclusive. For instance, people who undertake higher education study are more likely to volunteer, and place fewer demands on the health system. There is currently a gap in the evidence to demonstrate that those who study in more flexible ways bring these same benefits to society. Policy makers need to see these benefits to enable decision making. If it was evident that the outputs were the same regardless of the mode, funding could change.

The final side of the iron triangle is access. Demand for higher education is growing exponentially and, consequently, more flexible means are required. MOOCs were discussed as a mechanism to address the access issue. MOOCs have taught us to question what student success looks like from the learner's perspective.

Brown points to evidence of two different narratives about learning in higher education. The first is the knowledge economy, in which everything is a commodity. The second viewpoint identifies the importance of a knowledge, or learning, society. This narrative gives a more inclusive, participatory viewpoint. But these narratives are messy and entangled, so people's agency is crucial. Our words, language, and actions matter. Educators require an ethos to get around the table—to ensure we are the future makers, not the future takers.

Professor Tim Bell from the University of Canterbury explored the conference sub-theme of "Emerging teaching and learning strategies" in his keynote address. His presentation, "Empowering Teachers to Deliver the New Digital Technologies Curriculum", gave the audience hands-on experience of what the new curriculum might be like in schools when it is implemented in 2020. The focus of these experiences was on computational thinking rather than the technology. Computational thinking for digital technologies, and designing and developing digital outcomes, are the two new technological areas in the digital technologies curriculum. These will create a focus on looking at problems in a way that computers can help.

Bell pointed out that we are not alone in trying to implement a digital technologies curriculum in schools. More than 50 countries are at different stages of implementing digital curricula. In Bell's view, the keys to the success of the implementation are: confident teachers, good resources for students, understanding from parents and school management, and a healthy subject association. To ensure that New Zealand has confident teachers working with students, professional learning and development (PLD) for teachers is essential. Teachers in New Zealand and around the world are using the resources, *CS Unplugged: Computer Science Without a Computer* and the *Computer Science Field Guide,* as they begin to introduce the digital technologies curriculum.

Throughout his presentation, Bell kept his focus on the importance of people. Digital systems include the user, and this human element is crucial. With computer science, students can design and develop systems that meet the needs of people. People, not the technology, are at the heart of the digital technologies curriculum.

Brownyn Stuckey (@bronst) took us on a romp through the world of gaming for learning purposes. This keynote hit multiple themes: "Innovations in designs for learning"; "Emerging teaching and learning strategies", and "New tools (technologies and related pedagogies) for learning". Bronwyn framed her presentation in the context of Ryan and Deci's (2000) self-determination theory, highlighting the importance of autonomy, competence, and relatedness to the experience of learning. She challenged us to consider how gamification can be used to better engage our learners (regardless of sector) to enhance the excitement and experience of learning.

In terms of gaming for learning purposes, it is important to understand the concept of "fun". Fun is not just about giggles or amusement. Fun in learning, which comes from mastery of a topic or challenge, is the underlying principle of educational gaming—the idea of "hard fun" popularised by Seymour Papert, or the small "g" versus the big "G" from James Gee. Games can be a useful way to access complex topics, and games should be designed to encourage the discourse (the big "G") that will bring out the complexity. If we build all the complexity of the topic into the game, we run the risk of losing the fun by stripping it out to fit in more of the educational message. Games for learning need to allow space for the learners to contribute and actively engage, not passively absorb. "A good game is a reveal".

As well as games specifically designed for education, Bronwyn showcased a series of entertainment games that are being used for educational purposes. She reinforced the message that although we don't all have to be game designers, we have to be open to employing gaming elements in our learning spaces. Examples of such strategies were the use of "Keep talking and nobody explodes" to teach real-world group problem-solving skills and "Block by Block", a version of Minecraft that is being used to teach public-space planning.

Bronwyn shared great examples of educational gaming in action around the world, including examples from New Zealand. She challenged the delegates to consider how students could be involved in designing games for learning and working towards co-creation of the learning experience through collaborative game design. This is surely the ultimate approach to active learning.

FLANZ awards

The winners of the 2018 Flexible Learning Association of New Zealand (FLANZ) Awards were announced at the organisation's conference dinner on 10 April, 2018. Up to three separate awards may be conferred biennially in conjunction with the national conference. Awards are given for projects that:

- advance understanding of best practice in e-learning, distance, open, and flexible learning in New Zealand
- are original or innovative in concept or application
- are relevant to and whose outcomes are useful to the e-learning, distance, open, and flexible-learning community.

The Waikato University team of Professor Jonathan Scott, Dr Elaine Khoo, Dr Mira Peter, and Mr. Craig Gilliver received the top award for their development of videos in a flipped class environment to teach threshold concepts to undergraduate engineering students. This project, called "Developing Flipped Class Videos to Teach Undergraduate Engineering Threshold Concepts" made innovative use of technology to personalise the learning experience for learners, allowing them to engage with learning these essential concepts at a time, place, and pace that suits them.

A certificate of merit was awarded to Associate Professor Mandia Mentis, Associate Professor Alison Kearney, and Dr Wendy Holley-Boen from Massey University for their work, "Changing the Pace, Place and Face of Professional Learning Through Networked Learning Hubs". This project provides support for special-needs teachers in schools across New Zealand (see https://www.lsn.nz/). The panel also gave a Highly Commended award to Dr Linda Laven, Fiona Murray, Kim Baxter, and Dr Kate Hill from Massey University for their work, "Integrating Endnote From Download to Research Report for Distance Masters Students", which examines an innovative and replicable model of micro-teaching as a means of increasing digital literacy among Masters students. Special mention was also given to the application from Rosmini school called "Manu Tukutuku". Derek Wenmoth, convenor of the judging panel said, "it was encouraging to see the range of innovative and well-researched projects submitted for this year's award."

In addition to the FLANZ awards, up to two scholarships are given to students attending the conference. These scholarships are sponsored by FLANZ to recognise and support emerging researchers, as part of FLANZ's commitment to advancing research and training for the next generation of leaders in the field of flexible learning. This year's recipients of the scholarships were Danielle Dubien and Sara Farshad Nia, both of whom are undertaking doctoral studies at the University of Canterbury. Danielle had two papers accepted for the conference: "Course Development by the OERu: A Case Study Using Davis' Arena of Change With Technology in Education", and "Development and Use of a Quality Assurance Framework for OER While Practicing Open Philanthropy". Sara's paper was "Digital Equity for ESOL Students in a New Zealand Secondary School Analysed With Davis' Arena Framework".

The biennial conference also provides an opportunity to acknowledge the quality of the articles published in the association's journal (i.e., *JOFDL*) by presenting an award to the author of the paper voted the best article in the journal in the preceding 2 years. The journal's editor in chief, Alison Fields, convened a panel of judges from the FLANZ executive to determine the winner. The article by Kamila Hoffmann-Dumieński, "Professional Development Across the Islands of the South Pacific: A Perspective of a Blended Learning Facilitator" won the award for best journal article. Three highly commended articles were: "What are the Influences on Teacher Mobile Technology Self-efficacy Within Secondary School Classrooms?" by Jo Tilton and Maggie Hartnett; "Reading and Studying on the Screen: An Overview of Literature Towards Good Learning Design Practice" by Mark Nichols, and "Video Captions for Online Courses: Do YouTube's Auto-generated Captions Meet Deaf Students' Needs?" by Becky Sue Parton.

The conference committee congratulates all the award winners on their success.

Articles in this issue

This issue comprises two articles that are expanded versions of papers presented at the conference, a research article, and an addition to an article published in a previous issue of the journal. The first of the articles from the conference is called "Manu Tukutuku, ma te Huruhuru ka Rere te Manu: Empowering Learners to Soar" by Christine Te Kiri. The article discusses a project being undertaken at Te Aho o Te Kura Pounamu (Te Kura, The Correspondence School). It focuses on Māori student achievement and the first steps being taken to encourage engagement of both students and their whānau (families) in the students' learning. The article discusses what is needed to ensure culturally critical and sustaining practices with students and whānau, and presents several examples.

The second conference article, by Cheryl Brown and Genevieve Haupt, called "Using Personal Mobile Devices to Increase Flexibility and Equity in Learning in Resource-Constrained Contexts", reports on a research project that focused on first-year students in an extended degree

programme in the Humanities at the University of Cape Town, South Africa. Students in the programme were asked about their access to personal mobile devices (PMDs) and, based on need, some students were provided with general-purpose tablets. The study reports on the experiences of those students and highlights that addressing issues of equity (in terms of physical access) provides new learning opportunities—but also creates some new challenges.

Angela Lavin's research article, "What Are Some Key Attributes of Effective Online Teachers?", looks at the key attributes of effective tertiary online teachers. Through a series of interviews with a small group of academics in Australia and New Zealand, five key attributes were identified: avoid a didactic approach, vary pedagogical approaches, use productive failure, facilitate the learning process, and provide a seamless structure. Although it's a small study, the findings provide a starting point for effective teaching and learning in online contexts.

Finally, the invited addendum to Nichols' 2016 "Reading and Studying on the Screen" sees this author updating the growing literature on how this issue affects online learning. The main points from the original article are outlined as context, before the more recent literature is examined and new trends and conclusions are outlined. The issue of reading on screen versus print is more deeply grounded in the underlying context of digital-based versus print-based learning design, resulting in a more detailed and complex picture. The article ends with an outline of opportunities for further primary research, and advice (and encouragement) for students.

We hope you find value in the selection of articles in this issue. They provide an interesting mix of research on the rapidly changing nature of learning and teaching in digitally rich environments. If you wish to find out more about the conference, you can access the proceedings in the conference handbook, and video recordings of the keynote presentations, from the home page of the conference website (http://www.flanz2018.org.nz/home.html).

Finally, we would like to thank everyone who contributed to the FLANZ2018 conference and the development of this issue. Thank you to the conference committee, and a special thank you to Nicky Vallender for her tireless work in ensuring the conference at Massey University ran smoothly. Thank you also to the FLANZ Executive committee for their support. Finally, thank you to Alison Fields who contributed to this editorial and Fiona Diesch, who reviewed a draft version.

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