Centre for Technology Enhanced Learning

Research Booklet

Academic Year 2019-20

Prepared by Kyungmee Lee and Brett Bligh

Illustrated by Joe Decie with Natasa Lackovic [illustrations are visible in the graphical version of this document]

Centre for Technology Enhanced Learning

The Centre for Technology Enhanced Learning focuses on theoretical and practical challenges related to educational uses of technologies for teaching and learning in formal and informal educational settings.

We are based at Lancaster, present across the world!

The Centre has

- a small team of **Core Members**, mostly based in the Department of Educational Research at Lancaster University,
- a larger network of **Associate Members** from across Lancaster University and worldwide,
- **Doctoral Researchers**, currently conducting their PhD research in the Department, and
- **Alumni Members**, who previously obtained their doctorates in the Department.

This short booklet introduces three interweaving themes that the Centre investigates through our research and strives to achieve within our practice: **Inclusivity, Criticality, Mobility**.

Kyungmee Lee and Brett Bligh (co-Directors)

Inclusivity in Pedagogy and Learning

can be achieved by making resources more accessible; representing knowledge in multiple forms; and enabling new mechanisms of communication between people.

We are interested in how uses of technology can change educational practices to become more inclusive.

Introducing technology into pedagogical and learning practices is often **claimed** to be disruptive—established practices are discarded, innovative forms of learning are fostered, and new opportunities are created to include and empower more diverse social groups.

Our members investigate how pedagogical practices **actually** change when new technology is introduced in diverse educational settings—how power relations among participants are transformed or persist, and what opportunities can be created to empower the marginalised.

Dr Julia Gillen

Reader, Department of Linguistics and English Language

My research aims to expand understanding of the multimodality of contemporary literacy practices. I work with deaf children in marginalised communities, investigating how collaborative online learning can improve their English literacy.

How can we best support the multiliteracies education of young deaf users of Sign Languages in marginalised communities?

The illustration (in the graphical version of this document) shows deaf children, from across the globe, using a wide range of sign languages and communication tools to have meaningful conversations with each other. My recent project, working with children in India, Ghana and Uganda, particularly focuses on developing sustainable approaches to the multiliteracies education of deaf people in the Global South.

You can read more about my work here:

Gillen, J. (2014). *Digital Literacies.* London: Routledge.

Gillen, J., Panda, S., Papen, U., & Zeshan, U. (2016). Peer to Peer Deaf Literacy: Working with young deaf people and peer tutors in India. *Language and Language Teaching, 5*(10), 1-7.

Dr Julie-Ann Sime

Lecturer, Department of Educational Research

My research focuses on the Digital Literacies of educators in Higher Education. I am interested in the relationship between pedagogy, emerging technologies, and inclusive teaching practice.

How can we support educators to integrate emerging technologies and inclusive design into their teaching practice?

The illustration (in the graphical version of this document) represents recent research into the visual literacies of educators which highlighted the growing importance of immersive literacy and virtual and augmented reality technologies. I also investigate: how comics can support inclusive foreign language teaching; and how to increase the digital capability of educators to promote the digital wellbeing of their students.

You can read more about my work here:

Themelis, C, & Sime, J.A. (2020). From video-conferencing to holoportation and haptics: How emerging technologies can enhance presence in online education. In S, Yu, M. Ally, & A. Tsinakos (Eds.). *Emerging Technologies and Pedagogies in the Curriculum. Singapore*: Springer.

Themelis, C, & Sime, J.A. (2019). COMICS: Visual language and media for inclusive and technology-enhanced language learning. In S. Mavridi & V. Saumell (Eds.), *Digital Innovations and Research into Language Learning*. Faversham, UK: IATEFL.

Dr Sue Cranmer

Lecturer, Department of Educational Research

My research focuses on innovation to address inequalities that are manifested and reproduced in everyday uses of digital technologies. My recent work has taken an interdisciplinary approach that combines digital education with disability studies.

How can disabled children's uses of digital technologies support learning?

My study found that disabled children perceived many benefits in using technology for learning. However, these can be undermined when teachers have not yet developed inclusive digital pedagogies unintentionally creating stigma and an extra workload for children. Teachers need further guidance and support to enable the growth of inclusive digital practices. To illustrate my scholarship, I have chosen an image of the rainbow (in the graphical version of this document) to represent inclusivity.

You can read more about my work here:

Cranmer, S. (2019) 'Disabled children's evolving digital use practices to support formal learning. A missed opportunity for inclusion'. *British Journal of Educational Technology.*

Cranmer, S. (2017). *Disabled children and young people's uses and experiences of digital technologies for learning*. Lancaster: Lancaster University. [Report]

Criticality in Theory and Research

can be achieved by understanding that technology and learning are broad categories, each describing a range of phenomena; that relationships between technology, learning and education are indirect and influenced by a wide range of mediating factors; and that research, practice and policymaking are distinct domains related in complex and multidirectional ways.

We are interested in theorising the complex roles of technology in educational practices and policymaking.

How a given technology works in educational settings is often thought about in ways that are either **deterministic** or narrowly focused on **properties** of the technology itself.

Our members understand that **theorising** technology enhanced learning is necessary for empirical advancement and changing real-world practice—and we undertake that theorisation, drawing upon many theoretical frames and insights from other disciplines (such as sociology, psychology, politics, history and economics) to do so.

Professor Don Passey

Professor, Department of Educational Research

My research focuses on the implementation and management of leading edge technology at national, regional, local and institutional levels. I am interested in relationships between research, policy and practice, and learning in formal and informal environments.

How can we effectively examine the impacts of technologies on learning engagement and outcomes for different student groups?

The illustration shows a recent project exploring the implications of developing computing within school curricula. An important finding concerns the need to develop 'producers' of technology rather than just 'consumers'. When researching, we need critical approaches to evaluating the educational uses of technologies—considering not only immediate pedagogical outcomes but also long-term impacts on education and society.

You can read more about my work here:

Passey, D. (2019). Technology-enhanced learning: Rethinking the term, the concept and its theoretical background. *British Journal of Educational Technology.*

Passey, D. (2016). *Inclusive technology enhanced learning: Overcoming cognitive, physical, emotional and geographic challenges.* London: Routledge.

Dr Murat Öztok

Lecturer, Department of Educational Research

My research interests concern collaborative work and group discussion in digitally-mediated spaces, with a theoretical and practical commitment to social justice within learning communities. I draw upon Marxist and Post-Colonial perspectives to understand the sociocultural nature of learning.

What is digital scholarship? What are the ways in which online doctoral students can socialise into academia?

The illustration (in the graphical version of this document) shows a current project, which aims to develop a comprehensive framework to better conceptualise and design online postgraduate education, using the cognitive apprenticeship model of learning. By qualitatively investigating the process of doctoral students becoming independent researchers and legitimate members of academia, my study provides critical insights about how to support their learning.

You can read more about my work here:

Oztok, M., Lee, K., & Brett, C. (2018). Socialization and Cognitive Apprenticeship in Online Doctoral Programs.

Öztok, M., & Kehrwald, B. A. (2017). Social presence reconsidered: moving beyond, going back, or killing social presence. *Distance Education, 38*(2), 259-266.

Dr Natasa Lackovic

Lecturer, Department of Educational Research

My research explores educational futures via new approaches to research, theory and pedagogy. I am interested in how we can move beyond the marginal and casual uses of material and digital artefacts, towards more innovative, critical, holistic and relational ones.

How do material and digital artefacts (e.g., photographs, videos) relate to the ways in which we learn and create new knowledge?

The illustration (in the graphical version of this document) shows various artefacts that mediate learning. Using different approaches, including semiotics, multimodality, and critical theory, I have developed an Inquiry Graphics analysis to offer novel methods with visual and multimodal artefacts in educational pedagogy and research. My scholarship also includes critical approaches to graduate employability, geo-social justice, and marginalised identity empowerment

You can read more about my work here:

Lacković, N. (2018). Analysing videos in educational research: an "Inquiry Graphics" approach for multimodal, Peircean semiotic coding of video data. *Video Journal of Education and Pedagogy, 3*(1), 1-23.

Jandric, P., Lacković, N. (2018). Visual cultures and education. In *Encyclopedia of Educational Philosophy and Theory.* Singapore: Springer*.*

Mobility beyond Time and Space

can be achieved when technology bolsters connections between different places, times and people; helps people act differently within spaces; and fosters links between course communities and wider life experiences.

We are interested in the physical and temporal nature of education in the digital age.

Digital education is often **claimed** to make learning available anytime, anywhere—people can learn on the move and at a pace convenient for them, while communities come together online across great distances.

Our members investigate how people **actually** appropriate and combine different spaces, times and technologies to accomplish their objectives; use personal and institutional technologies to communicate differently within and between spaces; and integrate and separate the time spent engaging with formal programmes with their other professional and personal commitments.

Dr Brett Bligh

Lecturer, Department of Educational Research

My research interrogates the nexus of technology mediation, the physical environment, and institutional change in higher education. My work prioritises Activity Theory conceptions of human practice, and interventionist research methodologies.

How do the spaces that learners and teachers inhabit influence their educational practices?

The illustration (in the graphical version of this document) shows six ways in which physical spaces mediate educational practices. Following the path from the bottom left, spaces can be seen transparently eliminating sources of distraction, inviting particular forms of practice, providing sensory experiences, invoking cultural stereotypes, supporting the working-through of practice solutions, and accommodating an educational community.

You can read more about my work here:

Bligh, B. (in press). Physical learning spaces and teaching in the blended learning landscape. To appear in M. Peters (Ed.), *Encyclopedia of Teacher Education*. Heidelberg: Springer Nature.

Bligh, B., & Crook, C. (2017). Learning spaces. In E. Duval, M. Sharples, & R. Sutherland (Eds.), *Technology Enhanced Learning: Research Themes* (pp. 69-87). Berlin: Springer.

Dr Kyungmee Lee

Lecturer, Department of Educational Research

My research aims to better conceptualise and support adult distance learners and their learning experiences. Taking up sociocultural learning theories, I investigate the complex interrelationships between discourse, knowledge, and power in online higher education.

How is distance learners' everyday access to higher education shaped by their real-life conditions?

The illustration (in the graphical version of this document) shows that each adult learner is an authentic being, whose online learning experiences are greatly shaped by their personal lives. Their everyday access to higher education is bounded, often restricted, by their local and real-life conditions—which exist outside their formal learning environments. To better support their learning, we need to expand our conceptualisation of online learning beyond the screen.

You can read more about my work here:

Lee, K., Choi, H., & Cho, Y. H. (2019). Becoming a competent self: A developmental process of adult distance learning. *The Internet and Higher Education,* 41*,* 25-33*.*

Lee, K. (2018). Everyone already has their community beyond the screen: Reconceptualizing online learning and expanding boundaries. *Educational Technology Research & Development,* 66, 1255–1268.

Centre for Technology Enhanced Learning Community

Doctoral Programme in E-Research and Technology Enhanced Learning

The Doctoral Programme in E-Research and Technology Enhanced Learning builds on the expertise of the members of the Centre and vitalizes links between research and teaching. This PhD programme is designed specifically for professionals, who wish to study to an advanced level and carry out a quality piece of research related to an aspect of their professional practice. It is available to anyone in the world who wishes to learn while developing their research practice.

Our teaching is research-led and our research is informed by our teaching.

The programme combines a limited number of face-to-face residential meetings with carefully designed online learning activities and peer collaboration. **Part I** (modules with coursework) is designed to allow students to build on their professional experience to conduct research and develop their knowledge. **Part 2** (thesis), involves each student conducting their own PhD research, supported by a supervisor.

The Centre supports our Doctoral Researchers, who can join when they reach Part 2 in the Programme. We also benefit from the ongoing contributions of Alumni Members, who previously obtained their doctorates in the Department.

Dr Philip Moffitt (Alumni Member)

Lecturer, the Royal School of Military Engineering

My research explores how individuals and groups, within particular organisational settings, can be empowered to select and use technologies for their own learning. I use intervention-research methodologies for redesigning technology-enhanced learning collaboratively with participants.

How can technology enable learners to collaboratively redesign their own learning, to cope with rapidly evolving situations?

Dr Tünde Varga-Atkins (Alumni Member)

Senior Educational Developer, University of Liverpool

My research aims to understand how higher education can better support students to become digitally capable professionals in their own disciplinary contexts. Through the concept of signature pedagogies, my thesis identifies signature digital capabilities in engineering and management.

How are digital capabilities conceptualised, planned, and enacted in curriculum in different disciplinary contexts?

Meet and eat with authors: A Series of Lunchtime Events

The Centre has strong ties with educational institutions and research centres in the UK and across the globe. The Centre also has Associate Members drawn from a range of other departments across Lancaster University and from other universities and schools with whom we maintain close links.

The Centre welcomes opportunities to meet and work with other researchers and centres, and continually strives to create new links. One example is the regular **Meet & Eat** series of lunchtime events:

- We invite external scholars to Lancaster.
- We meet and discuss one of their recent publications together.
- We eat lunch and digest new ideas!

Our members on the other side of the world join us online with their own lunch, a cup of coffee, or a glass of wine!

- Would you like to join our upcoming Meet & Eat discussions?
- Would you like to visit us as an author?
- Would you like to participate in the Centre?

Please Contact Us

Kyungmee Lee and Brett Bligh (co-Directors)

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Enquires about the Doctoral Programme can be sent to:

Alice Jesmont (Postgraduate Co-ordinator)