*Research in Learning Technology*
Vol. 22, 2014

COACTION PUBLISHING

# EDITORIAL

## Technologies and Forms of Agency

This issue of *Research in Learning Technology* showcases a set of papers reporting on various digital interventions in further and higher education, drawing on a range of methodologies. In each, we find investigations of both the potentials and also the limitations of digital interventions in formal education, in a range of contexts. Although diverse and superficially unrelated, this set of papers could be loosely linked by a broad concept of agency, which I will discuss while providing an overview below.

Looking at the topic broadly in a German university context, Mertens *et al*. set out to establish the factors which influence student perceptions of the value of digital formats in a survey study, drawing on Küpper's acceptance model (2005), which was originally developed for business contexts – although some might take issue with their assertion that higher education is a business. Using a multivariate analysis, they found that motivation was an important predictor of the extent to which students valued the digital, specifically the degree of extrinsic motivation reported by students, which they speculate may be related to greater opportunities for self-monitoring learning in digital formats. Interestingly, they also found that students of economics were more likely to place value on the digital than their counterparts in social sciences. They also found that students with requirements for flexible working were more likely to value digitally mediated teaching and that frequency of use was more likely to lead to a greater sense of valuing digital formats. Here, it might be argued that the agency and purpose of students is found to be central to their acceptance and enrolment of digital technologies.

Focusing on the implementation of a specific technology, Fabian and McLean report on an action research study into the use of tablets in a UK further education setting. The analysis uses Puentedura's (2009) SAMR model of technology integration, which breaks the intervention down into substitution, augmentation, modification and redefinition. The study involved collaboration with teaching staff in Hairdressing, Languages, and Social and Vocational Studies, collecting data using observation, video recordings, practitioner interviews and survey data. The lecturers and students across these subject areas deployed tablets to use multimedia tools and existing apps, and also to create and use a bespoke app, in addition to multimedia manipulation and sharing, and creation of an e-portfolio. Drawing on Patten, Sánchez, and Tangney's (2006) functional pedagogic framework, they found the tablets to be effective alternatives for the type of functionality offered by fixed location computers, while also conferring advantages in terms of mobility and collaboration. The authors found that student feedback was broadly positive, although challenges were experienced around administration and security. They conclude with an interesting discussion of the type of tasks which lent themselves to shared tablet use in class, but also highlighting the limitations of their use for particular tasks such as reading.





Citation: Research in Learning Technology 2014, **22**: 24720 - http://dx.doi.org/10.3402/rlt.v22.24720

Here, I would observe that the tablets seemed to extend student agency in class through greater mobility and access to a broader range of resources and text types.

Fresen *et al*. also report on a highly applied and collaborative study, in this case using VLE templates in UK and US higher education contexts. They applied Hill, Fresen and Geng's (2012) lattice model to create six templates for use by academic staff. They present a useful literature review of the area, and a detailed account of the process of creating their templates, which is likely to be of interest to practitioners. This development emphasizes the agency and freedom of academics to adapt and refine the templates to their specific needs, and as such challenges conventional notions of VLE templates as 'restrictive'.

Hall *et al*. open their paper on digital literacies with a very helpful framing of the UK secondary school policy context and problematizing of how digital pedagogic practices have been used to underscore narratives of economic growth. They point out the limited scope of the 'skills and competencies' mainstream definitions of digital literacy, with its concomitant lack of attention to process and social practices. They also highlight the emphasis in the proposed UK Computing Programme policy on programming and technical aspects of digital engagement, as opposed to more critical approaches. In addition, they question the strong focus on employability, arguing that it

> ... reflects an entrepreneurial turn in the management of the curriculum, where the econometric focus on producing commodity skills that can be exchanged, is a form of alienation of both the learner and the teacher from a wider range of social, classroom practices. (P2)

Instead, their paper emphasises the importance of working in partnership with secondary staff, in particular looking at how staff can be supported to develop digital literacies in this highly politicised context. They describe a project undertaken by one UK city council in which a self-evaluation framework was developed, drawing on Fisher *et al*.'s (2012) DECK model (distributed thinking and knowing, engagement and motivation, community and communication). The resultant model is groundbreaking in this field in its rejection of 'audit' style checklists in preference for self-evaluation and teacher empowerment. In this case, the emphasis on situated and critical agency seems clear, in a rejection of generic 'top-down' frameworks.

Moving the focus away from the United Kingdom, Dashtestani's study investigates Iranian English as a Foreign Language (EFL) teachers' perceptions of the implementation of online EFL instruction. He begins by outlining the potential benefits and also some of the barriers to its implementation in EFL contexts in Iran. The study used a mixed-methods design, including semi-structured interviews and questionnaires, and found that the teachers were broadly positive towards the use of online engagement but favoured a blended approach. Dashtestani includes a discussion of the challenges to implementation of online EFL instruction in terms of the lack of online facilities and resources in Iran, with suggestions for future research and development. Here it seems the potential agency of these teachers is limited by current infrastructural limitations, but the author provides helpful pointers for future development.

Habel and Stubbs' paper reports on an Australian university-based action-research project focused on the use of the student response system (SRS) VotApedia


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for mobile phone voting in large first-year Law lectures. Their focus was on the extent to which these systems might enhance learning in courses outside of the hard sciences where questions tend to be divergent rather than convergent, looking in particular at peer learning, participation and engagement. The researchers drew on observations, class-based mobile phone voting and an online survey. The use of phone voting combined with group discussion was reported to have increased student engagement, with positive responses from students in the survey combined with some reservations, in particular about the time taken up by the voting activity in class. They conclude that SRSs are applicable to humanities-style disciplines in combination with constructivist pedagogies. Here the students' sense of agency was perhaps enhanced by the opportunity to interact in the large class scenario.

Finally, Barden's paper explores the use of Facebook by a small group of UK sixth form students labelled as dyslexic. The paper begins by challenging 'deficit' models of students with dyslexia, instead favouring a social model of disability and pointing out the potential of digital technologies to support the engagement of students with dyslexia in formal education. In a fascinating section, Barden points out the socially and historically situated nature of the construct of 'dyslexia', which can only exist in the very specific context of a society that places great emphasis on alphabetic literacy. He points out the tendencies of technological interventions designed for student with dyslexia to compensate for perceived deficiencies, and how these 'special' technologies may be avoided as a result. He argues instead for the use of 'everyday' digitally mediated technologies which are not likely to be regarded as assistive, and therefore potentially stigmatising. He uses the example of Facebook, which contains a spellchecker and is highly visual and multimodal, both features likely to be helpful to students with dyslexia. He reports how he guided a small group of students through scaffolded use of Facebook to research dyslexia as part of a series of workshops designed to support their learning. Ethnographically orientated methodology was employed, including participant-observation, semi-structured pre- and post-project interviews, video and dynamic screen capture and protocol analysis. The students reported that for them, 'levelling the playing field' was vital, and Barden identifies five dimensions in which Facebook was perceived to have helped with this: keeping up to date and meeting deadlines; increased control over learning; developing metacognitive awareness; greater control over literacy process and demands; and being experts and helpers. As Barden puts it,

> Facebook acted as a kind of outsourced memory, sedimenting conversations and helping the students keep up to date with their work and meet their deadlines. The group Facebook page acted as a pedagogic hub for a range of resources, which gave them increased control over their literacy and learning, allowing them to privilege their preferred modes and recruit understanding gained from these modes in understanding complex texts. (P14)

This final paper in this issue seems to illustrate a further aspect of how agency can be extended via digital mediation – in this case allowing these students to extend and distribute agentive practices using literacies in a multimodal and social setting.

Taken from a range of contexts in terms of nation, sector, disciplinary focus and methodologies, I feel these papers represent a fascinating range of work in fast-developing areas of research in learning technologies.

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Citation: Research in Learning Technology 2014, **22:** 24720 - http://dx.doi.org/10.3402/rlt.v22.24720