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Early Adopters Driving Digital Literacy: Professional development in technology enhanced learning

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ABSTRACT

The University of Nottingham International College moved the delivery of its pathway programmes online from March to August 2020, and since September 2020 has offered flexible learning modes for students wishing to study either on campus or online from their home country. The creation of engaging activities for online learners, which encourage them to actively collaborate and participate has been led by a group of digitally confident and curious tutors, recognised as early adopters. Their eagerness to explore and develop new activities, and in turn share these and support their peers in using them, has led to a significant general increase in digital literacy among the team. In July 2020, these tutors volunteered to co-host a 'TEL Talks' CPD event where various technologies were demonstrated and discussed by former tutors and present teaching staff. Holding an online event enabled recordings and resources to be stored in an online repository, which is available as a reference point for tutors wishing to review or explore new learning technologies.

Successes in the increased use of learning technologies in online classes have been due to creating an environment where all tutors can ask each other for help and offer advice, providing CPD opportunities to develop their skills as digital practitioners, and to encourage and recognise tutors who are in a position to showcase their skills and inspire others.

After the shift to online teaching and learning in 2020, it is clear that in some form, it is here to stay. This piece reflects on how our early adopters have been resourced and encouraged, perceptions of their impact and how staff development should continue moving forward.

Keywords: technology enhanced learning; digital literacy; digital leadership; continuous professional development; online teaching and learning

Background

This 'on the horizon' piece will explore how a team of digitally curious English language and academic skills tutors experimented, shared and reflected upon their experiences in adopting learning technologies, culminating in a TEL Talks professional development event. The impact and outcomes of this event will be examined, with a view to how future CPD provision should be shaped, and further research in this area could be explored.

The move to online learning left higher education institutions (HEIs) with no choice but to adopt and embrace digital practices (Gupta, Seetharaman and Maddulety, 2020), leading to a "huge leap" in digital capabilities among teaching staff (Maguire, Dale & Pauli, 2020, p. 25). Loughlin (2017, p.388) suggests HEIs had hitherto appeared "monolithic" in their approach to technology adoption and its rapidly changing nature, yet some had already explored learning technologies, embedding them in their culture long prior to the pandemic (Sanders, Correia, Dankbaar, de Jong, Goh, Hege & Pusic, 2020).

Digital delivery highlighted a tendency for educators to replicate face-to-face content delivery (Almpanis, 2015), and indicates support is required to adapt to a more learner-centred practice (Peacock & DePlacido, 2018). Studies have pointed to a number of factors which are critical if staff are to adopt TEL practices. In terms of barriers, the most frequently reported is a lack of time (Almpanis, 2015; Latif, 2017; Loughlin, 2017; Reed, 2014), though there is evidence to suggest that once time is invested, savings are made in the long term (Bennett, 2014). Lack of skills is also cited, although there can be dissonance between a perceived lack of skills, and ability to self-teach and build competence (Loughlin, 2017). A top-down approach, senior management buy-in (Clark & Taylor, 2021; Latif, 2017; Zhou & Milecka-Forrest, 2021) and strong leadership (Reed, 2014) are desirable, but can be lacking

(Almpanis, 2015). This, plus a lack of support (Reed, 2014; Smith, 2012) can lead to reluctance or resistance to adopt, as can a fear of losing control over teaching practice (Liu, Geertshuis & Grainger, 2020).

Successful adoption and integration of TEL in teaching practice

In encouraging adoption of learning technologies, confidence-building is key. Success in troubleshooting problems (Armstrong, 2019) and dealing with stressful situations (Howard & Gigliotti, 2015) leads to an increase in confidence and willingness to experiment further. Belief in the value of TEL increases where experimentation is successful (Bennett, 2014). Regardless of senior-level support, it can be extremely useful to draw on the existing experience of tutors (Clark & Taylor, 2021), and encourage them to share their practice with their peers. Rogers' diffusion of innovations theory (2003) is considered suitable for examining the adoption of technology, since much diffusion research has involved technological innovations (Sahin, 2006), focusing particularly on adoption in an organisational context (Kapoor, Dwivedi & Williams, 2014). Evaluations of a particular learning technology are shared through interpersonal networks, and practitioners rely on their colleagues' estimations, particularly those of early adopters. When they adopt a technology, their peers see this as a 'seal of approval' (Sahin, 2006 p. 19) and feel more confident experimenting with it themselves. It is therefore valuable, as White (2007, p. 848) puts it, "to develop and harness the early adopter's energy as a lever for systemic change".

Relying on early adopters to initially inspire and persuade may not be sufficient, however. Staff are more likely to persevere in their efforts where they belong to a community of support (Cox, 2011), and a major benefit of communities of practice is helping staff feel less isolated (Golden, 2016). It is therefore valuable for early adopters to continue to provide support and guidance, as their leadership reduces uncertainty (Sahin, 2006) and helps to diffuse innovations more quickly (Smith, 2012).

The online pivot and shift in CPD provision

The University of Nottingham International College provides pathway programmes to foundation and pre-Master's level international students, and moved its teaching provision fully online in March 2020. Tutors embarked on this new journey with varying levels of digital literacy and familiarity with learning technologies, as is normal for any period of technology implementation (Liu, Geertshuis & Grainger, 2020). Learning technologies had been a prominent feature of college innovation since its opening in 2017, and all teaching staff had benefited from piloting and experimenting with TEL prior to the pandemic. The Moodle virtual learning environment (VLE) was used by all teachers and students on a daily basis, both as a repository to aid learning and as a platform for collaboration and assessment. Learning technologies and active learning featured regularly in CPD offerings throughout 2018 and 2019.

As many teaching staff work part-time (and, during this period, from home), developing digital literacy and offering opportunities that build community and allow for peer interaction could be considered challenging (Campbell, 2016). In this context, time can often be devoted to skill-based workshops rather than providing a space where tutors can share both positive and negative experiences (Peacock & DePlacido, 2018). To address this, a space was created on MS Teams for the English language and academic skills team, and divided into more formal 'channels' where tutors and co-ordinators could post updates and ask questions pertaining to specific modules, and an informal chat group for all 30+ staff to check in, ask for support and share online teaching experiences. At first, the chat mainly involved troubleshooting and advising, but as tutors gained experience and confidence, it became a supportive and collaborative space that mimicked the office environment.

Much professional development takes place informally in the workplace, through spontaneous conversations and experience sharing (Campbell, 2016). With idea exchange in these once personal conversations now taking place in Teams chat spaces, the conversations were opened up, allowing a wider scope for questions, comments and discussion (Kisilevsky, Margolin & Kohly, 2021). Weekly CPD sessions, normally held in college, resumed online and maintained a TEL focus, but there was a sense that a more substantive development initiative was called for. Tutors were sharing tools, activities and materials embedding TEL on a daily basis, and so it was decided to recognise this important work through a CPD event on a larger scale.

TEL Talks

In 2020, online professional development initiatives sought to recreate the in-person conference format (Campbell, 2016), including network-building and peer support (Latif, 2017). This was the premise of TEL Talks in July 2020: a coming-together online

to demonstrate digital tools, provide brief walkthroughs to introduce the basics, share examples where these tools had engaged learners and enriched learning, and Q&A to allow for further enquiry and discussion. Over the course of an afternoon, thirteen members of staff hosted thirty-minute sessions, and attendees could choose from two 'rooms' depending on their interests. The event included welcome, coffee break and wrap-up sessions to enable networking and peer connection, and the chat function was used during sessions to build a sense of community. All college staff were invited, plus former tutors and other interested staff from the network. Since synchronous learning can be tiring after long periods (Campbell, 2016), all sessions were recorded, and accompanying resources collated and saved on an online platform that could be accessed by all invitees at any time. This meant that those who could not attend, as well as returning staff and new recruits, all have ongoing access to learning technologies explained, demonstrated and endorsed by their peers.

Post-event perceptions and outcomes

Following the event, there was a significant increase in online sharing of TEL successes among the team; this time including staff who had expressed having less confidence in the initial stages of the online pivot. Cases where experiments proved less successful were also shared, allowing peers to suggest adjustments and advice. This supports the notion that innovations that sit within the same context tend to diffuse more quickly (Smith, 2012). There was a feeling among the early adopters that the event had brought the team together, and while communities of practice develop over time (Latif, 2017), it seemed TEL Talks served to accelerate this development, and reinforce the importance of that community at a time where staff were restricted to online communication.

While staff confidence in learning technologies had clearly grown after over three months of teaching online, there was additionally a noticeable decrease in troubleshooting queries, or those involving how to use the tools introduced during TEL Talks. Access logs suggest that staff were reviewing recordings post-event, becoming more comfortable with experimenting and confident in their own problem-solving skills. Requests for recording and resource links to be re-sent were made well into 2021, indicating that staff continue to engage with the content from the sessions.

Impact on teaching practice

To recognise the increased enthusiasm for TEL, it was incorporated into our formal teaching observation form, to encourage tutors to demonstrate an activity they had tested and had success with previously. Observations that followed in Autumn 2020 and Spring 2021 clearly evidenced the investment staff had made in preparing lessons using TEL approaches, and even those who had been less engaged or confident were still able to demonstrate development in this area. In feedback conversations, tutors were far more vocal in suggesting technologies they wanted more exposure to, and this in turn prompted an increase in peer observations with others who were particularly knowledgeable in these requested technologies. Thus, tutors have become more able to identify their TEL developmental needs and interests, and more confident in asking for these needs to be met.

Future plans: TEL Talks 2021

These outcomes indicate a need to provide further opportunities for staff to experiment, build more confidence and develop their identities as digital educators (Armstrong, 2019; Watts & Galvin, 2020). Post-event discussion on MS Teams suggested a desire for new introductory sessions on different learning technologies, as well as advanced sessions for those featured in the original event. Several CPD sessions run in early 2021 experimented with a 'show and tell' format, where attendees were encouraged to bring examples, share their screens and briefly explain their activity and the impact it had. These sessions proved popular and indicate that in a follow-up TEL Talks event, extended sessions which allow time for demonstration, practice and feedback could also be beneficial. Such training illustrates how teachers are active learners in the CPD process (Smith, 2012), and that there should be a move away from the notion that CPD is 'done to them' (Bradshaw, Twining & Walsh, 2012; Compton & Almpanis, 2018). While there is a strong sense that TEL has been embraced at the college, there remains a need to support and seek to understand those who are less engaged or enthusiastic, to explore how and when TEL can be detrimental to learning and the achievement of learning outcomes (Zhou & Milecka-Forrest, 2021), and to include this topic in TEL Talks 2021.

Latif (2017) expresses the importance of ensuring any community of practice does not become too insular by involving other teams and other colleagues, and promoting external opportunities for professional development. Therefore, there is an intention to hold future sessions led by colleagues from other UK-based colleges to recognise and promote the breadth of knowledge across the network. It is also valuable to encourage early adopters to expand their networks and share best practice (Shraim & Crompton, 2020), and so going forward identifying and promoting these opportunities will be a priority.

There is evidence across the higher education sector of significantly increased engagement in digital skills training during the pandemic (Clark & Taylor, 2021; Harissi-Dagher, 2021; Maguire, Dale & Pauli, 2020); in some cases it has even 'flourished' (Kisilevsky, Margolin & Kohly, 2021 p.18). These successes have prompted decisions to retain CPD sessions as an online offering (Taylor, Lister, Judd & Liogier, 2021). This is a practice that is hoped will continue with our weekly CPD programme, making our staff development more flexible and accessible to everyone at the College.

Conclusion

It is clear at this juncture that the progress made in TEL due to the digital shift of 2020 has seen an increase in staff engagement, curiosity, competence and confidence. This is fortuitous, given that this shift 'will not be rolled back' (Maguire, Dale & Pauli, 2020, p.16). Educators now require time to experiment and shape their identity and interests where TEL is concerned. Moving forward, a format for training has emerged where early adopters provide a 'shop window or showcase for their colleagues' (Watts & Galvin, 2020, p.4), and this format should be explored and reflected upon further, given the positive impact early adopters can have on the adoption of TEL innovations (Sahin, 2006; White, 2007).

As teaching and learning begin a gradual return to the classroom, the lived experiences of tutors during the pandemic must be drawn upon, and so a more research-focused evaluation of academic development is called for as a next step to follow this piece. With a successful and supportive community having been established, recent research suggests there now exists a need to provide freedom of choice and flexibility, so that tutors may develop their own sense of self as digital educators, confident in the support of the community, the early adopters who inspire them, and the managers who lead them.

Biographies

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Katie Suvandzhieva MA is an English Language, Academic Skills and Social Science Tutor at the University of Nottingham International College. She co-ordinates an Academic Skills module and an initiative focused on facilitating students' digital and teamworking skills. Active learning and technology enhanced learning lie at the core of Katie's teaching practice.

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