Students’ Experiences of Digitally Engaged Learning and Teaching in Higher Education

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Abstract

This study examines students’ experience of higher education across four institutions in the west/north-west region of Ireland. The paper draws on the larger Teaching and Learning Champions (TLC) project, funded by Ireland’s National Forum for the Enhancement of Teaching and Learning in Higher Education. The primary aim of the TLC project is to develop teaching and learning champions within Higher Education Institutions (HEIs) in this region. This paper focuses on students’ experiences of digitally engaged learning across the four HEIs and explores what the requisite institutional supports are to support their engagement. The study adopted a mixed methods approach. The findings highlight the growing need for formal digitally engaged pedagogies to facilitate diverse learning opportunities for all students. Findings also suggest the need to support diversity in teaching practice to provide equity of access to self-paced learning opportunities.

1. Introduction

The concept of educational leadership in the higher education sector is shifting from traditional hierarchical leadership models to a more inclusive and student-centered leadership style that is representative of our modern higher education system [5], [23], [30]. Building the capacity and agency of higher education staff to manage change, inspire creativity, value innovation, and champion teaching and learning is vital to developing a multi-level, dynamic model of sustainable educational leadership for student engagement [5], [21], [35]. Therefore, there is a growing need to investigate the potential differential impact of these dynamic leadership practices on students’ engagement in higher education. The focus of student engagement in education, including digital engagement, is no longer perceived to be the sole responsibility of the students but instead is considered to be a collective of student learning as well as institutional habitus including environment, culture, strategic values and planning, policies and conditions. Trowler [39] describes student engagement as being concerned with:

- the interaction between the time, effort and other relevant resources invested by both students and their institutions intended to optimise the student experience and enhance the learning outcomes and development of students and the performance, and reputation of the institution.

This paper draws on data from the larger Teaching and Learning Champions (TLC) project, funded by Ireland’s National Forum for the Enhancement of Teaching and Learning in Higher Education (National Forum). The primary aim of the TLC project is to develop teaching and learning champions within the West /North West Higher Education Cluster in Ireland, which comprises four partner Higher Education Institutions. The research objective was to encourage and facilitate an evidence-based engagement with the learning and teaching issues and ideas articulated in the National Forum’s National Professional Development Framework for all Staff who Teach in Higher Education and A Roadmap for Enhancement in a Digital World 2015-2017. Particularly, the project sought to enhance the capacity of middle and senior managers for leadership in digitally engaged teaching and learning and consisted of two elements: (1) establishing a TLC forum for managers and (2) developing a module on mentorship for teaching and learning leadership to enhance student engagement. The blended TLC forum combined an online platform with bespoke digital resources along with events, short presentations, discussions and questions to create a concerted community of practice. The mentorship module was accredited at Level 9 on the European Qualifications Framework and was developed from evidence drawn from the TLC forum. This evidence will ensure relevance for the Irish HE sector while drawing on best practice and lessons from international experience. The module is underpinned by an action learning methodology and supported by bespoke digital resources aligned to the National Forum’s Professional Development Framework. A further key consideration of the project was the potential of developing the leadership capacity and agency of HE staff for supporting students’ engagement in HE. Therefore, this paper reports on
the student engagement dimension of the research project and explores students’ experiences of digitally engaged learning and teaching in HE.

2. Student engagement in education

2.1. Student engagement in education

Student engagement in education is not the sum total of their participation in learning but rather it is a process involving meaning making, activity, interaction, emotions and states of mind. Fredericks, Blumenfeld & Paris [17] categorize the three dimensions of student engagement as behavioral, emotional and cognitive. Behavioral engagement includes attendance and involvement whereas emotional engagement would evidence feelings and emotive reactions such as enjoyment, satisfaction or frustration. Cognitive engagement would evidence students who are engaged in the mental processes of learning and meets or exceeds academic requirements. Coates’ [8] definition of student engagement encompasses academic and non-academic dimensions of the students’ experiences of education and includes active and collaborative learning, participation, communicating formatively with academic staff and participating in learning communities and appreciating rich educational experiences. Students can engage in education at various stages and such opportunities include subject course work, discipline area, faculty, as well as at institutional and national levels.

2.2. Whose responsibility is engagement?

Participating in education means being an active participant in the entire learning process and not simply a passive receptacle for information or a passive transmitter of information. Research suggests that educators and learners are partners in this learning process, and this means collaborating and sharing power on the basis of trust, openness, honesty, respect, cooperation, building a relationship and becoming an integral part of a genuine and meaningful collective [20], [42]. Healey, Flint & Harrington [20] devised a conceptual model for partnership in education, which is underpinned by key values such as authenticity, inclusivity, reciprocity, empowerment, trust, challenge, community and responsibility. Further, Mitra [31] visualizes the different types of student voice as a pyramid, moving from ‘being heard’, through ‘collaborating with adults’ to ‘building capacity for leadership’. This paper represents that first stage of the pyramid as students’ voices regarding their experiences in higher education are being heard to inform staff professional development opportunities that support student engagement at all levels of higher education. This is the first step in building a teaching and learning partnership in which students are collaborating with staff and eventually share in the leadership of their learning. These types of positive youth development initiative encourage the responsibility for learning to be shared across both staff and students by providing students with the opportunity to build authentic partnerships in learning.

2.3. Success factors for engagement

Success factors for student engagement include students, staff, local context, institutions, educational ideology, national policy and linking the levels [7], [8], [25], [38]. Of significance to this research is that of educational ideology and how an individual participates in educationally purposeful activities [7]. The educational ideologies of institutions govern the nature, sharing and organization of educational experiences and this is a crucial factor in realizing and supporting student engagement in a way that is aligned with local context and also national policy. In particular, communities of practice deepen the concept of participation and engagement in education [26], [41]. Rooted in constructivist principles of learning, Lave and Wenger [26] developed a model of situated learning based on the premise that learning involves a process of engagement in a ‘community of practice’. Lave and Wenger point to the pervasive nature of such communities of practice in our daily lives from work, school, civic and leisure activities. This involves a process of learning from naturally interacting with the world in a social manner, which results in practices that reflect the sustained ‘pursuit of our enterprises and the attendant social relations’ [41]. With their variant characteristics, communities of practice engage participants in common activities and shared goals. Wenger [41] described the three dimensions of such collaborative efforts as: defining what it is about, how it functions and what capability it has produced (p.73-84). These dimensions characterize the practice as a joint enterprise that can be continually renegotiated by its participants. It involves a process of mutual engagement that connects the community socially. The process should produce shared practices developed by participants, such as artefacts, vocabulary, styles and resources [41]. The foundation of such communities of practice is constructed around that which holds meaning and significance to its members, which this takes time. Shared goals and a sense of identity are developed and emerging from this process are the relationships between participants. Therefore, the praxis itself becomes important since the way activities and actions are executed leads to a greater collective endeavour towards a more challenging joint enterprise over time. Such a practice is aligned with Sugata Mitra’s [32] model of Self Organised Learning Environments (SOLEs) [20]. SOLEs are collaborative school spaces that facilitate Inquiry-Based Learning.
through communities of practice using computers/devices and the Internet [32]. Both concepts seek to advance an understanding of what constitutes learning and knowledge formation within groups of individuals. The meaningful engagement of staff in these types of learning environments, physical or digital, supports and enhances students’ learning related to the courses in which these staff members teach [9].

2.4. Using technologies to support and enhance student engagement

Technologies and digital media have become an essential element of engaging in education [12], [15], [16], [22], [27], [40]. According to Koehler and Mishra [24] in order to support student engagement in education three knowledge wheels must co-exist in the learning environment: technology, pedagogy and content (TPACK). Koehler and Mishra’s framework conceptualizes their model for educational engagement and learning and emphasized the importance of the connections between the three constructs. The TPACK approach illustrates the synergistic nature of the three elements and illuminates the process of student engagement in modern, technology-enhanced learning environments. Further, the education landscape is becoming increasingly informed and shaped by advancing technologies, which in turns offers an abundance of choice to educators and learners. Therefore, effective educational practices for the digital age can include, for example: appropriate use of digital tools, developing digital literacies and competences, upskilling, adapting learning styles, learning new educational habits and designing technology-enhanced learning [2], [13], [36].

Introducing technology into pedagogical practices does not automatically render teaching and learning more creative [1]. Borland [3] notes that technology and new media is evolving relentlessly and therefore education requires transformation so as to fulfill the emerging needs of its participants. He describes the progression of technology, including the concept of Web 1.0, and Web 2.0., as follows:

Web 1.0 refers to the first generation of the commercial Internet, dominated by content that was only marginally interactive. Web 2.0, characterized by features such as tagging, social networks, and user-created taxonomies of content called ‘folksonomies,’ added a new layer of interactivity, represented by sites such as Flickr, Del.icio.us, and Wikipedia [3, p.1].

Consequently, the potential of technology in teaching and learning should be explored in terms of its provisions and interactive affordances in order to support creative efforts of students and teachers [15]. Gilbert [18] advocates the use of ‘low threshold applications’ (LTAs) when endeavoring to integrate technology into teaching and learning. He suggests that technology must meet the requirements of all users, students and teachers alike, in order to minimize the risks associated with its integration into pedagogy. Further to these activities focused on knowledge building, distributed cognition, community, communication and engagement can implement technology to support creativity (Loveless 2007 in [15]). Research suggests that Web 2.0. sites such as blogs, wikis, podcasts, social bookmarking tools, video sites and online discussion forums encourage authentic communication between individual, groups, inside and outside of the classroom, locally and globally [10], [37].

The usefulness of online discussion forums is a widely debated topic within the field of technology-enhanced learning in higher education [4], [14], [29], [19], [33]. Online discussion forums have the capacity to engage a diverse range of students and during times that are outside of restrictive college timetables. In their study of more than 300 postgraduate students’ use of online platforms Fine gold and Cooke [14] found that these tools support interaction and collaboration among students. When interaction included the relevant programme lecturers the students placed a higher value on the usefulness of the discussion forums. Further, the authors concluded that those students who interacted with lecturers in the discussion forums achieved higher grade. Other results included increased motivation from students to engage in programme material and improved communication skills. The use of formal discussion boards has also been linked to widening access and participation in learning for students with diverse needs [10].

3. Data Collection

A Mixed Methods approach was adopted for the wider TLC project. The data collection for the entire project included group interviews with managers and students as well as a discussion forum. For the research reported in this paper, participants comprise six student representatives from the West/North West Cluster; two were Students’ Union Presidents and one was a student engagement officer. Students were invited to share their experiences of engagement in HE, including their experiences of institutional approaches to teaching and learning and professional development. Two group interviews were conducted with participants of no longer that 50-minutes duration. Group interviews ‘help to reveal consensus views, may generate richer responses by allowing participants to challenge one another’s views, may be used to verify research ideas of data gained through other methods and may enhance the reliability of […] responses’ [11]. Thus, group interviews are an
effective method of gathering data that is characterized by multifaceted and diverse relationships and perspectives [34]. Schatzman and Strauss [34] state that group interviews: provide [...] an especially nice situation for revealing variations in perspective and attitude and a ready means, through subtle pitting of one against the other, for distinguishing between shared and variable perspectives. The pitting process hardly needs manipulation since the hosts themselves, by speech and gesture, will naturally ‘correct’ each other’s rendering or ‘reality.’ By contrast, in the one-to-one interview the pitting is more calculated, and probably is without any immediate corrective for the respondent (p.82).

Of significance to the student engagement dimension of the TLC project was ensuring that the student voice concerning educational leadership for student engagement was listened to throughout the research process and that students’ rich descriptions would inform the development of the TLC forum and the Level 9 mentoring module. Data was analysed thematically; this involved transcribing interviews verbatim, coding the data in rounds with both data-driven and concept-driven codes, including pilot coding sessions, cross coding, and then generating categories and themes.

4. Findings and Discussion

The following section presents the findings, which are discussed in relation to the extant research literature.

4.1. Partners in the learning process

On one hand, some students conveyed feeling disconnected from their HE department during programme board meetings in which they felt that their voices were neither appreciated nor accommodated in the conversation about student engagement. On the other hand, some students explained that in the management meetings in which they were permitted and encouraged to voice their opinions, perspectives and experiences, they felt valued and considered it a worthwhile and rewarding experience. One student, Shannon conveyed her experiences of contributing to management meetings regarding teaching and learning (Interview 3, ll.52-74):

I had the option to sit on three of those [management meetings] in the last two months. So that was very good. [...] Just because I was a student but everyone was like really listening to what I had to say and everything. You did feel like you were listened to. [...] They actually took what I had to say on board, which was kind of nice. And even [...] the registrar and the president of the college, they were in at one point and they listened as well, just as well as everyone else did. So, from the top to the bottom everyone [listened].

It is clear that a system in which management support collaboration and communication is valued deeply by these students. In line with Healey, Flint & Harrington’s [20] research, being a partner in a meaningful collective allows power sharing and facilitates a process of making connections and building a community of practice in which all partners’ voices are heard and listened to in order to promote equity in learning. Most students echoed this standpoint and agreed that institutional management have a responsibility to engage students in higher education from the bottom up through strategies such as the National Student Engagement Programme (NSitEP) and research projects such as this TLC study. This process of student-staff collaboration was a recurrent category in the interview data. One of the students, Erin (Interview 6, ll.139-146) pointed to the role of collaboration and building a community of practice in student engagement:

So basically, students engage more [...] where you come together in a group [and] working as well with [...] college staff […] It’s a toing and froing kind of exercise. [...] I think it’s really important that students see that as really important and can see obviously it benefits them here and now, but it benefits them long-term as well.

Erin’s concepts of lifelong learning and the enduring benefits of being a partner in the learning process highlight Lave and Wenger’s [26] process of building a community of practice which emphasizes the importance of purposeful social interaction for sustained enterprises and social relations. In our research all students agreed that open and frank conversations with both peers and staff in which teaching, learning and assessment approaches were discussed and negotiated were the most productive communicative processes to begin authentically supporting student engagement. According to the students, developing positive teaching and learning relationships with lecturers in which students are provided with choices is pivotal to how they engage in lectures, coursework and assessments. These positive relationship between staff and students allow the students to experience being placed at the center of the learning process. This process of student-staff partnerships also echoes Williamson’s [42] research which stresses that a sustainable educational ecosystem can be constructed by coming together as students and staff with a shared vision of what student
engagement is while being guided by the educational ideology of the partners and the institution.

4.2. Digitally engaged learning

Developing the digital literacy skills of students and staff was one of the primary findings in the data that indicated the need to ensure inclusion and diversity in teaching, learning and assessment practices in order to support overall student engagement in HE. Most students conveyed the need for institutions to build awareness and skills around communicating online for both staff and students in order to enhance student engagement in teaching, learning and assessment. One student, Pat (Interview 3, ll.207-216) suggested that:

One thing could be [to] bring in a lot more digital features [to support student engagement]. For times where you have an open discussion you could maybe bring in [...] an online poll because everyone has a phone now. [...] So it could be a math equation and three different answers, or it could be an opinion-based option where you can actually put in your written feedback or something like that. So it’s getting people engaged digitally along with having that discussion [about content].

Pat also suggested that staff engagement in a digital learning environment would support student engagement in learning and consolidate their learning, a point that was agreed by most other students in both interviews. Pat (Interview 3, ll.216-228) suggests that:

Along with that a lot of the classes are presentation based whereas there’s not that much engagement online, as in Blackboard [the VLE]. Staff could be doing their own presentations or doing small videos where everyone’s talking about your case [learning content]. You’d get a lot more students engaged. A lot of the times you’re taking notes in class. Then you go home, and you’ve taken notes but you’re like, I actually don’t understand what that actually means. Whereas, if you have a member of staff saying what they actually said in the classroom to you then you get it a lot easier. So, I think there’s a lot more that can be done in that regard, being technology advanced as we are an I.T. [Institute of Technology]. So, it’s definitely something that could be looked into.

Pat highlights the need for staff to incorporate digital features in teaching, learning and assessment practices to encourage students to engage in learning and assessment in different ways. Further, Pat suggests that utilizing virtual learning environments (VLE) such as Blackboard Learn would include and engage more students in the learning process and ultimately provide greater access to and widen participation in learning and HE. Research literature [9] supports the benefits to student engagement in HE of staff commitment to creating a technology-enhanced learning environment. These types of digitally engaged learning experiences offer students more authentic choice in relation to the learning habits, styles and approaches that they employ for different types of learning and knowledge construction [2], [13].

Most students conveyed that since the institution’s official VLE was not being utilised to its maximum potential to support student engagement, cohorts of students are creating their own social media groups (e.g. Facebook) to facilitate discussions about their course and their engagement in learning and assessment. In one institution Jackie (Interview 3, ll.866-875) notes that online discussion forums only exist in unofficial, informal, social capacities:

I think if that exists [online discussion forum] it’s the student doing it themselves on like, Facebook Messenger or something like that. It’s like two in my class, they don’t have Facebook, so they miss out. But if it was part of the college like Pat says, I think that would be really good.

Jackie’s account evidences that some students were forced to resort to creating an unofficial social media class group because an institution’s VLE was not being utilised by staff to facilitate online student discussion forums. Subsequently, two students were inadvertently excluded from the class social media group because they were not subscribed to that particular form of social media being utilised by the majority of students. As evident, these students would welcome the effective and intuitive use of official technology tools offered by their institution and utilised regularly by staff, to support students’ learning outside of regular teaching hours. Many students agreed that the use of such digital tools as a VLE, videos and digital polls have the potential to increase learning interactivity in a kinaesthetic and a virtual manner while also enabling students to utilize technology to access learning at their own pace. This use of technologies to support student engagement is precisely what the research suggests [24], [32] since making meaningful connections between technology, pedagogy and content offers a more bespoke, dynamic and fluid learning experience for students.
4.3. Physical and Digital Learning Spaces

The provision of institutional supports for students to develop their lifelong learning skills and competencies was a common thread across the data from students. Most students felt that the accessibility and availability of digitally enhanced space was problematic at certain times of the year and because of lack of resources across the institutions. Most students stressed the importance of ensuring daily standards of services, both physical and digital for supporting and enhancing student engagement in higher education. Erin conveys in one interview the necessity to align assessment approaches in higher education to the digital world and provide more choice, diversity and equality in the ways in which students showcase their learning:

So I think allowing students to actually take control of their learning, to take control of their assessment methods and they can think of new novel ways of assessment. There’s a great movement away I’ve noticed actually there’s a movement away from the exam at the end of your module or at the end of a semester. There’s a movement away from that completely being 100% of your grades having labs, having presentations. I’ve had so many students say they’re actually doing blogs as part of their assessments. They’re going digital. It’s great then because if they go on and do a masters or a Ph.D. if they have an experience of that; they’re more diverse (Interview 3, Erin, ll.88-96).

Including a digital element in the assessment methods that practitioners use in their modules came across quite strongly in the student interviews as evidenced by Erin. In the quote above Erin notes the significance of technology-enhanced assessment practices for creating more diverse experiences for students that will contribute to their future academic and employment success. Further, most students agreed that adding a digital element to assessment models will ensure there is greater balance between summative and formative assessment practices. However, although students are immersed in digital culture there is still a growing need to support continuous training in digital skills in the use of specific online learning platforms in higher education according to most students who participated in this study. Students expressed the need for ongoing training as they were not familiar with the full range of productivity and discussion tools offered by their institution’s specific online learning environment (e.g. Blackboard Learn or Moodle).

Shannon: So, in the introduction to it you’re introduced to everything and everyone.

Pat: And even if it [training in the online platform] was well done is there any touch-up trainings? Because blackboard when I studied here has probably changed vastly [...] I was almost reading another language because it was so different already [to I first began using Blackboard]. [...] So, I think a lot more training so [students] know what supports they have [in Blackboard]. [...]

Jackie: I think some lectures don’t know about that either. It would be handy maybe to have like training days for them in it.] (Interview 3, ll.536-575).

It is interesting that not only do students express their frustration at the lack regular training in digital competencies they also recognize that teaching staff might also require similar training on the full range of technological affordances of their institution’s specific online learning platform. As Ferrell et al. [13] noted it is important for educational practices to evolve with the changing world and regular up skilling is required in both content knowledge and delivery, including in the design of digitally informed teaching and learning. Therefore, supporting digitally enhanced engagement in learning through regular training is key to effective engagement in technology-enhanced teaching and learning by both teaching practitioners and students [13], [29], [33].

4.4. Digital Diversity in Teaching Practices

Most students felt that technology-enhanced learning would provide greater opportunity for students to learn at their own pace while also empowering students with a sense of responsibility to take ownership over their learning. Further, most students expressed excitement about learning in an interactive and hands-on manner while others suggested the technology was at least one of the solutions to providing students with some of the support they required outside of the class time. Jackie says:

I think it could also help students that can’t access some things as easily. If it’s all on Blackboard or if there’s other digital tools that anyone can access from anywhere it makes it easier for some students that might have certain disabilities that it would be hard to take notes in class or to read handouts. They can magnify it on their screen or they can use tablets. It creates more of an equal opportunity for everybody as well. [...] And then it can enhance everybody’s learning that way because everyone has access to all the same things. No-one’s held back by anything. (Interview 3, Jackie, ll. 835-837)
The affordances of modern technology can provide access to education for learners with diverse needs and as Jackie points out it can indeed break down some of those accessibility barriers for some students. However, as exemplified in Jackie’s earlier comment regarding the exclusion of some students in the class due to informal social media groups being set up by students to support each other in their course/module, technology can indeed have the opposite effect sometimes. Many students themselves suggested that the answer to this digital divide is to utilize the full range of an institution’s official virtual learning platform to ensure equity of access for all students. These sentiments of creating equal opportunities for accessing and engaging in self-paced learning are echoed in the research of Healey, Flint & Harrington [20], which described inclusivity and empowerment as core values of their model for partnership in teaching and learning.

Many students expressed a need to build awareness around communicating online and develop digital literacies that extend beyond the basic uses of a computer. Jackie expressed feelings of frustration at the lack of training time provided within courses that involve a steep digital learning curve such as Design programmes. It was suggested that more training time be provided within the delivery of such programmes to cater for the need for students to develop a range of digital skills and competencies that are unique to that particular programme. Jan suggests that particular approach ‘would require a lot of time, but even if [lecturers] were allowed an extra week somewhere to go through the software that you’re going to be using [...] require a lot of time, but even if they were allowed an extra week somewhere to go through the software that you’re going to be using’ (Interview 6, Jan, ll.940-942). Jan conveys frustration at the lack of time for students to become competent in particular digital tools required for their course and suggests that ‘that’s stressful for [the lecturer] too [...] if a student is falling behind because they don’t know how to use [the software package]’ (ll.935-937). Although Gilbert’s [18] concept of using low threshold technologies is useful for general curricular design and pedagogical practice, as we observe here certain HE programmes can have a larger digital learning curve than others and so place greater demand on students’ digital skill development in order to engage meaningfully with their coursework. The layers of interactivity that are embedded in different programmes are diverse in nature and as Borland [3] highlighted they are evolving relentlessly. Therefore, if educational programmes and pedagogies require transformation to keep abreast of the changing digital times then so too do students’ digital competencies to keep pace with these developments.

5. Conclusion

This paper examines the students’ experiences of digitally engaged teaching in Higher Education across four HE institutions in Ireland. The context of the study provides a unique opportunity to understand how teaching, learning and assessment practices impact students’ engagement in HE. Overall, students’ experiences of learning in HE were positive, and they welcomed the opportunity to provide their feedback and inform best practice in the area. Two key messages most students conveyed were (1) the importance of staff and students creating a shared educational ideology to enhance student engagement in HE and the (2) growing need for formal digitally engaged pedagogies to support diverse learning opportunities for all students. According to students, creating a shared educational ideology involves both staff and students becoming partners in the learning process where power is shared equally and the premise of the digitally engaged learning environment is trust, openness and cooperation. Further, a priority for students was seeing an increased concerted institutional effort towards realizing connections between technology, pedagogy and content. These significant findings highlight the necessity to build a community of practice between all students and staff in order to develop Teaching and Learning Champions that support student learning in a manner that is student centered, technologically enhanced and empirically informed. In this regard, further research is required to address the professional development requirements for teaching staff and managers in Higher Education Institutions to support students’ engagement in diverse learning opportunities.

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7. References

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