

ARTICLE

Are We Having Fun Yet? Institutional Resistance and the Introduction of Play and Experimentation into Learning Innovation through Social Media

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Recognising and responding to behaviours and patterns of resistance is critical to the successful implementation of technology-enhanced learning strategies at higher education institutions. At institutional, academic and student levels, resistance manifests itself in a variety of forms, at best supporting a critical culture and at worst creating inertia and active disquiet. Through the lens of an institution-wide strategic learning innovation vision at the University of Greenwich, designed to enhance connectivity and collaboration, this paper will explore the modes and pathways of resistance that occurred in the process of implementing and embedding an openness agenda at a learning and teaching level. Through supporting experimentation and play with social media creation and sharing as a mechanism of curricula transformation, we identified a number of patterns of resistance to sharing and openness. Using an approach informed by grounded theory we have attempted to represent these patterns in the form of a model of institutional resistance to technology-led change.

Keywords: technology enhanced learning; openness; social media; institutional resistance

Introduction

In the increasingly frantic, impossible and contrary debate around higher education pedagogy, social media (which conceptually includes notions of self-presentation, production, openness, critiquing and consumption of media positioned in the wider context of an open 'social presence' [Kaplan and Haenlein, 2010]) is hailed by various protagonists as being both hero and villain. Some assert that it can offer a mechanism that may help the institution realise the potential of technology-enhanced learning (TEL) to support open and collaborative learning practices (Green and Hannon, 2007; Siemens and Weller, 2011) but alternately, might entwine the academy or its staff and students in a web of perceived (or real) risks and dangers (Hughes, 2009; Towner and Muñoz, 2011; Ralph and Ralph, 2013). This paradoxical understanding of the role of social media exposes disconnects in the way TEL strategies and practices are implemented and subsequently evaluated within higher education. Sitting at the heart of this disconnect is the notion of institutional resistance to TEL change, which can manifest itself at macro, mezzo and micro levels within higher education institutions implementing TEL strategies (Bryant et al., 2014). Whilst institutional resistance is

not unique to higher education, it is especially prevalent in social systems such as universities which are structurally resistant to change and 'designed to neutralise the impact of attempts to bring about change' (Kavanagh and Ashkanasy, 2006; Macfadyen and Dawson, 2012).

This paper will look at potential reasons for institutional and individual resistance to openness and technology enhanced learning, through the lens of data collected through the consultation and implementation phases of Greenwich Connect, an institution-wide vision for Learning Innovation at the University of Greenwich, United Kingdom. We argue that, in the context of implementing a strategy that utilised open and student-led production and sharing of content through social media, there was not a single point or mode of institutional or individual resistance, but a number of critical pressure points that manifested themselves at an institutional, academic and student level. These pressure points were particularly visible where we encouraged and supported staff and students to experiment and play with content creation, sharing and collaboration in an open environment.

The nature of institutional resistance to openness

There has been significant debate around the role of technology in facilitating change within higher education teaching and learning, specifically related to the intersection of academic practice, teaching and openness (Pearce et al., 2011). Centred on the notions of what it means to

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be an open scholar within the environment of accessible platforms such as social media (Veletsianos and Kimmons, 2012), the debate has often coalesced around the future of modern higher education, arguing at one end of the scale that it represents the end of the university as we know it (Losh, 2014) and at the other, that it is the medium by which the university can re-invent itself as an information hub for the digital, open community (Baer, 1998; Grosseck, 2009; Taylor, 2010; Pearce et al., 2011). However, the pace of change within institutions globally has traditionally been slow. Davidson and Goldberg (2009) argue that;

'...institutions of learning have changed far more slowly than the modes of inventive, collaborative, participatory learning offered by the Internet and an array of contemporary mobile technologies'. (Davidson and Goldberg, 2009)

There have been a number of studies that attempted to identify reasons for this latency and resistance. Critically, they point to issues of organisational culture and structure, including the impact of innovation diffusion arising from variable rates of staff acceptance of technology (Wilson and Stacey, 2011) and the development of cultural practices and policies that support openness, trust and participation (Rollett et al., 2007). Selim (2007) argues that these cultural and organisational factors have significant flow-on effects to the acceptance of technology amongst students, noting issues such as the teachers attitudes to technology and the ease with which the university infrastructure facilitated access as critical. Garcia, Annansingh, & Elbeltagi (2011) argue that in the context of social media adoption, resistance comes from the perceived appropriateness of social media tools for higher education.

The use and integration of social media into teaching and learning presents unique challenges to TEL strategies built on encouraging institutional acceptance. At an institutional level, concerns around appropriate usage (Garcia et al., 2011), the rules governing IT (Somekh, 2007) and a diversity of understandings around privacy and data security (McGee and Begg, 2008) have impacted significantly not just on the use of social media, but on the way academics and students understand and communicate the benefits and challenges to open scholarship and open learning that social media presents (Siemens and Weller, 2011; Fenwick, 2014). Resistance does not manifest itself as a simple, dichotomous yes/no choice in this context. Madge et al (2009) point to resistance from students when social spaces like Facebook are 'invaded' by institutions which leads to what is referred to as the 'creepy treehouse' phenomenon (Stein, 2008) or '...when authority is seen to try and invade a young person's social space' (Siemens and Weller, 2011). This collision between personal and educational space manifests itself clearly where the practices of play and experimentation are taken as key to overcoming staff and student resistance, especially where there is a perception that social media, despite its

commercial foundations, is primarily a social or fun tool for use outside of professional contexts like academia (Mihailidis, 2014).

Institutional resistance to play and experimentation

In the specific context of TEL implementation at an institutional level, there has been a need to develop specific strategies to win the 'hearts and minds' of staff and students in order to positively encourage the trialling of new pedagogies and innovative technology-led approaches to teaching and learning and to move away from the idea of education as simply '...the transfer of information from one database or brain to another' (Raschke, 2002; Macfadyen and Dawson, 2012). Social media use has been a flashpoint of this debate. There is an inherent tension between social media as an instrument of play or leisure and as an instrument of information dissemination or learner distraction. Mihailidis (2014) argues that these tensions (which manifest themselves in a variety of ways including what he refers to as the 'put it away culture' whereby students are asked explicitly to engage in class activity without access to their devices) can be alleviated by embracing the inclusivity, literacies and civic impacts of these playful, personal spaces' (Mihailidis, 2014).

Play is at the heart of human behaviour, encouraging healthy relationships, enhanced literacy and creativity (Saracho and Spodek, 1998) and a better developed approach to work and career (Hartung, 2002). Play is not risk free, with some arguing that the best learning should hurt (Mann, 1996). Margitay-Becht & Herrera (2010) note that 'fun is learning' and observed little resistance by staff to engaging in fun activities such as virtual worlds and gaming but much higher resistance from the students, who wanted their experiences rooted in reality and wanted play for their activities after learning. Dodgson et al (2013) describe the tensions between the 'technologies of rationality and foolishness' where the introduction of technology to learning that is predicated on play (such as gaming or virtual worlds) is often disrupted by the intentions and effects of technology that is rational (such as a Virtual Learning Environment -VLE) (Dodgson et al., 2013).

The Greenwich Connect Seed Fund

In June 2013 the University of Greenwich Educational Development Unit advertised a call for projects that could utilise technology to enhance the production, sharing and remixing of student generated content, facilitated through social media (seed fund projects). This was an important component of the University Learning Innovation strategy called Greenwich Connect, whose primary intent was to support the formation and growth of networks and connections between learners, graduates, faculty, peers, disciplines, research, community and industry. Project teams made a bid for kits of equipment, selected with a particular pedagogical purpose in mind (making user-generated content, digital storytelling, sharing and critiquing, or connecting with other learners). Each kit was also designed to be appropriate for use by the student, allowing them to

adapt and build on existing skills, extending or repurposing these for slightly more 'professional' media making and sharing contexts. The call resulted in the allocation of nearly 150 pieces of content-making technology (e.g. tablets, cameras, recorders and software/hardware designed for editing, production and collaboration) to twelve programme teams across the university.

The projects included technology-supported content making in subject areas such as maritime history, marketing, psychology, food science, engineering, management and mathematics. Staff planned to use a variety of platforms and media to engage with students in summative and formative assessment tasks, class activities, personal tutoring or feedback processes. At the proposal stage, many of the ideas that came in were relatively unformed and exploratory. Some identified specific pedagogical approaches they wanted to trial (digital storytelling for example), whilst others wanted to experiment with the boundaries and potential of students as producers or makers. A number of projects wanted to address problems they had identified with collaborative large and small group projects including anonymity or group cohesion.

In organising the fund, we took the view that specific technology and platform decisions should be sited within the context of individual disciplines. Each team were responsible for how they would integrate the making/sharing of student-led content into their teaching and learning practice, initially at a delivery level but in subsequent iterations influencing changes in pedagogy and curriculum. However, in response to many of the comments made in our early consultations around institutional risk and fear of failure, it was important that teams felt empowered to have fun and play to explore the potential of the technology and how innovative pedagogical experimentation could shape its use. We required each successful team to integrate collaborative practices into their learning, teaching and assessment (encouraged through the allocation of fewer pieces of equipment than the number of students involved, thereby encouraging them to take partnership roles in the production of content). They were also expected to engage in a process of critical reflection and peer evaluation at all stages of their project.

It was important to us that the projects addressed and contributed to the debates around openness in higher education, not simply at an abstract or theoretical level or through the academics making an in/out editorial decision on behalf of the students. Rather, we wanted this engagement to emerge through the *practice* of openness. This would require experimentation with the methods by which openness could be integrated into teaching and learning and a 'switched-on' exploration of the ramifications of making student and staff content open. From the findings of our early staff focus groups we knew there was a handed down 'oral tradition' within the institution that questioned the efficacy, legality or reputational benefit of making student content open, which led to considerable resistance to the concept of openness. This was especially prevalent in the use of social media as a way of sharing and then critiquing student work. At both an

institutional level (in the form of regulation and policy development) and from individual academics, there were debates, and custom and practice 'policies' emerging on issues of privacy, ownership, bullying and control. These arguments were often made on behalf of the students but rarely involving them, which runs counter to much of the research that suggests that learners are in the main comfortable with and competent in sharing content they had made themselves (Duggan, 2013).

The process of implementing the seed fund needed to address these concerns head-on, both at point of application and at point of awarding through privileging learner-led innovations, through visible, acknowledged and openly shared practice (rather than "under-the-radar" and peripheral innovation) and by using the idea of play and experimentation to undermine some of the high-risk perceptions of social media usage held by some staff within the institution.

Methodology

The seed fund project evaluation was part of a wider impact and evaluation process integrated across the entire Greenwich Connect project. The data for this paper was collected through a primarily qualitative mixed methods approach drawing on anonymised student evaluation data, four focus groups with staff, ten interviews with staff and some limited benchmarking of student satisfaction (through the institutional student satisfaction process), achievement and output which started in June 2013. The learning activities that the students were involved in were part of their course work and those outcomes were not used in the evaluation. The student evaluation data was not collected as part of this project but rather collected as a part of ongoing student evaluation processes within the institution (for which the students gave their consent). Since the students themselves were not under investigation but the focus was on the implementation of an activity, informed consent was not sought from the students but from the academics.

For the purposes of identifying underlying theory and rationales for resistance behaviours in the context of implementing an institution-wide learning innovation strategy, we utilised a constructivist grounded approach (the ability of the methodology to inductively construct a theory to explain behaviours within a context) (Charmaz, 2003; Charmaz, 2006). This afforded us the ability to draw on the interactions and relations that exist between the individuals under study and the theory being developed (Creswell, 1998; Dey, 1999). It should be noted that we have not rigorously applied a grounded theory approach, we have used it more as a way of interrogating, interpreting and understanding what we have observed as part of the wider evaluative approach (Rowlands, 2005).

Notions of resistance within the seed fund projects

The diagram below (**figure 1**) attempts to model the specific types of institutional and individual resistance we identified both prior to the commencement of the seed

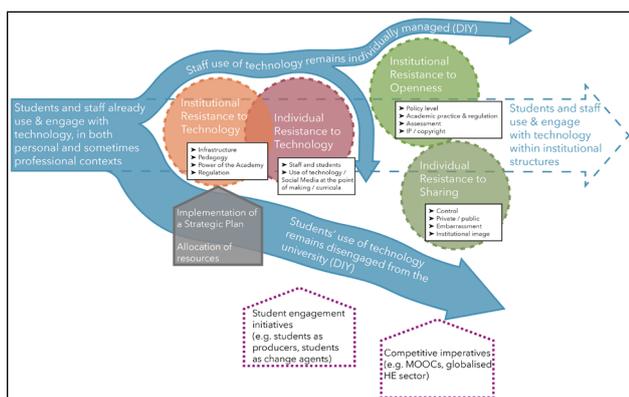


Figure 1: Resistance to openness and technology.

funds projects and subsequently during the analysis and evaluation phase.

Prior to the start of the Greenwich Connect project, we identified significant, complex and widespread individual staff engagement with technology, in both personal and professional (academic) contexts, although the cross-pollination between these contexts was not especially widespread or free of tensions. When asked for the reasons why their personal uses of technology had not significantly influenced their teaching practices, staff pointed to a lack of institutional commitment to technology in terms of support, resources, time and space to experiment. Some staff suggested that there were no real mechanisms in place to share best practice or engage in technology in a strategic way. The implementation phase of Greenwich Connect was in part designed to address these resistance factors and provide a strategic approach to TEL that was (adequately) resourced. The seed fund projects were the first resourced and planned intervention designed to address and perhaps break this nexus of resistance.

Individual resistance to technology

Within the majority of seed fund projects there was a degree of resistance from either staff or students to the use of the technology or to the embedding of the technology within a deeper pedagogical approach. This was not unexpected as change within higher education is often accompanied by resistance, especially where the technology is being used to change practice as opposed to replicating existing ways of teaching (Blin and Munro, 2008; MacKeogh and Fox, 2008, Kirkwood and Price, 2014). What was interesting for us was the way this resistance manifested itself in behaviour and attitudes towards technology or the institutional approach as a whole. We found that the type of technology being used had some influence on the degree of resistance. Generally, iPads and tablets were a successful intervention, used by both staff and students, with their initial introduction to the classroom acting as a catalyst, both providing a trigger for pedagogic experimentation and as a validation of the use of such tools for academic purposes. One project noted that alongside their use of tablets, they found students became far more confident in bringing and using their own devices. The use of advanced equipment for video,

audio and still production experienced much greater active resistance from students, where we found that they preferred to use their own less complex devices over the supplied technology. Both instances of Do-it-yourself (DIY) or Bring-your-own-device (BYOD) represented a form of resistance by the individual to institutionally supplied technology. Whilst individual choice and ownership of the technology used in learning might be seen as a facet of openness within education (Rodriguez, 2011), and even to be preferred over the limitations imposed by institutional control over the tools of learning (Dobbin et al., 2011), this preference seems to be rooted in a particular cultural set of circumstances. Our aim was to open out those circumstances, rather than accept a simple equation of oppositions between open and institutionally controlled practices with consumer and higher-end devices. Recognising there are also limitations implicit in restricting experience to consumer equipment, one of the key ambitions of the seed fund project was the transformation of media making and sharing skills from the personal to the professional (at least representing a professional image and identity for the student). The reversion to self-supplied devices that were inferior technically to the semi-pro or high end consumer technology was therefore not an anticipated or desired outcome. Linked with the resistance to sharing discussed later, this represented significant challenges for the implementation of the institutional strategy.

The willingness of the academics to experiment with the pedagogy that informed the seed fund project was equally varied. At one level, some staff were comfortable with finding their own ‘safe space’, engaging at their point of least disturbance (which was more often than not replacing one teaching and learning activity with another led by technology, for example, replacing class contact hours with virtual conferencing). In this instance, the seed fund project provided a protected space within which to experiment, where there were few consequences from failure and significant personal payoff for success. At the other end of the scale, a number of staff wanted to transform their entire pedagogical approach as a result of engaging with the technology.

It was clear that resistance occurred at a pedagogical level through a sense of fear, with a number of participants noting concerns with ‘putting their head above the parapet’ through experimentation. It was also clear that resistance arose through a fear of the unknown. We identified a number of instances where the staff were learning how to use the technology at the same time as they were employing it with the students. Whilst resources and training were provided, there was still a sense of risk attached to using the semi-professional equipment or social media platforms, of being embarrassed in front of the students. This resulted in a ‘play it safe’ approach to pedagogical innovation, which mitigated the sense of loss of control for the staff. An interesting exception here was that early career academics involved in the project were more inclined to try new things and acknowledge the fact they were still learning to teach. In the main, it

was the more experienced academics who sought to replicate existing, successful practice through the technology or experiment at the margins of formative or class-based activity, as opposed to summative or curricula activity.

Individual resistance to sharing

One of the key aims of the seed fund project was to encourage students to make and share content, creating an environment where students and staff are supported to engage in critiquing, remixing and connecting their own and others' content. We found there were a number of disconnects between the intention to share expressed in the application and what was ultimately shared as a result of the project. Some staff did not provide clear instructions or linkages to assessment, which led to the students' expressing their confusion as to what was expected of them regarding the technology and the real purpose of the task. Most of the initial bids did not include a strategy for sharing or consideration of the implications of making content open. Within this unstructured framework, some student groups found ways to share their content, often using platforms they were comfortable with (such as Facebook). Other groups resisted using their social media presences and sought guidance and support from staff to use the institutional Virtual Learning Environment. In a number of cases the lack of instruction, structure and boundaries for students created an environment in which staff felt they needed to act as a censor, providing 'post-production' either by requiring the final say on publishing or by being the person that aggregated and published all the student-made content themselves. Even in the cases where the task-fulfilment criteria were clear and adhered to, there was still a general individual resistance to sharing the final product of the work.

In the context of the implementation process, the lack of guidance or support for both staff and students on how to share content in part led to the individual resistance we experienced. Equally, the project did not adequately recognise the need for resources on how to critically use social media. Much of our interactions with staff were more around the 'stranger danger' aspect of social media as opposed to how they could use it effectively in their projects. Ultimately, the overall tendency towards control by academics restricted students' autonomy and as a result there was a deficit of openness in a majority of projects. Through the course of our evaluation it became clear that we were seeing not a dichotomous understanding of openness, rather there were degrees of open practice informed by ethical, literacy and pedagogical understandings (Olcott Jr, 2013; Deimann and Farrow, 2013).

Some projects established processes (some staff-led, but in the case of two projects through staff/student collaboration) that agreed what video content was 'appropriate' and 'suitable' in an assessment/learning context, which was then shared on the VLE. We found significant staff resistance to sharing outside the VLE, with reasons given including limited scope and ambition in their project design, a lack of trust in students' judgment, fear of ridicule and to some extent their belief that they needed

to comply with or be responsible for institutional reputation or practices. There were a small number of instances where students identified a sometimes stated, sometimes tacit clash between the notions of private and academic space, where they were asked to use their personal social media identity for academic purposes (notably Facebook and Twitter) and felt that this was not appropriate. There was an expectation from some students that if their teacher required them to share content then the institution needed to provide the medium on which they could do this (the fact that the VLE seemed to fulfil this role seems to indicate that wider audiences and open practice were not fully considered). On the other hand, some projects developed a structured approach and rationale for which social media platforms would be used, primarily linked to contemporary practice in specific disciplines and professions.

Finally, the individual resistance from staff extended to sharing the outcomes of their seed fund projects. Key to the impact of the seed fund projects was the idea of staff forming networks through the sharing of best practice and experiences arising from their engagement with the technology. There were a number of reasons suggested for this ranging from embarrassment at the results through to a studied and passionate defence of intellectual property. The latter was especially true in cases where the outcome was considered to have the potential to become a cross-institutional innovation or result in publishable findings.

Institutional resistance to technology and openness

In the context of an institutional strategy, identifying and adapting to institutional resistance is critical to ensuring the success (or explaining the failure) of e-Learning initiatives (Conde et al., 2013). Whilst we had identified a number of institutional barriers to technology and openness prior to the commencement of the seed fund project (around social media policy, Open Educational Resources (OER) capability and knowledge and a more general sense of institutional risk aversion), the project identified a number of other resistance behaviours. In some ways these are hard to separate from individual behaviours operating within an institutional environment. There was however an explicit measurable impact of institutional resistance in that less than 5% of the permanent academic staff applied for the first round of the seed fund. Participation was attached to significant reputational risk and a sense of real or perceived time poverty. Whilst these projects rewarded innovation with technology, there is no current system within the institution of rewarding successful learning innovation. Equally, some of the seed fund projects challenged staff perceptions around and engagement with institutional quality assurance (curricular and assessment change), intellectual property, information technology policy (device support and network security), technical and pedagogical support and academic regulation (real or established through custom and practice). These resistance behaviours were often presented as reasons for failure before the project had even started or been evaluated.

Conclusion

What became clear from a majority of the seed fund projects was that the notion of students owning their own learning disrupts and transforms the traditional distribution of power in teaching and learning at both an institutional and individual level. There was significant although not universal resistance to sharing content. Openness was a broadly misunderstood and misinterpreted concept, caused in part by disconnects for both staff and students between doing and learning. This distinction between activity (doing something) and action (effecting change through doing something) is an interesting one in that, in the context of the projects, there was significant engagement with technology simply because it was there, as opposed to the identification of a clear pedagogical purpose, either beforehand or else arising from the experience of using the technology.

What we have attempted to do with this paper is explore the notions of resistance to an institutional strategy as seen through the lens of openness, social media and experimentation. Whilst we recognise the limitations of the study, it is clear from both the literature and our analysis that resistance to technology enhanced learning is an ever present and complex point of tension and that it is difficult to separate individual and institutional resistance. Equally, we found it difficult to predict or prepare for its impact within a large higher educational institution seeking to implement change in learning innovation.

As the seed fund projects progressed to completion (July 2014) it became clear that whilst there was a significant gap between where the institution was and wanted (and needed) to be in terms of learning innovation, simply providing the technology and support capacity to integrate it into curriculum was not enough to guarantee success in learning processes and that gaps in digital literacy, risk taking and other manifestations of passive and active institutional resistance slowed or even reversed the pace and success of change. One of the flaws in the implementation of the seed fund was that there was no expectation, either explicit or tacit, that the mode of learning and teaching needed to adapt to the new technology and student-led learning, nor was there any strategic or operational way to ensure the kits went to people who wanted to engage in at least evaluating the appropriateness of existing pedagogical practice. The strategies and instruments we used to transform practice, encourage and motivate staff to experiment and seed a step change in terms of openness were flawed in that we focused on the production of content and not on the methods that facilitated, encouraged, rewarded and most importantly developed the capacity for sharing, critiquing and remixing content.

In adapting our implementation to account for institutional and individual resistance, we believed that the provision of a safe space to experiment, have fun and play through accessible and low risk technology was critical to the success of Greenwich Connect. However, a number of the staff interviewed shared examples where the idea of integrating technology into a new learning and teaching approach was not fun at all, but plainly frightening. Equally, there were some examples where staff were not

resistant to the technology or the sharing of content, but to the notions of play and experimentation itself (and to the risks attached to them). It is this wider issue that is of most concern. Where a strategic initiative has been resourced, interrogated and been through a consultation process, and where from those steps a clear and achievable implementation process developed, experiencing resistance to processes that clearly support staff to engage safely and supportively in innovation highlights some critical issues for institutions. Are there disconnects between the rhetoric of an institution in terms of innovation and its embedded and often unstated organisational culture and practice? How do institutions ensure that resistance is not so entrenched and intractable so as to make any TEL innovation process nigh on impossible?

With institutions exposed to increasing pressures to engage in debates around MOOCs, openness, globalised education and mobile learning, and with graduates entering industries demanding networking and connectivity skills, content making and creativity-led adaptation, as well as high-level digital literacy, the small pockets of successful TEL innovation, led by enthusiasts and active innovators need to find a place in the wider institutional strategy. Equally, the resistance to TEL innovation at an institutional and individual level should be addressed rather than knowingly accepted. The role of policy, strategy and recruitment cannot be underestimated, nor can the role of the institution to support and reward staff who choose to innovate, experiment, take risks and make learning and teaching fun and relevant for the digital age.

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