

Disruption, destruction, construction or transformation? The challenges of implementing a university wide strategic approach to connecting in an open world

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Abstract

The University of Greenwich embarked on an innovative and ambitious strategic process to implement an institution-wide vision for learning innovation. At the heart of this vision was an aspiration to enhance the connectedness of learners at a curricula and teaching and learning level. Critical to its success was the use of learner generated and produced content, shared openly through social media. This paper seeks to explore and understand the resistances and challenges of implementing the openness agenda of Greenwich Connect in the first year, and reflect more widely on the issues that impacted on the success of the initiative in achieving its goals. We argue that whilst many of the activities and projects that were part of the implementation of Greenwich Connect change were perceived as disruptors and destructors, the development of these digital age practices and skills resulted in transformative and constructive enhancements in teaching, learning and assessment.

Keywords

Higher Education, Social Media, Openness, Digital Age, Technology Enhanced Learning,

'When art leaves the frame and the written word leaves the page – - not merely the physical frame and page, but the frames and pages of assigned categories – - a basic disruption of reality itself occurs....' William S Burroughs – *Apocalypse*

Introduction

A number of theorists and futurists in higher education argue that technology will be the greatest instrument of change for higher education and that universities are facing the most significant challenges in their history as a result of the impact of technology on their learners and their way of learning (Barber, Donnelly, Rizvi, & Summers, 2013; Brown & Adler, 2008; D.R. Garrison & Anderson, 2003; Greenhow, Robelia, & Hughes, 2009; Kamenetz, 2010). Yet, with all of the debate, research and dialogue, there is little evidence that wider, macro-level change arising directly or indirectly from technology and its impacts on pedagogy and learners has occurred within institutions (Kinchin, 2012; Njenga & Fourie, 2010). There are thousands of individual, cross-institutional and even international projects, looking at elements of the relationship between technology and higher education, but very little empirical research that argues that technology has had any substantial impact on the way we conduct teaching, learning and assessment (Njenga & Fourie, 2010). It is an issue therefore, that after decades of debate and proselytizing at both policy and research level, pedagogical practitioners and researchers are still talking about e-learning in terms of 'potential' (Bryant, 2013) or as instrument of change desperately seeking direction and a reason for being with higher education institutions (D Randy Garrison, 2011).

The implementation of open pedagogies, strategies and/or projects within institutions is a cogent and contemporary example of this perceived or actual resistance to change. Open education or open pedagogy has been allied with the use of new digital technologies (Beetham & Sharpe, 2007), linked to the production and/or use of open resources (Bradshaw, Younie, & Jones, 2012), and more recently connected to the ongoing analysis and roll-out of MOOCs (Downes, 2009a). Open pedagogy has been conceptually and operationally connected to a wide variety of instruments and models including, open access journals and repositories, open educational resources and courseware, open enrolment courses, open textbooks, open access projects, creative commons licensed multimedia, and freeware software and platforms (Hodgkinson-Williams & Gray, 2009; J. C. Taylor & Mackintosh, 2011). Yet, the influential NMC Horizon 2103 report notes that despite the relative ubiquity of open projects, the concept of openness is only 'becoming a value' (Johnson et al., 2013) and that there are significant issues that openness creates in terms of the way academia is managed, staff are hired and promoted and how the institution is evaluated (Borgman, 2007; Pearce, Weller, Scanlon, & Kinsley, 2011). Further, institutionally, the effectiveness and impact of open educational resources is, at the most basic level, being impacted significantly by low levels of staff awareness of projects and initiatives (Rolfe, 2012). Murphy (2013) argues that whilst awareness was not necessarily a limiting factor, issues such as a lack of institutional strategy and resources (including staffing) were key to explaining the low impact of open projects on achievement. Alternately, one of the key benefits of engaging in OER usage was the ability to '...test OER collaboration models as low risk projects' which suggests that impact and risk have at least some tenuous connection. At the other end of the scale, the stampede towards being seen to engage in the MOOC debate identified that when institutional factors such as senior management imperative, resourcing and reputation and

branding were at play, resistance could be overcome quickly and effectively, especially where some systems were already in place (Weller & Anderson, 2013; Yuan & Powell, 2013). What is clear from the discourse around openness is that whilst many institutions and academics have a baseline awareness of openness, or demonstrate localised pockets of engagement, there are a multitude of interpretations, barriers, applications and understandings around how openness impacts on learning design, academic career progression, digital practice, and teaching and learning, manifested through a variety of political, social and organisational actions and behaviours (Olcott Jr., 2012; Peters & Britez, 2008; Weller, 2014).

Greenwich Connect and openness

In 2012, the University of Greenwich implemented a strategic and innovative approach to learning innovation called 'Greenwich Connect' (<http://blogs.gre.ac.uk/greenwichconnect/>). This development is predicated on the notion that social interaction, connectivity and support of collaborative practices can significantly enhance learning (Downes, 2009b; D.R. Garrison & Anderson, 2003; Siemens & Weller, 2011; M. C. Taylor, 2010). The challenge for the university is to build this type of connectivity into the practices and strategic direction of the institution. From new arrivals experiences, through to curriculum design, learning, teaching and assessment, digital literacy development, social interaction in and out of the 'classroom', infrastructure strategy and learning spaces, post-graduation processes, the ability of the learner, the academic, the administration and management, the employer and the community to interact, engage and maintain connections is central to the ability of the institution to flourish in a digital age (Jenkins, 2009; McLoughlin & Lee, 2008; Tapscott & Williams, 2010). Greenwich Connect is comprised of a series of inter-linking projects designed to affect a 'step-change' in terms of how technology shapes the learning, teaching and assessment practices of the university and to build connectivity, engagement, innovation and collaboration in and through technology.

One of the key issues that informed the development of Greenwich Connect was the relative expense (both in terms of capital and on-going licences, hosting or support) of large scale corporate e-learning systems. Educational technology has become expensive to purchase, proprietary and frequently uniquely customised to an institution, often requiring the protection of firewalls and closed systems or a limited scope of device or platform support. A tension arises where learners bring skills to their higher education built on 'open' systems, secure to maintain privacy but free to access and share. They produce content at no cost on these platforms and share them with a network of their choosing, with the potential for wider dissemination. This tension is made even more complex when the higher education institution becomes focused on the operational parameters of an instrument or platform, rather than the reason for using it, or the way it is integrated into curricula (Foroughi, 2011; Richmond, Rochefort, & Hitch, 2011). Hemmi, Bayne and Land (2009) argue that the changes in infrastructure required by open and social media driven pedagogies are often volatile, experimental and flexible, challenge university management to act quickly in order to address conflicts and tensions that arise between new and existing ways of teaching and research, and to '...alter relations between process and artefact, permit fragmentation over cohesion, exploration over exposition and the visual over the textual' (Hemmi, Bayne & Land 2009). The challenge is made more complex by the argument that engaging in open systems that are located in the cloud significantly reduces the costs involved in technological enhancement (D Randy Garrison, 2011; Masud & Huang, 2012)

At the University of Greenwich, there had been significant impacts arising from the historical investment strategy in learning technology, where some critical aspects such as Wi-Fi infrastructure had received insufficient investment whilst at the same time costly systems had been installed with little academic engagement, resulting in failings in implementation and an eventual costly redundancy of the systems. During the consultative phase of Greenwich Connect, there was evidence of considerable wariness by academic staff towards another new initiative that may not work, or fail to achieve the student and organisational outcomes specified.

Responding to and addressing these tensions and institutional histories is at the core of the activities and intentions of Greenwich Connect. The project takes a more holistic and outward facing view in its drive to support the connectivity and networking skills of students and staff by creating not simply an environment, but also the conditions under which they can be actively and openly shared in order to support the formation and development of networks. Equally, at all levels of student experience within the university, we wanted our community to be linked by its devices, platforms, locations, sites and campuses but not bound by them. These aims manifest themselves in a number of projects designed to enhance the skills of learners and staff to produce, share and consume open content, as critical aspects of their formal and informal learning and assessment. The aspirational intention of the project was to open an engaged and research-informed debate about pedagogy, knowing that this debate that will not be simple or painless, nor will it be predicated on the belief that technology always enhances learning, or the technology will change or replace any or all aspects of traditional teaching. However, it was to lead towards the objectives of Greenwich Connect which sought to use vehicles like openness, sharing and collaborative learning as a way of achieving connectedness.

Methodology

This project has just completed its first year of implementation. The impact and evaluation of the entire project uses a mixed methods approach, incorporating traditional questionnaire based data collection, focus groups and interviews to provide baseline data, coupled with action research projects and more grounded qualitative studies to collect data iteratively and analyse it inductively. For the purposes of this paper, we were specifically interested in the institutional and pedagogical challenges that occurred from and impacted upon the implementation of Greenwich Connect. Vavoula and Sharples (2011) undertook a challenge-based approach to identifying the impact and effectiveness of mobile technology in higher education, which sought to draw out the notions of learning in diverse contexts. Whilst some of the challenges they identify are a little prosaic ('seeing the bigger picture'), their approach recognises the grey space where learning and the role of the institution merge. Further, drawing on an emergent model of IT evaluation proposed by Meek (2006), they suggest three layers of evaluation (or granularity as they term it) which look at the micro level of evaluation (looking at the way individual users assess the benefits of a learning technology system), the meso-level, which specifically looks at the grey space of how learning occurs at the point where learning and technology are integrated and finally the macro which looks at the wider impacts of learning technology at the level of institutional practice.

Challenge 1- Institutional impotence

It has been recognised that the pace of change within higher education institutions globally has traditionally been slow (Crow, 2013). 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’. It also argued that this resistance is built structurally into institutions (at a macro level) run as social systems which are often structurally resistant to change and ‘...designed to neutralise the impact of attempts to bring about change’ (Kavanagh & Ashkanasy, 2006; Macfadyen & Dawson, 2012).

A number of studies point to issues of organisational culture and structure, including the impact of innovation diffusion arising from variable rates of staff acceptance of technology (Wilson & Stacey, 2011) and the development of cultural practices and policies that support openness, trust and participation (Rollett, Lux, Strohmaier, & Dosinger, 2007). Adria and Rose (2004) argue that ‘...new technologies require faculty members to abandon many conventional practices and relationships and perhaps find new ways to define themselves and what they do, and this is difficult’. This is a challenging and sometimes frightening endeavour, especially in the wider context of declining job security and increased accountability. Selim (2007) argues that these macro factors have significant flow-on effects to the acceptance of technology amongst students, noting that issues such as the teacher’s attitudes to technology and the ease with which the university infrastructure facilitated access can be critical in this regard. 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.

In the course of implementing Greenwich Connect, resistance manifested itself as both an active form of change blocking and in more passive forms of intransigence that become a form of institutional impotence both institutionally and at an academic and student level. This was especially the case when critical concepts and practices such as openness, social media and experimentation were introduced (Bryant, Coombs, & Pazio, 2014). There was no doubt that the involvement of those staff who self-selected to contribute to the project, whether via bids for equipment, or volunteering to participate in groups or committees was generally positive and engaged. Institutionally, however, there was some resistance to identifying key staff to represent at a formal level on decision making and action-led projects and groups. We saw the same names re-occurring time and again, resulting in some fatigue amongst the staff being regularly selected. As involvement was often voluntary, the pool of interested staff was quite small and itself represented some form of individual and arguably institutional resistance. There were a number of instances in our interviews and interventions where the notion of keeping your head down and hoping it would all go away were given as a rationale for disengagement. There was a belief that whilst the project represented potentially ambitious and laudable aims, the realities of what the funding and organisational capacity could achieve were far less ambitious.

The implications for learning were more complex. What implementing this vision did achieve was the clarifying of positions around the contested notion of the need for pedagogy appropriate for the digital age. Across a number of institutional and project-led forums there were polarised (and sometimes productive) debates about teaching and learning practice and the efficacy of technology. Equally, there was some pushback arising from the perception of an institutional process mandating change in teaching rather than it evolving from the grassroots. There were

also a number of examples that arose, where openness and sharing as critical aspects of the strategy were challenged, with staff (and in some cases, students) questioning these as ethical, responsible or even appropriate practices to enhance learning. This resulted in technology either replicating existing closed-system practices or being relegated to a wrap-around or gimmicky addition to ‘traditional’ pedagogy.

Challenge 2 – Governance

In order to effect a significant and complex organisational change, such as the one being demanded by the disruptive shifts within a technologically-mediated society, there needs to be a recognition (at management and staff levels) that this change is not simply an on/off change process but positioned within an inter-connected set of organisational, cultural, pedagogical and human behaviours and constructs (Schneckenberg, 2009). Reid (2012) argues that there has been a separation of administrative and academic interests in terms of governance around major change, moving institutions from a shared faculty approach to a more centralised business model of governance. These issues have become especially visible in the debate around technology and the future of higher education, which at one end of the scale argues that technology represents the instrument by which we will see the end of the university as we know it and at the other, is the medium by which there will be re-birth of the university as an information hub for the digital, open community (Baer, 1998; Grosbeck, 2009; Pearce, et al., 2011; M. C. Taylor, 2010). The importance of this debate, and the fervor with which it is sometimes enacted (the debate around MOOCs for example), further causes tensions between teaching staff and administration, especially around the addition of controls and measures of performance (Adria & Rose, 2004).

Governance represents a critical nexus between the macro-level role of institution to implement change through policy and certification practices, and the meso-level role of the academic/programme team to institute the change at a teaching and learning level. The governance structures and objectives of Greenwich Connect attempted to model a more democratic process of implementation. During the initial consultation, staff had expressed their concerns that in the past, new initiatives were often perceived as being ‘done to them’ rather than being a collaborative, bottom up decision making and implementation process, so our goal was to introduce collaborative practice in a more significant and impactful way.

Partially in response, the development and implementation of the Greenwich Connect governance structures was designed to be consultative, agile and representative of the breadth of the organisation. This took the majority of the project team’s time in the first year of planning. Covering policy development, the formation of representative committees and working groups (including a cross-institutional e-learning team), the governance was effectively an entirely new layer of consultative processes designed to enhance the potential of Greenwich Connect to achieve its aim. Even with this extensive and time consuming process, there were a number of examples of confused authority (either accidental or deliberate) where responsibility and ownership of particular processes was challenged. Governance itself became an activity rather than a means to implement activity and we could see a drift towards solutions that fitted the needs of individuals who were important to the development of the governance structures. Processes were added to the mission ostensibly because they were building blocks required to implement the bigger picture. Critically, the more democratic and connected intentions of the governance were never fully realised in the first year, which could partially be attributed to a

wide-ranging organisational restructure from Schools to Faculties occurring at the same time at the implementation of Greenwich Connect, which added layers of practice and policy change.

The groups and policy making process became realigned with the more traditional institutional models and we underestimated the impact of the magnetic sway of custom and practice as an organisational force. In the context of the openness agenda, the attempts to develop a practice driven policy agenda were hindered by practices that had morphed into unstated policy. Initiating a debate around open sharing and students as producers exposed a wide variety of perspectives often rooted in an understanding of the way the institution had always done it (or alternately the ways it had tried in the past and had failed). In organisations as intellectually complex as universities, the desire to change is as important as the need to change. With long institutional memories and often contradictory policy and procedures, the motivation of staff to embed changed practices can be undermined by inconsistencies in internal communications, practice or intent. For example, there were a number of instances where open practices such as media sharing through YouTube were challenged at an institutional level as breaching policy, where either no such policy existed or was an interpretation of an out-of-date or less than relevant policy.

Challenge 3 – Social media

The use and integration of social media into teaching and learning presents unique challenges to strategies built on encouraging institutional acceptance. At an institutional level, concerns around appropriate usage (Garcia, Annansingh, & Elbeltagi, 2011), the rules governing IT (Somekh, 2007) and a diversity of understandings around privacy and data security (McGee & Begg, 2008) have impacted significantly on not just the use of social media, but on the way academics and students understand and communicate how others could use social media. Madge et al (2009) point to resistance from students when social spaces like Facebook are ‘invaded’ by institutions which leads to what they refer to as the ‘creepy treehouse’ phenomenon ‘...when authority is seen to try and invade a young person’s social space’. This collision between personal and educational space manifests itself clearly where the practices of play and experimentation are key to overcoming resistance, as social media despite its commercial foundations is seen primarily as a social or fun tool for use outside of professional contexts (Mihailidis, 2014). Amongst users of social media, new skills such as collaboration, sharing, content production and inquiry have become ‘normalised’ and form part of the daily work and personal lives of learners (Green & Hannon, 2007).

The integration and use of social media was a critical aspect of the Greenwich Connect project. A number of studies have identified significant behavioral changes in the generation of pre-university aged students (generation wi-fi as it has been labelled). These learners are acting as digital citizens, critically engaged, autonomous, digitally competent, collaborative and connected, although not always across a multitude of devices and platforms and not with universal literacy (Conole & Alevizou, 2010; Janssen et al., 2013). To a slightly lesser degree, this variability of usage and engagement was identified in our own digital literacy research of new arrivals. We were also aware of a number of DIY projects initiated by staff often in response to the perception of a relatively slow moving institutionally supported system. A number of the core projects of Greenwich Connect were designed to encourage collaboration, remixing and repurposing of student created content via social media platforms. We also put in place working

groups involving academics and regulatory support staff to engage in wide consultation around social media and open educational resource practices.

At the end of our first year, there were some significant success stories around the use of social media that are now building on the existing micro-level practices. There have been examples where successful uses of social media have impacted on the wider faculty, on the meso-level of curriculum and the design and funding of learning spaces. These aside, it was clear that social media was in the main seen as a wraparound to the existing learning and teaching approaches. Many of the open debates that were held brought to the surface a range of established views and opinions often based on received wisdom, or the sometimes populist perspectives that demonise social media practice. This was sometimes used as a defense for not allowing content to become open. Institutional reputation, trust and control, the role of the student in their own learning and staff/student relationships all emerged as barriers to developing an open and collaborative culture through Greenwich Connect. The dichotomous relationship between the private and public self, as they are portrayed on social media represented a point of resistance for students and staff, but in vastly different ways. Some students perceived academic use of social media to be an invasion of their space (perhaps akin to their mum following them on Facebook). Staff based their usage on their personal engagements, either as transformative model of practice (more seen in the creative fields) or as inappropriate, gimmicky or unnecessary for academic work. The result was often that content remained either unshared outside the individual student and teacher (usually as part of an assessment submission), unshared through the need for filtering, editing and approving (time consuming processes in a time poor faculty) or shared only on Moodle, which is a closed system accessible only to the people enrolled on that course. The benefits of wider sharing, open access and critiquing were all lost and social media usage and integration remained relatively low.

Challenge 4 – Staff engagement

‘The task of identifying and implementing a new instructional technology is frequently managed with little or no faculty involvement. Once an instructional technology is implemented, measures for success may not be defined or publicized. On-going support is often an afterthought, and fails to consider all those needing it or the types of support they may need.’ (Reid, 2012)

Our early engagements with staff, both those who had previously engaged in e-learning and those engaging at institutional level for the first time through the Greenwich Connect project, suggested that many academic staff felt they had no time to effectively learn about and embed open content made by students and staff, or social media into their learning teaching and assessment. Some of them indicated that the risks involved in these approaches outweighed the benefit, especially if the experiment failed to produce results in-line with institutional key performance indicators. Whilst there is a culture of production and making exhibited by the staff and students engaged in the project, this culture is not always supported by delivery of the skills and practices of criticality, judgement, re-purposing, scaling, analysis, aggregation, application and remixing. Many of the activities that support Greenwich Connect in terms of practice sharing, proactive engagement with teams, staff training and research are aimed at effecting a

pedagogical step-change where these digital age practices and skills are transformative to teaching and learning practice and not simply (and perhaps dismissively) labelled as disruptive. During the first year, the openness agenda and the use of social media was significantly impacted by variations in institutional buy-in. There was a collective inability on our behalf to successfully engender ownership and shared responsibility for the project. It was frequently referred to as 'our' project, as opposed to the institutions, resulting in our role morphing into a service one, with requests to set up accounts and make content as opposed to facilitating the debate and change required as part of the project. The impact of strategy fatigue and staff overwork was also important. During our consultations with programme teams, interactions with committees and when we met with Faculty Leadership teams, some staff expressed that notion that they were waiting to see if this project got past the first hurdle before committing themselves to it. This was a pervasive theme from all our early focus groups, with staff noting that they did not want to put their head above the parapet, or use their valuable time in additional initial enhancement activity if this wasn't formally recognised. Some staff believed the best way to do this was to engage at the minimum level required so as not to draw attention to themselves, whilst others attempted to participate away from the glare of institutional attention (and systems). This is not uncommon or unreasonable behaviour as higher education has a tendency to develop rolling institutional strategies in response to competitive or regulatory requirements.

Conclusions

It is important to note that this evaluation represents the first year of the study and is the experience of a single institution, and as such there is difficulty in drawing any wider inferences from this research. That said, it is clear that Newton's physical law that for every action, there is an equal and opposite reaction, proved to a somewhat apt analogy for our experiences in implementing the openness agenda of Greenwich Connect. Many of our actions were either effected in reaction to other actions within the institution or themselves generated reactive and opposing consequences.

These actions attempted to engage the institution in a learning innovation step-change, to challenge established behaviours and beliefs and to find some alignment between the practices of learners as they entered higher education and the practices of learning they engaged with it. Whether this engagement and alignment occurs at the macro, meso or micro level, it could be argued that openness and sharing are not always the default position of the academy. The complexity of the tapestry of previous (or inherited) learning and teaching experience, institutional memory and the fear and shock of the new, intervene to limit the effectiveness of an institutional strategy to change that default position. Certainly, when interviewed some of the staff at our institution, expressed significant levels of strategy fatigue, fear at the risks of failure and resistance to altering their default positions. But equally, when the strategy was explained, and the role of openness and social media demonstrated in concrete, experiential or research-informed ways, there was a proportion of staff who demonstrated a capacity for experimentation, play, learning enhancement and innovation. In the context of our study and more widely, there is an on-going and sometimes intractable struggle to take technology enhanced learning past these pockets of experimentation and into the mainstream.

As William S. Burroughs noted (in the quote that leads this article) when '*... art leaves the frame and the written word leaves the page... a basic disruption in reality occurs*'. In terms of

technology and its impact on society and on learning the genie is already out of the bottle. The tools that whole generations use every day represent the next iterations of technology and media, leaving the ones that many higher education institutions are struggling to implement in teaching and learning contexts (such as BYOD, social media platforms and open content) as out-of date (Barnes & Tynan, 2007). These learners consume information in ways that are in conflict with the some of the notions of the traditional pedagogy, replacing the didactic idea of ‘I will tell will you what I know’ and relying more on the assertion that ‘I will find out what I need to know’ (McLoughlin & Lee, 2008; Moore, Fowler, Jesiek, Moore, & Watson, 2008). We titled this article ‘disruption, destruction, construction or transformation’ because these words have been used to describe the impacts of technology on pedagogy. The intentions of Greenwich Connect were to construct new networks and new connections, to encourage staff and students to construct learning through openness and sharing, making these networks wider and more fertile again. It was an aspirational change, driven by a vision for learning in the digital age. The challenges we have exposed in this article are as a result of the aspirational intent, from the relative failure on our behalf to share this aspirational vision and to engage in the widest possible debate about its efficacy. The result was disruption and in some cases destruction, rebellion and resistance to policy and governance, even to projects that should have been popular (like the provision of free, supported equipment such as iPads and digital cameras). Perhaps one of the reasons for the sector’s slow passage towards digital pedagogies is that aspirational change has been the misunderstood mantra in corporate strategic planning models that drive the modern university. The incessant requirement to achieve KPIs, react to changes in the global environment and the national policy agenda has led to some of the strategy fatigue and fear. The most successful aspects of Greenwich Connect came when the experimentation and passionate innovation of the advocates spilled into a wider, organic evolution of practice. How do you scale that transformative process to whole schools and faculties when aspirational change or at the least the rationale for it is understood but not responded to?

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