Why do digital teaching innovations so often fail?

Journal of Education, Innovation and Communication (JEICOM)
11-29
Vol. 2. Issue 2, December 2020
DOI: 10.34097/jeicom-2-2-Dec2020-1

Professor Justin O'Brien[1]

Abstract

In a dynamic field, university marketing educators ought to harness new digital tools and social media platforms successfully in the curriculum, but evidence of its widespread adoption is meager (Tuten & Marks, 2012). By explicitly investigating exemplars of pedagogic innovation failure, this research paper analyses faculty and digital marketing student perspectives on the use of digital tools and social media for formal learning. This research paper makes a case to dispel the unhelpful narrative of technophobic instructors struggling to teach homogeneous tech savvy digital natives, but to recognise a nuanced continuum of digital capabilities, for both students and instructors. Educators should seek to collaborate with students to choose how they interact using digital tools, recognising the importance and diversity of public-private boundaries and consider the need for this to take place beyond the gaze of faculty.

Keywords: Digital innovation failure; digital learning; education technology; faculty resistance; student experience.

[1] Professor, Executive Director of Postgraduate Programmes, Surrey Business School, University of Surrey, UK, email: University of Surrey. Email: just.obrien@surrey.ac.uk

Introduction

Traditional lecture style teaching "simply does not work any more" (Lohman, 2016, p. 163), students are no longer content to be passive consumers posits Selwyn (2012), they should be seen rather as active co-producers of a new pedagogy. Lee and McLoughlin (2010) eulogise about an emergent culture of technologically enabled learning that liberates collective exploration, play and innovation over individualised instruction. Perhaps, as Thayne and Cooper (2014) believe, social media is the much-needed trust change catalyst and staff-student bond enhancer in the digital space which Dabbagh and Kitsantas (2012) argue should be used to create informal and formal learning spaces. However, Espuny, Gonzalez Martinez, Fortuno and Gisbert Cervera (2011) lament that the enormous potential of new digital tools, including social networks, is inhibited by the legacy of the one-way information flow pedagogy, the outmoded lecture and seminar format that was still favoured by many universities prior to the Coronavirus pandemic.

However, an emergent approach sees web-enabled technologies applied in an increasingly personal, social and participatory manner; posit McLoughlin and Lee (2010). Social media tools (e.g. Microsoft Teams) have the potential to enable rich learning such as: effective resource sharing, collaborations, peer-to-peer interaction and augmented communication skills, a space where traditional learning management systems have had limited traction according to Espuny et al (2011). Sharples et al (2016) note social media's potential to develop conversations and to foster learning through the sharing of ideas but also identify the challenge novice learners face in discerning inaccurate and biased sources and the requirement to have sufficient personal resilience to handle hostile responses.

With breakthrough technologies surfacing annually (Shaltoni, 2016), Prensky (2001, p. 2) highlighted that "students are no longer the people our educational system was designed to teach" citing a significant discontinuity. Johnson and Jones (2010) signal that the fast-paced change in technology makes it difficult for educators to retain their subject currency and suggest that there are important generational gaps between instructors and digital native students, whilst Duffy and Ney (2015) believe that the application of digital technology tools have been ad hoc and not sufficiently systematic.

Some lament the just-in-time shift from what we know 'cultivators' to what we can find out for ourselves, described by Carr (2010) as 'digital hunters and gatherers'. In considering this momentous digital challenge, Crittenden & Crittenden (2015) highlight the need for universities to ensure that marketing students have the prerequisite skills needed to compete for marketing jobs with graduates of more numerate subjects.

Selwyn (2012, p. 214) uses the uncomplimentary term mongrel to describe the education and technology (edtech) non-field, one that attracts a "transient ragbag of individuals" from across the disciplines. Roberts and Micken (2015) posit that significant literature gaps exist in how to present digital concepts and point at a dearth of pedagogic strategies on how to teach digital marketing effectively. It is hard to find examples of failure in the management pedagogy literature, this despite the popularity of the entrepreneurial fail fast mantra (Hirsch, 2012), Haig's (2005) Brand Failures text is a rare scholarly example of codified dissemination of marketing learning from calamity. It is perhaps difficult to present the

scholarly contribution of an innovation failure, because of the potential reputational implications for both the scholar(s) and their institution(s). It is therefore not unsurprising that research in this field is typically penned by optimistic, pioneering tech evangelists keen to promulgate their successes, promoting new innovations, that are written up in a way to suggest that they are for the most part uncomplicated and effective (for example, see: Evans 2014; Moran et al., 2011).

So, recognising a field that is perhaps overly represented by rosy accounts of innovative digital pedagogic success, this research study turns its head and seeks to understand why non-mandatory digital learning augmentation often fails, by analysing anonymous interviews with marketing management faculty innovators and undergraduate students of digital marketing.

This paper uses eleven semi-structured faculty interviews to solicit experienced, UK-based university marketing and management educators' reflective accounts on pedagogic social media innovations that have failed to live up to their expectations. It then juxtaposes these teacher perspectives with insights from ten digital marketing student interviews, aiming to explore the manifest tensions a proactive marketing educators attempt to transform their teaching practice. A number of important recommendations are identified, aimed at learning the lessons from relative failures using a less trodden investigational path. The literature review starts by critically considering the idea that social media is merely the latest pedagogic nirvana, before progressing to consider published insight on staff and then students' social media expectations, and concludes by summarising the challenges faced by faculty seeking to institute transformational digital technologies in their classrooms. Problems and challenges faced by educators are often given limited attention in pedagogic innovation papers. This research's contribution is to provide a contemporary account of marketing educators' failures when attempting to use digital tools in university teaching.

Social media hype: the latest digital pedagogic nirvana

University students now have very different expectations of their teaching and learning experience, changes driven by their evolving relationships with technology (Brown & Watson, 2017). Mobile and socially connected technology affords opportunities for interaction, communication, collaboration and content creation like never before (Grant, 2013). McLoughlin and Lee (2010) believe that university education should be moving from knowledge-focused content delivery to designing transformational experiences that enable personal learning that simultaneously encompasses skills and capabilities development.

In some areas, notably in the marketing discipline, there has been growing focus on new digital and social media based tools to mediate and enhance teaching with the aim of fostering active learning in students, and Tess (2013) surmises that whilst some scholars make the case for university educators to integrate more digital assets into their curricula, the largely self-reported evidence set for this is lagging. Gikas and Grant (2013) have highlighted that ubiquitous ownership of internet connected, powerful mobile devices (creating a serendipitous Bring-Your-Own- Device networked platform) has afforded educators the opportunity to enhance student communication, interaction and collaboration. This digital and social media enabled, many-to-many, participatory collective offers the potential to foster enhanced collaboration, conviviality and creativity (Gikas & Grant, 2013; Selwyn, 2012).

However, Solomon (2016, p. 150) warns of the over-promise of technology; "rash, misplaced and misconceived" investments in silver bullet gadgets. As highlighted by Gouseti (2010), are we again, merely in the midst of the latest iteration of a familiar technological cycle of hype, hope and disappointment?

Staff attitudes towards social media and collaborative digital tools

Lohman (2016) believes professors are now expected, as an absolute minimum, to include learning tools far beyond PowerPoint slides but also a full range of 'traditional' social media platforms, comprising: Twitter, Facebook, Skype and YouTube shorts, according to Shaltoni (2016). Brocato, White, Bartkus and Brocato (2015) argue that it is imperative to integrate digital into the curriculum to ensure marketing graduates possess a competitive skill set. Social media technology is defined by Davis et al (2012, p. 1) as "web-based and mobile applications that allow individuals and organisations to create, engage, and share new user-generated or existing content, in digital environments through multi-way communication". Moreover, Blankenship (2011) suggests that interactive community tools such as: Skype, Twitter, Facebook, YouTube, Blogs and wikis, are becoming omni-prevalent in university classrooms, but it is not clear that this so-called engagement is actually much more than an occasional video clip in reality.

Faculty, according to Roblyer, McDaniel, Webb, Herman and Witty (2010) have been prone to prohibiting popular student technologies, citing in particular Facebook, and are more likely to prefer traditional platforms, namely email. Rather than embracing the opportunity for developmental change, it is not unusual for digital technophobes to require their students to turn off their mobile devices in class, banning social media and even dismantling wireless hubs (Thomas, 2011). Buzzard, Crittenden, Crittenden and McCarty (2011) noted a faculty preference for student engagement via the learning management system, whilst students preferred web-based tools and even email. Furthermore, Roblyer et al. (2010) claim that universities possess a well-established culture of non-adoption of new technologies, describing faculty as laggards. Tuten and Marks (2012) noted that marketing academics use social media in their personal lives, but posit that it is not used widely for educational purposes. Davis et al. (2012) identified that community college leaders thought that social media had minimal to moderate value pertaining to learning outcomes. They saw value through personal use in; community building on campus, facilitating staff-student interaction, cascading events information and as student feedback channel. Contradictory research evidence from the Babsom Survey Research Group (Moran et al., 2011) suggests that faculty are big believers in social media, with two thirds of their sample using social media in class (typically online video) and 30% posted content for beyond class engagement, with video, podcasts and wikis cited as the most valuable collaborative learning tools. It would appear from the above that there are disparate perspectives, and points, perhaps unsurprisingly, towards a more heterogenous picture of digital adoption.

Students expectations in a post web 2.0, social media age

Students are increasingly self-organised, self-sufficient, flexible and fluid; habituated to and comfortable with multitasking, digital juggling and exercising more autonomy over their lives

(Selwyn, 2012). Hargittai (2008) advised that it is not wise to assume that all students will share the same levels of interest, motivation and affinity for utilising social media. Many students were found to be uncomfortable communicating online, according to Munoz and Wood (2015), and convincing students that they do not already know everything about social media was a significant challenge. Intriguingly, they found a large number of students were resistant adopting new technology and/ or creating an online presence (Munoz & Wood, 2015). Critically, Selwyn (2012) posits that student social media use is not always equitable, highlighting important divisions by race, gender, age and socio-economic differences. Buzzard, Crittenden, Crittenden, and McCarty (2011) noted the adoption of contemporary tools for entertainment and communication, but not necessarily for education purposes. Moreover, Selwyn (2012) highlights a lack of sophisticated use of social media by university students, despite its significant potential for communal activity, it is primarily used for one-way passive content consumption. Prevalent is a social media ethos where the majority lurk, free-riding the creative, often altruistic, efforts of a minority.

Taylor, Mulligan and Ishida's (2012) research findings support growing evidence that management students do not welcome the formal academic use of Facebook and underpinning this position Karl and Peluchette (2011) identified that suspicious faculty friend requests made many students feel uneasy. However, contradictorily, Dearbone (2014) noted that despite a student preference for little or no faculty self-disclosure, students did not find Facebook teacher friendships invasive, but that the majority would only accept an invitation because they felt compelled to, and they had mixed feelings about the pedagogic use of Facebook, although effective, because it stripped the site of its intended social role. Elliott (2011) also identified student feedback that valued an enduring, personal relationship with their university educator.

Kassens-Noor (2012) found that the always-available, micro- blogging tool Twitter fostered the creation of better group knowledge than traditional methods, notable for connecting students beyond the classroom environment, but its short text limit constrained self-reflection and critical thinking. Al-Bahrani and Patel (2015) insight indicates that students may prefer one-way sharing social media platforms such as Twitter and Instragram, rather than more intrusive, two- way friending in Facebook. Junco, Heibergert and Loken (2011) and Evans (2014) found that Twitter usage increased student engagement, Johnson (2011) evidenced that Twitter enhanced the credibility of the tutor, whilst Lowe and Laffey (2011) found, in a study with a 65% voluntary uptake, that interactions enhanced enjoyment, subject learning and employment skills. The instant messaging platform Whatsapp was found by Rambe and Bere (2013) to foster spontaneous discussions, independent learning, confidence building and collaborative resource generation, but there was resentment of the encroachment of academic life into the family sphere from mature students and ambivalence to wider usage.

The literature specifically considering Twitter, Whatsapp and Facebook seems to support Lee and McLoughlin's (2010) view that social media can enrich learning, but that not all students are comfortable in partnering in Selwyn's (2012) active, co-produced vision. Although a number of successful social media pedagogic innovations have been cited, underscoring its potential to enhance learning, student support for them does not appear to be unanimous.

Faculty challenges: digital teaching

To be successful, university educators need to convincingly deliver novel, relevant communications by experimenting with emergent technologies (Johnson & Jones, 2010), a position that is supported by Fose and Mehl (2007) who believe that fun and creativity enhance learning, particularly when seeking to compete for limited student attention bandwidth. McLoughlin and Lee (2010) posit that the pedagogic challenge presented by online collaboration is more than just demonstrating competence with particular tools, staff need to effectively and authentically integrate them into the new learning experience. Similarly, Munoz and Wood (2015) believe there is an important paradigm shift away from social media as entertainment towards being recognised as means facilitate collaboration and to develop valuable skills. Although they do warn of the rapidly changing landscape that can require a different course every semester and the heavy workload challenge of remaining current. Johnson and Jones (2010) also recommend that educators undertake more experiential research to develop their digital knowledge to ensure students are provided with vocationally valuable learning experiences. However, part of the appeal of social media is its lack of control, so lecturers need to realise this potential without undermining the inherent value students attribute to them by not controlling learning, through the one-way broadcasting information, but to facilitate successful student-student and student- staff interactions (Siemens & Weller, 2011).

Hybrid digital spaces can lead to a blurring of private- public boundaries, which raise important privacy issues (Lewis et al., 2008), appropriating student's peer networkingenvironments can be perceived as an invasion of their space (McLoughlin & Lee, 2010). Moran, Seaman and Tinti- Kane (2011) also highlight key concerns of privacy and integrity around the use of social media. Because these new approaches are often more accessible and unpredictable (Beetham & Sharpe, 2013), Hedberg (2011) argues the need for more than successful mastery of technology, but expert collaboration, successful experience orchestration, and the creation of an on-going support community.

Vrasidas and Glass's (2005) study identified a conservative education culture that is slow to reform policy, curriculum and assessment, with a heritage of resistant teachers. Also, operating in a contextual environment known for: a tradition for sometimes perverse or limited incentives and time to investigate and integrate new technology into the curriculum; an insufficient infrastructure; and meagre on-going support. Al-Bahrani and Patel (2015) identified additional drawbacks, including over-utilisation of mobile devices in classrooms, privacy issues, additional time consumption due to easier access to faculty, and the additional effort required to bring unfamiliar students up to speed with the platform(s).

Research by Hedberg (2011) highlighted that, to a fearful and technologically inept instructor, challenging, new technology creates anxiety, requiring teachers to adapt to a more flexible sense of self. Beetham and Sharpe (2013) identified that successful technological implementation was seen by faculty as a long-term project aligned with the staff's own perceptions of their evolving expertise and confidence. This requires, as Rambe and Bere (2013) argue, a transformation to the role of lecturer, morphing from being an expert knowledge (and skill) instructor to an all-embracing, on-demand guide, mentor and facilitator. Echoing a recurrent theme in the literature, responsibility for the development of

faculty social network capability is something Richmond, Rochefort and Hitch (2011) believe lies firmly with the educational institution.

Literature review summary

This exploration of the literature sought to understand to why social media based pedagogic enrichment often fails. The insight gleaned is rather contrary to the perceptions about insular, born digital Gen Z's being comfortable interacting in a virtual environment. Surprisingly, it rather paints a picture of resistant students who appear reluctant to use social media for formal, active learning, preferring a more passive, free riding, lurking role, who voice concerns pertaining to privacy, integrity and the appropriation of 'their space'. There is recognition that traditional lecture- driven instruction has less efficacy, but the potential of social media to foster many-to-many, transformational experiences through guided learning has yet to be realised, with limited evidence supporting any material pedagogic shift. In a fast-changing digital field, it is difficult for educators to retain subject currency, a challenge that is exacerbated by generational gaps between head-in-the- sand instructors and digitally native learners, each with different expectations. There is also recognition of the need to ensure that university students are well prepared for the workplace, which likely requires a new sense of pedagogic self, and an expertise shift away from instructor towards guide, mentor and facilitator.

Methodological approach

Convenience sampling was used to identify a diverse group of 11 marketing and marketing-related lecturers and senior lecturers from across UK and ten students from a medium- sized research-focused English University. Students from one of the author's second year undergraduate digital marketing classes were invited to volunteer to contribute their opinions by participating in a one-on-one informal interview. Participation came predominantly from the most engaged, high-performing students. Academic participants, drawn from the author's personal connections made at national pedagogic and marketing conferences, were selected for their extensive (decade or more) instructor experience and for their recent experience of digital tool experimentation. Marketing was considered to be an optimal discipline for research because of the importance and centrality of both digital and social media within its contemporary, dynamic curriculum. Individual interviews were the chosen research methodology over focus groups because they can be more effective at generating wider-ranged themes (Guest et al., 2017). Due to the potential sensitivity of the topic, all respondents were promised and given full anonymity. A comprehensive participant briefing was undertaken by the author prior to commencing all the inteviews, covering all the required ethical disclosures and informing interviewees of the purpose of the research. For those who expressed an interest, the researcher shared a short summary of the secondary and interim primary research findings immediately after the formal interview had been concluded. Faculty participants were invited to share their own experience of digital innovation failures over email but the majority opted for a recorded interview with the author that took place either in person or over the telephone. The ten students, who had all studied digital marketing with the author and responded to a social media invitation, participated in an in-person semi-

structured interview that explored their perceptions of social media and digital tool use in their university learning journey. McGrath, Palmgren and Liljedahl (2019) highlight the importance of developing a rapport and effectively establishing comfortable, trusting interactions between the interviewer and interviewees in qualitative research. The research methodology was designed and implemented in accordance with the author's institutional ethical research policy. Khazaal et al. (2014) note that caution is needed when interpreting studies using self-selecting respondents. This modest scale, qualitative and limited research was never designed to offer up scalable, representative findings. Student participants were given a book voucher by way of compensation for their contribution, in line with contemporary custom for equity and non-exploitation of immaterial labour. Interviews usually lasted between 20 and 40 minutes. Interviews were transcribed manually by the author using an iPhone and wordprocessing package and then analysed thematically, using coloured highlighters and Post-It notes. By linking repeated ideas presented by students and faculty, the emergent themes were then used to aggregate, analyse, and present the research findings.

Findings and discussion

Results are presented in two main sections, starting with analysis of the staff interviews and concluding with insights from the student research.

Staff respondent results and discussion

Reflecting on wide and deep experience across more than ten universities and drawing on a broader understanding of the social media definition (Davis et al., 2012), staff respondents mentioned a number of tools they had experimented with including: blogs, Quizlet, Socrative, Kahoot, Facebook, Google hangout, YouTube, Polleverywhere, Tableau, Photoshop, Google Analytics, Instagram, LinkedIn, Pebblepad, Thales reading lists, and Padlet. Faculty interviews were deliberately concentrated on exploring social media failures and the results are presented using four main themes that evolved from the author's coding process, using coloured highlighter pens and dynamic systematisation of summary Post-It notes. The first three: resistance and the fear of failure, additional preparation time, and limited technology support were found to be in line with Vrasidas and Glass's (2005) findings, familiar change management problems that generations of educational technologists have previously encountered. Given that social media innovations in UK Higher Education are often adopted as non-mandatory, blended enrichment, more unexpected findings are presented in the fourth staff theme, which considers the failure of student engagement.

Student and staff resistance and the fear of failure

One of the primary causes of staff resistance was identified by several respondents as the fear of failure, evidenced by this example telling insight; "Students assume if you don't know what you are doing, they think you are not a very good teacher". Staff were unsure of what technology to use, were fearful of it not working and being made to look stupid, together creating apprehension that had been burnt into their memory by their own and/or colleagues' bad experiences. These findings were very much in line with Hedberg (2011). Operating in

an increasingly marketised UK Higher Education environment, with high fee paying and demanding students, academics perceived that they were not afforded the chance to fail in delivery, they "just had to get it right first time". The fear of complaining behaviours from students was a strong sentiment that came out of several of the interviews, because "if anything went wrong", some students were likely to "act as dissatisfied customers, running, screaming and fussing to figures of authority".

One academic was quite emphatic in stating that, in their opinion, "not all digital native students were actually that tech savvy", struggling when "an application is not as intuitive as Snapchat" and "finding new technology to be really scary". This perspective aligns with Selwyn's (2012) idea of student competencies, spanning a continuum from technophobe to highly skilled professional. Students, it was said, "often possess heavily mediated online digital footprints" and yet they "did not ask questions, did not want to look foolish or a swot asking too many questions in class forums". One particularly academically gifted and self-assured student expressed their anxiety; "you don't want to be flamed by other students in a big forum", highlighting a preference for communicating in smaller, closed groups "where you know everyone". For example, when a group of first years were asked to create a professional job search profile and begin building a network in LinkedIn, some students did not know what LinkedIn was, and the idea of creating a professional persona was an "alien concept to them". It transpired, in follow on questioning, that students were acutely worried that they would "look bad in ten years' time" and had extreme anxiety about "not knowing how to interact" in an adult, business-facing application. One faculty highlighted that this sentiment echoed "social media warnings from their schools and wider media coverage of individuals being called out for undeletable comments and opinions published by their younger and less mature selves". The media regularly carries stories of individuals being "rebuked or worse for historic social media posts".

Twitter, the micro-blogging service that is "popular for its breaking news, community exchanges and political arguments", offers an open text-focussed discussion forum, which can provide a degree of anonymity through self-created user names (dubbed 'handles'). There was a perception by three academic respondents that Twitter use was "popular with some faculty, but for research purposes rather than teaching in class". Several academics highlighted their use of the tool for signposting industry content to students; however everyone reported very limited engagement. Generally, Twitter was not considered to be successful as students were reluctant to learn a new app, and the consensus amongst academic respondents was that the majority of the student body did not end up following faculty accounts, experience that contradicts research by Junco et al. (2011) and Lowe and Laffey (2011). One respondent described their Twitter experiment as "an absolute disaster" and noted several students turned their phones over and flat refused to participate, murmuring "I'm not doing this" demonstrably, citing concerns about being found out at a job interview later in the week. Students, it seemed, did not "appreciate the opportunity to impress potential employers" by crafting a professional social media presence that "highlighted their ability to demonstrate their marketing prowess" and present themselves as "stand out, interesting thinkers".

Time investment for slick delivery

Multiple respondents highlighted the "time and effort" usually required to experiment with even straightforward new social media tools. They signalled that there was often "an awful lot to learn with new technologies to be confidently slick in integrating it into classroom delivery", in agreement with Munoz and Wood's (2015) findings. Evaluating the effort and return, it was just often considered to be "easier not to innovate", not a case of laziness, just "pragmatic resource prioritisation". This issue was not reserved only for faculty, one lecturer, having set a six-minute YouTube video creation project, met resistance from students who felt they had to spend excessive time developing their film production skills. Activity that the students felt lay well outside the credit bearing scope of the assessment, evidenced by this response; "I'm a business student, not a media arts student, you know!". The lecturer reflected that the non-credit bearing effort required to travel down the technology learning curve somewhat detracted from the assignment content, and noted that "where new technical skills are required, these should be included in the learning hours expectation and rewarded explicitly in the marking criteria".

Three respondents shared similar stories related to inexperienced experimentation with word cloud tools (such as Answer Garden and Polleverywhere) that allow students to write what they want, anonymously, onto the projected screen with the objective to encourage wider, in-class engagement with open questions. In some, but not all, instances several students wrote offensive content, including sexist remarks and used inappropriate language. Platform anonymity, whilst potentially overcoming student fears of being flamed or shamed, was found to be problematic, notably with less mature students, and highlighted issues of effectively policing boundaries, as identified by Beetham & Sharpe (2013). One staff interviewee decided "never to use the tool again", whilst another lecturer said "I went home and cried". Yet another saw students' post "super safe, sweet platitudes", resistant, task avoidance behaviour that sought to "avoid embarrassment, politely". These examples illustrate situations where subversive student groups failed to address the set task meaningfully, resulting in a sub-optimal learning engagement that generated faculty feelings of failure. Reflection on these dissatisfying outcomes identified inexperience and a lack of sufficient preparedness as key factors. Innovative faculty often had missed crucial, real time filter functionality to block frivolous participant contributions and establish firm ground rules upfront with students, to establish a shared understanding of what constituted appropriate responses. These findings align with Vrasidas and Glass's (2005) research.

Technical challenges and a perception of limited support

Some staff discussed their often positive engagement enhancing experience, using clickers, physical and virtual devices, that allowed students respond to lecturer questions (often using multiple choice or numerical inputs) and see aggregated, anonymised cohort responses on a shared screen. It was found, however, that there were issues with the logistics of physical clickers, "not being delivered to the learning space in a timely fashion", hub connectivity, insufficient working units, and "late arriving students not picking up devices". Additionally, with virtual clickers (students' own mobile devices) occasionally not working because of low

battery power or a full memory. Aligned with Fose and Mehl (2007), one lecturer commented that whilst gamification could "energise the learning environment and bring a sense of fun", some students she had worked with felt polls and quizzes were "trivial and rather beneath them". Here, follow-on discussions highlighted a perception that US College programmes might typically benefit from larger, multi-person teaching teams. In-class teaching assistants can support their professors who were able to "triage technical set up issues", but this is not typical in the UK

Higher Education sector, where solo staffing is the norm. UK academics are usually required to manage technology niggles, often necessitating individual attention, whilst also trying to orchestrate an effective learning rapport with the whole student body. This was identified as being "significantly more demanding than merely demonstrating tool competence" as identified by McLoughlin and Lee (2010). Where leaders of large modules were responsible for coordinating other staff members to implement innovations, with diverse, individual capabilities and motivations to embrace novel ways of working, the challenges of teaching-the-teacher multiplied further, with a "pragmatic tendency to level down rather than up".

Many respondents indicated that they did not know who to ask for help and advice when investigating social media and wider digital innovations. Several identified a lack of trust in the technology infrastructure to be able to deliver learning encounters with confidence, and difficulties in getting specialist software loaded onto campus computers for students to access in class and beyond; "we just haven't supported it properly". A common refrain was noted, that often, learning technologists were too technology-led, and not teaching-led. An interesting idea was highlighted by several respondents, who indicated that they tried to use a pedagogy (not tech) first orientation, rather than doing something digital for the sake of doing it; "I try to think what tech will solve my problem or augment my teaching".

Not all students have access, or choose to have access, to every social media tool, for example Chinese students were found to prefer Weibo over Facebook, which is blocked in China. This problem of non-universality is a significant issue, with staff bound to ensure equity of access, but challenged by finding tools that work for everyone without taking onerous responsibility for learning to use multiple tools and duplicating activities across multiple platforms.

Disappointing student engagement

When digital tool use forms part of a mandatory student assignment, engagement issues were less apparent. Most of the examples of failure discussed by faculty members involved enrichment experimentation (Johnson & Jones, 2010) that was not obligatory, often part of a deliberate pedagogic design, where students were given the choice to participate or not. Implementing technology-based innovations in high stakes, summative assessments was considered to be "ultra-high risk". However, in something of a Catch-22 situation, students were found to be all too often "unwilling to engage in tasks unless they were mandatory", faculty respondents noted that take up was "significantly compromised unless course credit was attached". One example, of a student-authored blog, was found to drive engagement only if access was required during class, "if you expect to see comments beyond class, it doesn't happen", resulting in advice not to "bother with long blogs, students want short things".

Disappointing iterations of innovations where teacher effort was high but accompanied with low student engagement were commonplace. Unsurprisingly therefore, several respondents expressed feeling rather jaded. For example, one lecturer spent a whole day creating a 30-minute video to replace a snowed off lecture, to find that students had "not watched the video". Two respondents gave the example of introducing the Talis online reading list system, populated with a range of useful content, including video tutorials, but again found "very low student take up", perhaps because there were just too many assets on the virtual learning environment, and due to "confronting students with too much diverse, whizzy tech".

Facebook use was found to be a quite negative experience over all. It was felt by several respondents that students conceive "Facebook as their place and did not want academics lurking or moving into that space". Reflections such as,"I don't think they would interact with me to be honest if I was in a Facebook group" and "I've been astonished, shocked and horrified that nobody engages with my professional Facebook page", typifying faculty perspectives, but in line with Al-Bahrani and Patel's (2015) suggestion that boundary-breaking Facebook is more intrusive.

Instagram was only mentioned by a single respondent who found it engaged induction students, using a self-guided outdoor treasure hunt that required students to capture images that were shared by the class using a hashtag. But, in a follow-on encounter, only two or three students participated from a cohort of 100. In agreement with McLoughlin and Lee (2010), one faculty respondent cited student boundary feedback; "That's my space, I don't want you in this room" and "I don't want to post that". Many students, it seems, did not want to associate their studies with their online personas, because it might downgrade their "cool factor" and "peer reputation", and result in "lost followers".

Student interview findings

During interviews, students were able to recall unaided a wide range of digital and social media tools utilised in their teaching and learning including Moodle forums, email, Google docs, Twitter, LinkedIn, Facebook, Whatsapp and even one mention of the dating service Tinder. However, examples, although varied, were sparse, rather confirming Tess's (2013) view that pedagogic social media use has yet to be widely adopted across the curriculum, albeit drawing only on the experience of students from a single institution. Student interaction in social media appears to concentrate on "sharing humour" and "information about assessments". Many respondents divulged their predilection for lurking, Selwyn's (2012) one-way passive content consumption behaviour, watching but not posting. However, analysis of interview transcripts did not support Blankenship's (2011) omni-present social media assertion. Instead students, reflecting their particular institutional experience, expressed views such as; "we don't use social media that much in our course", and "platforms are not the place for university learning", but also providing some contradictory sentiment; "some platforms are for learning, there is everything on Facebook, interesting articles and documents".

Despite the ubiquitous rhetoric that digital native students are always connected, respondents opined; "I don't really go there [Facebook], I don't really use it that much anymore", "I feel it's dead now, people are on it, it's just not the space for me and most of my friends", "not everyone is on Facebook", and not all group members "have Facebook or claim they can't find it". This evidence tends to support the widely reported youth trend away from Facebook and towards Instagram and other more visual platforms (Alhabash & Ma, 2017). Interviewed students claimed to use social media to collaborate with each other and for assigned tasks, but there were alternative perspectives also presented, for example; "I'm a private person,… I am not 100% comfortable using social media, I prefer to ask course mates in person", evidence that highlights that participation is not always willing or congenial, reinforcing Munoz and Wood's (2015) view. The reason for low levels of voluntary engagement with instructor-facilitated social media was attributed to feelings of anxiety, students did not want to "trip up", "say something wrong", or "offend someone".

Discussing a failed experimental engagement with Twitter, students suggested it was caused by peer anxiety, nervousness and a lack of familiarity with the app, one respondent believed students were shy and did not want their tweets to be read out loud in class, perhaps because social media is "more comfortable when it's just students". When asked to develop a LinkedIn profile as first years, notably with no course credit, several respondents indicated that they did not complete the voluntary task. Having then not used LinkedIn for two years, one job-hunting finalist found it to be "quite cold, but I now like it, it's so professional you hardly see an emoji". Student inhibition, to be wary or cautious, might be explained by the observation that in- person embarrassment fades over time, but "online things are permanent, even if you delete it after three seconds, it's still there, someone may have taken a screen shot and shared it with their friends. If you post something there is no going back" - echoing Moran et al's (2011) integrity and privacy concerns. Educators should note student heterogeneity, in line with Selwyn's (2012) inequitable socio-demographic findings, and crucially that not every student is active in every platform, and that many are very cautious about their privacy and profoundly risk averse.

Students on peer connectedness

In discussing the digital tools that marketing respondents used amongst themselves for group work, students cited Facebook Messenger, and Google docs (valued for its simultaneous, virtual editing) most often, with Whatsapp and email also less frequently mentioned. Facebook Messenger, which has meeting coordination and document sharing functionality, was a "first port of call" because it was easy to find group members by name, whilst Whatsapp required more sensitive sharing of telephone numbers, which was not always desirable, again echoing Moran's (2011) concerns for privacy and integrity. Wider social media groups were used mainly for "questions about exams", "selling used books" and "flat shares", with several respondents stating that they had "become tired of the banal group chat" found there.

When asked why students did not engage more in the more public, student-facing social media environments, explanations included that students did not want to: "share with people they don't know", "look stupid and be made fun of", "be judged on posts", "be the only one

posting", and finally "be flamed or called out". In describing the finalist's 200-member strong, Facebook Messenger group (perceived to be a faculty free zone), one participant believed it to have been "quite fundamental in helping many students pass their degree" thanks to "effective and timely information sharing". When a lecturer might take two or three days (well within the institutional response time policy) to reply to an emailed question, crowd sourcing a problem to peers might take just ten minutes. Clearly signalling a 'be here now' generational preference for instant gratification from a less authoritative source over the perhaps more veracious, but less instantly responsive faculty. The popularity of the Messenger application is potentially due to its user interface which "feels like you are replying to friends, and then you are like, OMG, there are actually 200 people in this chat, but it feels a lot smaller".

Student – staff connectedness

Students voiced uncertainty around "how they should interact" with faculty, unsure of the social etiquette. University adult learning marks a transition from school, where sensible child protection rules prohibited pupil- teacher friendships. "Social media feels like a lightly policed space" and connecting with a lecturer, some said, can make it "feel like those boundaries are put back" according to Beetham and Sharpe (2013). Respondents also highlighted student apprehension of "contradicting staff opinions" and anxiety around the "potential consequences" of a memorable disagreement. Supporting Elliott's (2011) finding that students valued an enduring, personal relationship with their university educator, several, albeit self-selected, respondents expressed that they liked connecting with staff on social media, choosing LinkedIn for acquaintances but linking on Facebook only with faculty who they found a 'connection' with. Although one student was worried about the "potential negative perception" that could be created by their "missed class again" posts. In accordance with Hargittai (2008) there were, however, several opposite perspectives voiced, such as: "my other half categorically won't connect with staff" and "I don't connect with members of staff", perhaps also challenging the utility of Lohman's (2016) contention that professors are expected to utilise social media tools as a matter of course in their teaching. Some students stated that they "only accepted invitations to connect from staff in LinkedIn", which was considered to be the more appropriate venue for teacher interactions. One participant felt flattered to be invited, as they felt it recognised their class contribution, whilst another student had strategically connected with three staff members to be able to "keep in touch for their future career" and having "someone to count on" in the final year. Another more confident student said "I connect actively with staff on LinkedIn, particularly where there is a good connection, it is easy to ask questions, email is too formal", highlighting perhaps an uncomfortable impasse, Roblyer et al. (2010) noted staff preference for traditional platforms like email.

Perspectives on students connecting with faculty over Facebook were significantly less positively evidenced, reinforcing Taylor et al.'s (2012) findings, by refrains such as: "no, I don't mind students, but not teachers, it's about my family, my holidays", "awkward party pictures" and "it's a lot more personal, fun and photos, drunk Friday nights out". However, in accordance with Dearbone (2014) and Elliott (2011), some respondents were more open,

interested to discover teachers as they 'really' are, explaining that for them it very much depended on the nature of the relationship with the teacher. One student opined that "the relationship had to go with the social media" and they found it easier to talk via Facebook than email, "that's more my generation". The majority of interviewees were not active Twitter users, finding the platform "difficult to sign up for and use", an outcome that is very much in harmony with the new technology resistance observed by Munoz and Wood (2015). Twitter was, however, found to be useful for breaking down barriers, following guest speakers, offering interesting content that "wasn't super cringey or too, like, in our faces" and considered best for a constant pour of information for assignment assistance. Evidence found in this study supported the divergent perspectives on student appetite for the academic appropriation of social media channels (spanning Taylor et al., 2012 to Dearbone, 2014) but perhaps at the same time supporting Thayne and Cooper's (2014) contention that social media can be a trust and bond enhancing catalyst for some.

One commuter student found the novel, one off virtual lecture week, which utilised the virtual discussion forum, to be a very positive experience, suggesting that "higher than usual levels of student engagement were observed". They believed this was a function of the computer-mediated 'shy boundary' which allowed "brave screen warriors to take their own time and participate with an effective embarrassment filter". Students were unanimously categorical in their rejection of both Snapchat and Instagram for staff connections, both recognised as being "just not the place", "I can't see anything professional" and "it's just pictures" supporting McLoughlin and Lee's (2010) notion of resistance to the invasion of their own space.

Conclusion: Why do digital teaching innovations fail?

In seeking to understand why digital pedagogic innovations fail, four themes emerged from staff interviews; resistance and the fear of failure, the need for additional preparation time, limited technology support and disappointing student engagement. Essentially research insight that presents a picture of digital pedagogic innovation, from a staff perspective, as a high stakes, time intensive activity that is insufficiently supported by both universities and the student body. Themes identified from trying to understand student perspectives on digital tool and social media use at university were purpose, boundaries, anxiety and social media preferences. Students ascribed diverse value and notably purpose to different platforms, identifying some platforms as private spaces for close friends and family only, where faculty were not welcomed. Many were not wholly convinced about the merits of using social media for formal university learning, although a variety of tools were found to be helpful for beyond class groupwork collaboration.

Whilst comfortable engaging with faculty in less intrusive (and less popular) professional applications, such as Twitter and LinkedIn, privacy boundary concerns were identified by many in Facebook and unanimously with Snapchat and Instagram, notably when used for sharing more personal content. Social anxiety concerns highlighted included: the perceived fear of hostile responses, and judgement from peers, alongside concerns about the risk of future, career limiting embarrassment caused by everlasting posts. The research also highlighted that not every digitally native student was present and/or active even in the more

popular social media platforms. Put together, these themes might reinforce Selwyn's (2012) finding of divergent perspectives and perhaps this nuanced complexity helps explain the dearth of effective digital pedagogic strategies that has been signalled by Roberts and Micken (2015).

An important insight from this research is the need to consider the student body not as a homogeneous digital group (Hargittai, 2008), and to avoid the unhelpful narrative of technophobic instructors educating tech-savvy digital natives. But, rather as Selwyn (2012) highlights, to embrace diversity and the value in consensual collaboration, particularly in relation to the choice of social media platform(s) and by offering multi-channel, opt-in choice. Empowering students to choose how and where they engage recognises the importance and heterogeneity of public-private boundaries, and the degree to which each individual student is more open, or inhibited, to contribute their ideas in a 'forever' social media record.

Marketing instructors may wish to consider the potentially negative, controlling impact of their own presence in student- facing social media and how this might inhibit student learning (Rambe & Bere, 2013). Operating as a guide-on- the-side lecturer (King, 1993), it may be appropriate to foster self-directed groups who make their own, private choices for collaborative social media spaces located comfortably beyond the gaze of faculty.

References

Al-Bahrani, A., & Patel, D. (2015). Incorporating twitter, instagram, and facebook in economics classrooms. The Journal of Economic Education, 46(1), 56-67.

Alhabash, S., & Ma, M., (2017). A Tale of Four Platforms: Motivations and Uses of Facebook, Twitter, Instagram, and Snapchat Among College Students?. Social Media+ Society, 3(1), https://doi.org/10.1177/2056305117691544

Beetham, H., & Sharpe, R. (2013). Rethinking pedagogy for a digital age: Designing for 21st century learning. Routledge. https://doi.org/10.4324/9780203078952

Blankenship, M. (2011). How social media can and should impact higher education. The Education Digest, 76(7), 39-42.

Buzzard, C., Crittenden, V. L., Crittenden, W. F., McCarty, P. (2011). The use of digital technologies in the classroom: A teaching and learning perspective. Journal of Marketing Education, 33, 131-139. https://doi.org/10.1177/0273475311410845

Carr, N., (2010, May 25). The web shatters focus, rewires brains. Wired. https://www.wired.com/2010/05/ff-nicholas- carr/

Crittenden, V., & Crittenden, W. (2015). Digital and social media marketing in business education: Implications for the marketing curriculum. Journal of Marketing Education, 37(2), 71-75. https://doi.org/10.1177/0273475315588111

Dabbagh, N., & Kitsantas, A. (2012). Personal Learning Environments, social media, and self-regulated learning: A natural formula for connecting formal and informal learning. The Internet and higher education, 15(1), 3-8. https://doi.org/10.1016/j.iheduc.2011.06.002

Davis III, C. H., Deil-Amen, R., Rios-Aguilar, C., & Gonzalez Canche, M. S. (2012). Social media in higher education: A literature review and research directions. The University of Arizona and Claremont Graduate University, 8.

Dearbone, Ryan, "Relational Development, Self-Disclosure, and Invasion of Privacy: College Students and Teachers as Facebook Friends" (2014). Masters Theses & Specialist Projects. Paper 1349. http://digitalcommons.wku.edu/ theses/1349

Duffy, K., & Ney, J. (2015). Exploring the divides among students, educators, and practitioners in the use of digital media as a pedagogical tool. Journal of Marketing Education, 37(2), 104-113. https://doi.org/10.1177/0273475315585826

Elliott, A. (2011). Equity, pedagogy and inclusion. Harnessing digital technologies to support higher education access and success. The Journal Of Community Informatics, 6(3), 1-9. http://www.ci-journal.net/index.php/ciej/article/view/751

Evans, C. (2014). Twitter for teaching: Can social media be used to enhance the process of learning?. British Journal of Educational Technology, 45(5), 902-915.

Espuny Vidal, C., González Martínez, J., Fortuño, M. L., & Gisbert Cervera, M. (2011). Actitudes y expectativas del uso educativo de las redes sociales en los alumnos universitarios. RUSC. Universities and Knowledge Society Journal, 8(1), 171- 185.

Fose, L., & Mehl, M. (2007). Plugging into students' digital DNA: Five myths prohibiting proper podcasting pedagogy in the new classroom domain. MERLOT Journal of Online Learning and Teaching, 3(3), 277-287.

Gikas, J., & Grant, M. M. (2013). Mobile computing devices in higher education: Student perspectives on learning with cellphones, smartphones & social media. The Internet and Higher Education, 19, 18-26. https://doi.org/10.1016/j.iheduc.2013.06.002

Gouseti, A. (2010). Web 2.0 and education. Learning, Media and Technology, 35(3), 351–56.

Guest, G., Namey, E., Taylor, J., Eley, N., & McKenna, K. (2017). Comparing focus groups and individual interviews: findings from a randomized study. International Journal of Social Research Methodology, 20(6), 693-708.

Haig, M. (2005). Brand failures: The truth about the 100 biggest branding mistakes of all time. Kogan Page Publishers. Hargittai. E. (2008) Whose space. Journal of Computer-Mediated Communication, 13(1), 276–297.

Hedberg, J. G. (2011). Towards a disruptive pedagogy: Changing classroom practice with technologies and digital content. Educational Media International, 48(1), 1-16.

Hirsch, E. (2012). The paradox of design entrepreneurship: are you a risk voyeur?. Design Management Review, 23(3), 86-87. https://doi.org/10.1111/j.1948-7169.2012.00201.x

Johnson, K. A. (2011). The effect of Twitter posts on students' perceptions of instructor credibility. Learning, Media and Technology, 36(1), 21–38.

Johnson, P. M., & Jones, S. K. (2010). Beyond the banner: Teaching powerful creative techniques in digital marketing. Journal of advertising education, 14(1), 7-14.

Junco, R., Heibergert, G. & Loken, E. (2011). The effect of Twitter on college student engagement and grades. Journal of Computer Assisted Learning, 27, 119–132.

Karl, K. A., & Peluchette, J. V. (2011). "Friending" professors, parents and bosses: A Facebook connection conundrum. Journal of Education for Business, 86, 214-222.

Kassens-Noor, E. (2012). Twitter as a teaching practice to enhance active and informal learning in higher education: The case of sustainable tweets. Active Learning in Higher Education, 13(1), 9-21. https://doi.org/10.1177/1469787411429190

Khazaal, Y., Van Singer, M., Chatton, A., Achab, S., Zullino, D., Rothen, S., ... & Thorens, G. (2014). Does self-selection affect samples' representativeness in online surveys? An investigation in online video game research. Journal of medical Internet research, 16(7), 1-10. https://doi.org/10.2196/jmir.2759

King, A. (1993). From sage on the stage to guide on the side. College teaching, 41(1), 30-35.

Lee, M. & McLoughlin, C. (2010). Web 2.0-based e-learning.

Hershey PA, Information Science Reference

Lewis, K., Kaufman, J., & Christakis, N. (2008). The taste for privacy: An analysis of college student privacy settings in an online social network. Journal of Computer-Mediated Communication, 14(1), 79-100. https://doi.org/10.1111/j.1083-6101.2008.01432.x

Lohman, L. L. (2016). Generation ZZZ: Keeping students engaged in the classroom (beyond their phones!). Marketing Management Association Annual Conference Proceedings 183-184.

Lowe, B. & Laffey, D. (2011). Is Twitter for the birds? Using Twitter to enhance student learning in a marketing course? Journal of Marketing Education, 33(2), 183–192.

McGrath, C., Palmgren, P. & Liljedahl, M. (2019). Twelve tips for conducting qualitative research interviews. Medical Teacher, 41(9), 1002-1006.

McLoughlin, C., & Lee, M. J. (2010). Personalised and self regulated learning in the Web 2.0 era: International exemplars of innovative pedagogy using social software. Australasian Journal of Educational Technology, 26(1), 28-43.

Moran, M., Seaman, J., & Tinti-Kane, H. (2011). Teaching, learning, and sharing: how today's higher education faculty use social media. Babson Survey Research Group.

Muñoz, C. L., & Wood, N. T. (2015). Update status: The state of social media marketing curriculum. Journal of Marketing Education, 37(2), 88-103.

Prensky, M. (2001). Digital natives, digital immigrants part 1. On the horizon, 9(5), 1-6. https://doi.org/10.1108/10748120110424816

Roblyer, M. D., McDaniel, M., Webb, M., Herman, J., & Witty, J. V. (2010). Findings on Facebook in higher education: A comparison of college faculty and student uses and perceptions of social networking sites. The Internet and higher education, 13(3), 134-140. https://doi.org/10.1016/j.iheduc.2010.03.002

Rambe, P., & Bere, A. (2013). Using mobile instant messaging to leverage learner participation and transform pedagogy at a South African University of Technology. British Journal of Educational Technology, 44(4), 544-561.

Richmond, N., Rochefort, B., & Hitch, L. (2011). Using social networking sites during the career management process. In higher education administration with social media (pp. 147- 164). Emerald Group Publishing Limited.

Roberts, S. D., & Micken, K. S. (2015). Marketing digital offerings is different: strategies for teaching about digital offerings in the marketing classroom. Journal of Education for Business, 90(2), 96-102. https://doi.org/10.1080/08832323.2014.988200

Selwyn, N. (2012). Social media in higher education. The Europa world of learning, 1-10.

Shaltoni, A. M. (2016). E-marketing education in transition: An analysis of international courses and programs. The International Journal of Management Education, 14(2), 212- 218. https://doi.org/10.1016/j.ijme.2016.04.004

Sharples, M., de Roock, R., Ferguson, R., Gaved, M., Herodotou, C., Koh, E., ... & Weller, M. (2016). Innovating pedagogy 2016: Open University innovation report 5. Institute of Educational Technology, The Open University.

Siemens, G., & Weller, M. (2011). Higher education and the promises and perils of social network. Revista de Universidad y Sociedad del Conocimiento (RUSC), 8(1), 164-170.

Taylor, S. A., Mulligan, J. R., & Ishida, C. (2012). Facebook, social networking, and business education. American Journal of Business Education (AJBE), 5(4), 437-448.

Tess, P. A. (2013). The role of social media in higher education classes (real and virtual)–A literature review. Computers in Human Behavior, 29(5), A60-A68.

Thayne, M. & Cooper, G. (2014). Digital learning environments and collaborative pedagogy: Media Culture 2020. Creating the difference: Proceedings of the Chi Sparks 2014 Conference, pp. 104-107.

Thomas, M. (2011). Technology, education, and the discourse of the digital native. Deconstructing digital natives: Young people, technology, and the new literacies, 1-11.

Tuten, T., & Marks, M. (2012). The adoption of social media as educational technology among marketing educators. Marketing Education Review, 22, 201-214. https://doi.org/10.2753/MER1052-8008220301

Vrasidas, C., & Glass, G. V. (2005). Preparing teachers to teach with technology. IAP.