# SEDA Final Report, July 2017

The intersections between digital fluency and teaching excellence: case study-based and media-rich explorations with HE tutors

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The intersections between digital fluency and teaching excellence: case study-based and media-rich explorations with HE tutors

## Dr Christine Smith and Dr Simon Lygo-Baker

## 1. Introduction

This report presents a summary of a small, mixed-method research project, funded by the Staff and Educational Development Association (SEDA). This collaborative project was undertaken by educational developers based at the Universities of Suffolk and Surrey. The project focused on examining relations between *digital fluency* and *teaching excellence* within the Higher Education (HE) sector, primarily through the development of a set of rich and elaborate case studies of academic tutors.

We explored HE tutors’ conceptions of teaching excellence, with particular attention to their knowledge and skills in the application/use of digital learning and teaching resources. We have been interested to know more about tutors’ perceptions of digital fluency ie in their ease and confidence in the design, use and application of technology enhanced learning (TEL) within their practices as academics, but our approach has foregrounded the tutors’ espoused pedagogical beliefs and practices in teaching and support of students’ learning. We suggest this study is particularly opportune, given the development and implementation of the UK’s Teaching Excellence Framework (TEF).

The project was a qualitative study exploring the attitudes, conceptions and practices of eight HE tutors, working in two institutions (University of Suffolk and University of Surrey). We have worked with four tutors at the University of Suffolk, and four tutors at the University of Surrey. Within each of the institutions, we have worked with one tutor associated to each of four disciplinary clusters: STEM; Arts and Humanities; Health and Social Care; and Social Sciences.

In addition, we conducted an open online survey of students at the two institutions, to elicit their views on the teaching and support of their learning as experienced during their studies. In the later sections of this report, we present the case studies with the HE tutors, followed by the findings of the student survey. But first we provide the background to this project and our methodological approach.

**1.1 Project background and contextual setting**

The project has centred on active collaboration between two very different Higher Education Providers (HEPs) offering opportunities for comparison and to identify commonality as well as distinctive differences. We sought to identify implications for educational development: by contributing to understanding around the intersections of digital literacy with teaching excellence across four disciplinary clusters. This study has taken us beyond our immediate practice as educational developers, and is timely and opportune to HE especially as the Teaching Excellence Framework is implemented and further developed across the UK HE sector.

The University of Suffolk and the University of Surrey are in many ways sharply contrasting higher education providers. However, both share strong interests in tutors’ digital fluency, linked to their ease and confidence in use of digital tools and environments, *and* in relation to professional development towards the notion of ‘teaching excellence’. Within this study, we have foregrounded the importance in conceptualising teaching excellence as linked to digital fluency, but in nuanced ways: eg across contexts of learning; as well as in individualised and/or programme-based approaches. This has enabled us to acknowledge teachers’ practical wisdom as situated, social, dynamic, and contested. We also recognise that individual teachers’ conceptions of their teaching and working practices need to be understood within the frame of their own sense of professional identity, hence each of the case studies we present in this report, is particular to the individual, highly specific *and* rich in thick description (Geertz, 1973).

### 1.2 Analytical framework

The analytical frame for the project was shaped by an initial desktop literature review, focusing on the constructs of eg: teaching excellence; teachers’ digital literacy and digital fluency; digital capabilities and competencies. In the following section below, we provide a brief summary from the literature review activity.

## 2. Literature Review

## 2.1 Conceptions of teaching excellence in the literature

We are aware of ambiguities and contentions around notions of *teaching* excellence, as well as *teacher* excellence, and the relationships of these with and to student learning (eg Kreber, 2002; Skelton, 2005; Gunn & Fisk, 2013). This has become particularly pertinent given the focus on how ‘teaching excellence’ might be assessed in a Teaching Excellence Framework (THES, 2015).

Gunn and Fisk argue in policy terms, for developing a shared repertoire around teaching excellence and teacher excellence, stating

*‘teaching excellence embraces but is not confined to teacher excellence and needs to fulfill the requirements of the range of internal and external groups invested in facilitating excellent learning outcomes’.* (2013, p7)

We have structured our review of the literature around teaching excellence between three dimensions: (i) *personalised conceptions* *of teaching excellence*, associated with the individual tutor; (ii) *conceptions associated to the learning context* ie the course, programme, department or institutions; and (iii) *conceptions focused around students* and their learning.

However, we were also mindful, given the focus of this project on the intersections between teaching excellence and digital fluency, to examine literature that explicitly considers the role of digital competency, literacy or fluency, in relation to teaching or teacher excellence. We point to literature in this regard in the final section of this literature review section.

### 2.1.1 Personalised conceptions associated with the individual tutor

Personalised conceptions of teacher excellence can be presented as characteristics and/or practices of an individual tutor, in creating the conditions for optimal learning and for learning to thrive. We acknowledge excellence in teaching might be made manifest in various and varied ways by the tutor, and indeed Elton (1998) proposed excellence should be considered in teams and not individuals. Within our review, we have also taken the liberty to consider those writing of the ‘expert teacher’ in offering their commentary, is helpful to us, there being close association and similarity with the notion of an excellent teacher.

Shulman (2004) suggested the expert teacher as one who not only knows the subject matter being taught and knows how to teach, but also knows how to transform the particular subject being taught into terms that students can understand. Meanwhile, Kreber (2002) connected expertise to excellence in discussion of ‘scholars of teaching’, as being both excellent teachers and expert teachers, in being scholarly by sharing their knowledge and advancing knowledge of teaching and learning in ways that can be peer reviewed. Skelton (2005) identifies that there are ‘psychologised’ understandings of teaching excellence, which focus primarily at the micro level on transactions between individual teachers and students.

Kember (1997) offered five conceptions of teaching as:

1. Imparting knowledge
2. As transmitting structured knowledge
3. As an interaction between teacher and student
4. As facilitating understanding on the part of the student
5. As bringing about conceptual change and intellectual development in the student

Glasner (2003) highlighted a lack of clarity in use of the term ‘excellence’ but offered broadly consensual themes in the tutor being: learner centred/learner focused; informed; motivational and possibly inspirational. Glasner further suggests, in excellence at the individual level, there are requirements for:

1. Learning from others and learning about themself
2. Understanding of the institutional context, so learners can be engaged, inspired and motivated
3. Resources and opportunities provided by the institution are captured and effectively utilised
4. Reflection is promoted
5. An active and imaginative engagement with the institutional mission and with students

Meanwhile, Weavers (2003) described the excellent teacher as one who is:

* Maximising each student’s learning
* Utilising a wide range of teaching and learning approaches and supporting materials
* Encouraging students to experiment with different learning
* Aware of specific student needs eg disabilities
* Actively seeking feedback from students and using that to critically analyse their teaching and taking actions to improve
* Communicating with students on changes
* Communicating with peers in the teaching community of the HEI and beyond
* Seeking to improve teaching for oneself and that of others eg via mentoring

In a small-scale study (Burden, Bond & Hall, 2006) groups of staff and students were asked to identify dimensions of excellent teaching. The staff suggested five key characteristics in tutors as:

1. Enthusiasm and/or inspiration
2. Subject-specific knowledge
3. Communication and interpersonal skills
4. Knowing how people learn and how teaching works
5. Being organised, reliable and good at routine

Whereas the students in this study identified four aspects for good tutors as:

1. Use of a range of strategies/techniques
2. Enthusiasm/inspiration
3. Teaching for ‘learning that lasts’
4. Knowing how people learn and how teaching works

Perkins (2008) suggests pursuit of teaching excellence might be characterised as possessive, performative and proactive. Possessive is defined as something we have, performative as measured and controlled, while proactive is associated with tutors applying knowledge with understanding, aligning teaching to originality and insight, and with display of reflective abilities.

We note too there are confusions between excellence in teaching and ‘good enough’ teaching (eg Gibbs & Habeshaw, 2002; Glasner, 2003). Gunn and Fisk (2013) identified a lack of clarity around the distinctions between what might be a threshold quality of teaching and teaching excellence. They further suggested there was a lack of sophistication in conceptualisations of teaching excellence to accommodate the changing expectations and roles undertaken across an academic career. Furthermore, they argued there is a lack of representatively diverse conceptualisations of teaching excellence to mirror the differentiated nature of the HE sector, thus creating ‘*a normative universalising of teaching excellence*’ (p7).

Cashmore, Cane & Cane (2013) suggest a need for a flexible framework of criteria for teaching excellence aligned to levels of seniority and stages in an academic career. Similarly, HELTSA (2015) assert:

*‘An excellent teacher is a reflective practitioner who has grown more effective over a number of years in relation to increasing knowledge of teaching and learning, experience in teaching and the facilitation of learning, and systematic observations of what happens in the classroom with a view to improving student engagement and learning outcomes. An excellent teacher has a clearly articulated teaching philosophy informed by educational theory and appropriate for the university context*.’

The interest in excellence has also mirrored the new and more demanding tasks of academic leadership in HE, to the extent one might argue there is a movement to conceive excellence in teaching away from a focus on the ‘doing’ of teaching, towards it being about leading and managing change. This concurs also with those distinctions being made between conceptions of good enough teaching *and* excellence in teaching, in determining that any claim of excellence by a tutor becomes commensurate with evidence of additional competency/commitment. Within this there appears a potential conundrum. Situated within the frame offered by the notion of a higher education, based around the plurality of viewpoints and approaches which can be celebrated there is potentially a limit brought by notions that threaten to ring fence definitions of excellence. This latter approach that surrounds notions of managing change through external sets of frameworks appears to work towards a reductionist approach that rather than allows expansion of ideas acts as a potential funnel which narrows down the definitions, rather than celebrating the difference that may actually exist.

Evidence of such plurality is evident in the literature. Gunn and Fisk (2013) identified emerging themes in the literature since 2007 (ie after the CHERI 2007 report) in which teaching excellence was seen as:

* Active research-teaching activities (Brew, 2007; Jenkins & Healey, 2007)
* Dynamic student engagement and notions of student partnership
* Assessment for learning as well as assessment of learning (Colley & Healey, 2012)
* Flexibility of provision and access to provision (Nichol *et al* 2012)
* Scholarship of Teaching and Learning (SoTL) and the need to be evidence-based (Gibbs, 2007; Kreber, 2013) with examples of SoTL involving students seen as ‘particularly’ excellent (Gale, 2007)
* Leadership, both hierarchical and distributed

Skelton (2009) suggested excellence involves the reflexive development of a personal teaching philosophy and should be conceived as part of the whole of academic life, reflecting the values outlined within SEDA (SEDA, 2014). There is a danger that within these attempts to bring meaning that each new definition is seen as a refinement and not an alternative perspective which recognises the richness.

### 2.1.2 Conceptions associated to the learning context

The literature reviewed also pointed to debates around teaching excellence as attempts to promote institutional environments that give (greater) prominence to learning and teaching as integral aspects of excellence in education. For example, HEFCE (1995, p2) offered 17 characteristics associated to excellent education:

1. Subject aims and objectives well understood by teachers and students and achieved
2. Broad and flexible curricula to match the aims and objectives and informed by contemporary scholarship and research
3. Programmes of study that enable students to develop subject and transferable skills
4. Well qualified and committed staff whose teaching is underpinned by scholarship and research
5. Clear commitment to good teaching, staff development promoting good teaching and learning
6. A range of teaching approaches relevant to the learning objectives
7. Academic and pastoral arrangements well matched to course structure and the nature of the student intake
8. Clear course documentation from induction to graduation
9. Methods of assessment relating to the learning objectives with timely and appropriately detailed feedback
10. Active systems for gathering and considering student feedback and taking action on feedback
11. Means of gathering, considering and responding to external opinions eg from external examiners, PSRBs, etc
12. Establishing and effective arrangements for reviewing provision
13. Effective links with industry and commerce contributing to curriculum, good teaching and development of transferable skills
14. Constructive relations between students and staff
15. Well stocked and managed resources
16. Good access to learning resources
17. Suitable and sufficient teaching and social accommodation

According to the Higher Education Academy’s report: *Promoting Teaching: a benchmarking guide* (HEA, 2014), evidence to accord with the contextual and institutional perspective in determining teaching excellence, might be found in relation to the following seven aspects:

1. *Impact on students* from eg a tutors’ teaching philosophy; teaching/course evaluations; student learning outcomes
2. *Staff development* eg in tutors’ teaching preparation and qualifications; in attending teaching-related workshops
3. *Curriculum development* eg in tutors’ development of resources, subject/course developments; engagement in curriculum review; innovation; development/contribution to textbook
4. *Peer evaluation/recognition* eg from peer review; teaching awards/citations; peer evaluation of curriculum; referee reports
5. *Scholarship of teaching and learning (SoTL)* eg in statements of scholarship direction; application of a scholarly approach; peer-reviewed publications; being a presenter/workshop leader; gaining grants
6. *Teaching:research nexus* eg from tutors’ undergraduate research engagement; in research supervisions
7. *Teaching leadership* eg tutors’ management role; contributions to committees/reviews/policy; mentoring roles; formal teaching leadership roles; external leader/reviewer/advisory roles

### 2.1.3 Conceptions focused on students and their learning

Excellence in teaching has also been defined in terms of the students themselves and the consequences for student learning, in enabling the accommodation of a variety of approaches to learning among the student body. Gibbs and Habeshaw (2002) for example, assert good teaching is teaching which helps students to learn, in that it encourages quality in student learning. They suggested good teaching discourages superficial approaches to learning, while promoting students’ active engagement with the subject matter.

*‘Good teaching is that which encourages in the learner … the motivation to learn, a desire to understand, perseverance, independence, a respect for the truth and a desire to pursue learning.’* (Gibbs & Habeshaw, 2002: p5)

Skelton (2005) also cited other small scale studies which focus on the personal qualities of the teacher and the teacher’s ability to manage complex interactions with students. He places an emphasis on tutor moves towards creating personalised learning for students, and in assisting students to deal with contested knowledge bases and the complexities of the knowledge society.

Gunn and Fisk (2013) also acknowledge this need for diverse conceptualisations of teaching excellence. They conceive of this as embodied with tutors who are both *dynamically engaged* in practice and inspiring *dynamic engagement* in their students.

### 2.2 Excellence in teaching in relation to digital fluency

According to Skelton (2004), teaching excellence in higher education is inescapably connected to broader social and technological changes, highlighting the use of technologies as being one of the most significant innovations in teaching and learning (see also Hannan & Silver, 2000). It is argued teachers confident with digital tools and in a digital environment can make a real difference to students’ learning, working collaboratively, interacting globally and facing new challenges, in the supercomplexity of higher education (Barnett, 2000).

Meanwhile, Devlin & Samarawickrema (2010) suggest engagement with changing technologies should be integral to claims of teaching excellence. Laurillard (2012) suggested a connective perspective between learning and technology, notably in the construct of teaching as a ‘design science’.

These perspectives, around connections between teaching excellence and digital fluency, have been explored with the participating tutors in this project, investigating also the extent to which excellence in teaching might also be relatively mapped to tutors’ relevant digital capabilities and approaches eg: as *transaction* with a focus on content; or as *transformation* with a focus on learning and conceptual change, as suggested by JISC (2014).

#### 2.2.1 Digital fluency and expertise

JISC (2014) defines digital literacy as those capabilities which equip an individual for living, learning and working in a digital society (Beetham, McGill & Littlejohn, 2009). Professor Peter Chatterton in prefacing the JISC report (2011 Page no?) references to the constancy in teaching amid emerging practices in HE in a digital age:

*‘… in a complex and fast-changing technological world, we must always remember that there are enduring principles of good teaching and ways of engaging students which transcend different media and technologies’*

JISC (2014) recommend HE institutions take a systemic approach in the development of staff’s digital capabilities, including in designing and using Technology Enhanced Learning (TEL). Beetham (2016) further offers a classification of digital capabilities as six interconnecting elements:

1. ICT proficiency
2. Information, data and media literacies
3. Digital learning and self development
4. Communication, collaboration and participation
5. Digital creation, innovation and scholarship
6. Digital identity and well-being

We might ask, in relation to digital fluency being connected to, or an aspect of, teaching excellence, whether the notion of a tutor’s digital fluency requires capability in *all* of these six aspects of digital capability.

In the next section of this report (Section 3), we outline the methodology adopted in this project and the qualitative methods applied in order to gather relevant evidence, from which we have created the eight case studies of HE tutors working in one of four disciplinary clusters: Arts and Humanities; Health; Social Sciences; and STEM. The case studies are presented in Section 4.

## 3. Methodology

The project’s methodological frame is qualitative research as phenomenography - ie openly exploring the lived experiences, understanding and perceptions of HE tutors of ‘teaching excellence’, and considering these perceptions also in relation to tutors’ use of, and rationale for, digital technologies in their teaching and support of students’ learning. The case studies derived therefore reflect how these tutors individually perceive these conceptions; how they describe them; and how they make sense of them, within their natural practice settings (Geertz, 1973). Qualitative case studies of the HE tutors, have become the main output from this research, in articulating how these eight individual academics, working across a range of disciplinary clusters experience and understand ‘teaching excellence’ in relation to their own practice.

The process of phenomenographic analysis is strongly iterative, inductive and comparative, and we have been able to draw on interpretivist approaches and specifically a constructivist grounded approach (Charmaz, 2014). The grounded analysis of the tutor interviews was designed to enable the identification of specific categories of description; to relate to one another, typically by way of hierarchically inclusive relationships, although linear and branched relationships could also be revealed, as dimensions of variation.

We have also conducted a comparative analysis of the case studies across the institutions, to identify themes of commonality and distinctions and these are explored below, in Section 7 of this report.

The analytical frame for the tutor interviews was shaped by the initial literature review around aspects of teaching excellence and digital fluency in HE: including tutors’ philosophies of teaching and learning; how tutors translate their espoused philosophies into practical designs for students’ learning; the uses made and rationale for using digital technologies and resources; and how tutors evaluate these various aspects for impact, upon their current and ongoing practice.

## 3.1 Key research questions

The project was shaped by three main, overarching questions:

1. What conceptions of teaching excellence are held by HE tutors, working in two very different Higher Education Providers (HEPs)?
2. Can HE tutor conceptions of teaching excellence be further distinguished within the disciplinary clusters of: STEM; Arts and Humanities; Health and Social Care; and Social Sciences?
3. Can these conceptions of teaching excellence be linked/connected with tutors’ digital fluency and/or approaches in the use of digital technologies?

To create the set of case studies, we elicited rich, thickly descriptive responses (Geertz, 1973) to these questions, including by the use of sub-questions, including:

1. How is excellence in teaching understood by these particular tutors?
2. How has this understanding evolved to this point in the tutor’s career?
3. Can the tutors’ understanding and evidence of teaching excellence be linked to their digital engagement, digital competence and/or digital fluency?

**3.2 Methods**

To help with the complexity of interpreting the notion of teacher and teaching excellence a range of methods were employed, aiming to be complementary and subsequently offer the opportunity for the triangulation of evidence whilst also acknowledging and recognising the plurality that may exist between individuals and their interpretations and values.

All data-gathering processes used in the project conform to BERA’s ethical code (2011) ie that: participants have been fully informed of the purposes of the research; interviews are confidential; and participants’ identities protected. Students were able to participate in the survey anonymously and we only asked them to identify the disciplinary cluster to which they belong (by virtue of their current studies).

The project’s qualitative methods included the use of semi-structured interviews in order to create the case studies, use of a think aloud protocol by tutors while working on a TEL-related design task and an online student survey.

**3.2.1 Interviews with HE tutors**

Interviews were undertaken with a set of eight HE tutors (with one from each disciplinary cluster at both universities) who are using digital technologies and resources as part of their professional practice (Patton, 2002). The interviews were conducted between October 2016-January 2017 (see Appendix 2 for the interview schedule). The schedule was used to ensure key areas were covered, drawn from the project research questions. Using open questions, these conversations enabled participants to construct accounts with their own emphasis and focus, offering insights into experiences and conceptions (Kvale, 1996). In conducting the interviews, we were looking at a particular point in time and asking the tutors to reflect back over the journey they could recognise. The interviews were transcribed for thematic analysis.

The eight case studies are presented below, as part of Section 4 of this report.

**3.2.2 Think Aloud Protocol (TAP)**

In order to provide an opportunity to augment the interview data and also as a method of checking the information initially gathered was as accurate as possible, each tutor was asked to undertake a short audio-capture process. This process was based on each tutor engaging in real aspects of preparation for some kind of TEL-related teaching or student support activity, using a ‘think aloud protocol’ (Eriksson & Simon, 1993). Tutors were provided with guidelines to assist them in doing thir thinking aloud (see Appendix 3) as we asked each tutor to verbalise their actions and reflections-*in*-action (Schön, 1983) during the time they were undertaking the design task.

We asked that each tutor create a single audio recording of approximately 30 minutes. Five tutors were able to make recordings, during March-April, 2017. The tutors were asked to share their recordings as soon as they were created. These recordings have been analysed and integrated into the case studies as appropriate, including adding additional material or reinforcing the information initially gathered in the interviews.

**3.2.3 Student survey online**

Complementary data, for triangulation, was gathered from an anonymous, online survey (using SurveyMonkey) of students at the Universities of Suffolk and Surrey , and within the four disciplinary clusters. Students were asked to comment on their beliefs about, experiences and attitudes towards teaching excellence and tutor’s use of digital tools within their programmes of study. The aspects explored in the online student survey are outlined in Appendices 4 and 5.

The student survey was not shared with students until May-June 2017 (see Appendix 3), timed to become open for students’ responses once the National Student Survey (NSS) and internal student surveys at both Universities had concluded for the academic year (2016/17).

### 3.3 Analysis

Interviews were recorded and transcribed in full and these ‘texts’ have been explored, looking for prominent themes and claims, especially in relation to the themes identified in the literature review. This process has allowed for genuine exploration and fluidity. Central in this approach was also the constant comparative method, facilitating a systematic analysis of experiences and expectations and providing insight into differences and similarities across tutors in different disciplinary clusters and at different kinds of institution (HEIs).

## 4. The Case Studies

# 4.1 Development of the Case Studies

The interviews with HE tutors have been used to create a set of eight case studies. Additionally, where tutors also used the Think Aloud Protocol to create an audio recording of their engagement in a TEL-related design task, the analysis of the recording has also been integrated into the case study as relevant.

Each case study begins with an account of the tutor’s articulation of their own teaching and learning philosophy, and in the section below we explain why this was considered a central plank to be foregrounded at the outset of the case study. Tutors also explain how their philosophy translates into the design of their teaching and the learning activities of their students. Also within the case study, tutors reflect on how digital tools and technologies are used by them in relation to their learning and teaching. In the final part of each case study, tutors explore their own sense of teaching excellence, especially linked to their ongoing practice and professional development.

## 4.1.2 Articulating a teaching and learning philosophy

*A teaching philosophy statement is a systematic and critical rationale that focuses on the important components defining effective teaching and learning in a particular discipline and/or institutional context.*

*Schönwetter (2002: p84)*

We commenced each tutor interview by asking the tutor to articulate their own philosophy for teaching and learning. A tutor’s personal teaching philosophy is likely to be highly complex, tacit and nuanced: a synergy between the self, the discipline, and the institutional context (Schönwetter, 2002).

A teaching philosophy we have found is shaped and fashioned by a tutor’s personal beliefs and values about teaching and learning. However, it is also influenced by their commitment to, and identity within, a disciplinary culture and their understanding and commitment to the institutional context and its structures and culture, within which they are working. Personal beliefs are likely to include the nature of knowledge and competence, about the purpose of learning in HE and how learning occurs, about how people should be treated (Steeples, Jones & Goodyear, 2002). From the institutional perspective, it is recognised that tutors’ beliefs are also likely to be informed by knowledge of their learners including the demographics of the student body. Equally tutors’ beliefs and practices are also likely to be mindful to the opportunities, affordances and constraints of the institutional culture and structures: eg in systems, policy and regulations; as well as physical spaces, facilities and resources.

Creating a conceptualisation of how teaching and learning processes occur and how they contribute to one another is fundamental to a teaching philosophy, according to Chism (1998). As part of such an articulation, the expression of current teaching and learning theories and values, as important within a teacher’s beliefs about education are needed (Atkinson, 2000). Equally, one would expect goals for student learning, teaching intentions and personal development goals to also form parts of a teaching philosophy statement.

In asking a tutor to articulate their teaching and learning philosophy it is apparent this is a highly challenging task, not least in untangling the complexity between the personal, the disciplinary and the institutional dimensions. Another danger of which we were aware, is when asking a tutor for such an articulation, it might well lead to tidied-up and abstracted accounts, distanced from the dynamic and evolving actuality of a tutor’s authentic practice. However, we recognised the value in getting tutors to outline their philosophy, seen as an intermediary to action, that would not seek direct prescriptions of their actions in practice, but that would help to privilege and place some forms of possible action into the foreground for our consideration. In other words, getting the tutor to articulate about their teaching and learning philosophy, was helpful to reveal the tutor’s rationale towards which their efforts in practice are geared (Ebel, 1983; Smyth, 1986).

According to Schönwetter *et al* (2002) a teaching philosophy statement might be used for a range of purposes, including to identify what a tutor believes is good teaching, and in providing a rationale for a tutor’s teaching behaviours. A teaching philosophy can also help promote personal and professional development, by getting a tutor to reflect on their teaching and learning beliefs, knowledge and approaches to their professional practice. A teaching philosophy statement can also be shared as a means of encouraging the dissemination of effective teaching.

Recognition of the value of creating a philosophy is not simply personal to the tutor, or perhaps to his/her peers when Brookfield comments ‘*students feel that they are under the influence of someone who is moved by well-thought-out convictions and commitments’* (Brookfield, 1990,   
p195). Equally with colleagues, a teaching philosophy statement has the potential of promoting professional dialogue, growth, and development (Goodyear & Allchin, 1998; Lyons, 1998).

During the interviews, we explored tutors’ beliefs about their teaching and support of learning, their uses of technologies in teaching and scholarship, and looking across a range of activities eg: in-class teaching; supporting students’ digital learning skills; curriculum design (Beetham & Sharpe, 2015).

The articulation of a philosophy of teaching in the case studies we have created, is valued for encouraging self-reflection, moving beyond an abstracted inspection of one’s teaching activities, to being a fully ‘reflective practitioner’ (Schön, 1987) and attuned to one’s identity in the teaching role (Palmer, 1998). A tutor’s explanation of the teaching and learning dynamic can provide insights about how they teach and how their teaching has an impact on student learning. Boyer asserts the creation of a philosophy may help engage a tutor in the scholarship of teaching as a systematic and evaluative enquiry, designed to contribute to the development of teaching, and to critically reflect on the impact their teaching is having on students (Boyer, 1990).

**4.2 The Case Studies 1-8**

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**Case Study 1: Arts & Humanities**

***A learning environment built around professional practice***

Alan, works within the Arts and Humanities disciplinary cluster, as an Associate Professor. Figure 1 above, presents the key aspects of Alan’s approach to teaching and the support of students’ learning including some examples of the digital technologies he uses. The case study explains more on Alan’s conceptions of teaching as related to the professional field within which his work is located.

## Philosophy for teaching and learning

Alan’s philosophy for teaching and learning is framed by his own personal experiences in photography, as a photographer himself: ie from his own area of practice, including from his area(s) of research. Indeed, Alan felt it difficult to separate out his identity or his practice as a photographer from his teaching – the one is embedded in the other and they are, he feels, mutually beneficial. He expressed importance that he gives his students “*experience of everything*” so they are as prepared as possible for professional practice, to be able to respond appropriately to anything they might meet beyond the course in their own professional work.

This close coupling between practice and teaching, follows through into how Alan works with students and into the design of the photography course, as rooted in the practice of photography. Aligned to this, Alan emphasises the importance for the course to be a “*meaningful, relevant, challenging and engaging*” experience for the students. Alan suggests the degree programme helps develop the students as: artists, researchers, picture researchers and as photographers. Students’ preparation for the profession he feels has to be based on raising students’ awareness and confidence in the professional world, in helping students from the outset, but increasingly as they progress, become part of the professional community.

Integration into, and within the professional community was therefore foregrounded by Alan as a key aspect in his role and translated into the course design. He talked of the integration of current substantive and skills-based areas from across the photographic field into the course, and the integration of students into the professional community, as significant parts of the student experience. A sense of the professional community is also promoted through the involvement of visiting speakers that contribute periodically to the course, (including renowned and prestigious photographers), as well as students having opportunities to connect with alumni of the course.

### Challenge and change as golden threads

Challenge as an essential theme in the student experience was foregrounded by Alan. He described students being challenged to critically explore what photography is today, in the 21st century, within national and global contexts. He described the course as designed in order that students meet challenge in a variety of forms: eg

* in declarative and theoretic knowledge, that includes both historical and contemporary sources and knowledge of relevant technology;
* practically in procedural knowledge linked to technical skills and processes, but including in developing interpersonal and business skills; and
* in the provision of regular opportunities for networking, including with visiting speakers and industry experts.

Alan emphasised challenge comes in the learning environment by placing students “*out of their comfort zone*”, but ever keeping a positive stance to these experiences. To illustrate, Alan described the importance of students getting ‘authentic’ critique, from external, professional speakers and photographers. Having credible professionals critically commenting on students’ work helps emulate a ‘real worldness’ in the course. He added: “*they will take it [the critique] from them*”. He believes the students need to meet and accept harsh critiques of their work during the course, as preparatory to the criticisms they will get of their work, once they fully enter the professional world.

Alan also seeks to raise the students’ own critical and contextual awareness in photography, by challenging the pre-conceptions of photography held by the students. He suggested in the early stages of study on the course, students will often focus their own critiques of photographs primarily around the photographer’s technical skills. He enjoys provoking and getting reactions from students by challenging these conceptions. He suggested he also looks to engage students with new movements in photography and to develop depth in their critical abilities to see and understand an image.

Alan asserted students meeting and facing challenges and criticisms was influential in leading to stronger student performance across the course: including in better students’ exhibitions; and in gaining confidence in using contemporary technologies associated with photography. Alan was justly proud to state the external examiner describe the degree programme to be of “*national significance*”.

Alan spoke of ‘relevance’ as an essential claim in his teaching approach and support of students’ learning. Relevance he suggested comes from students appreciating what they are being taught is absolutely focused and essential to their growth in the professional field. He believes the students also recognise the relevance of tutors to their learning, not least because students are aware tutors are active photographers themselves and that tutors have gained and maintain their own credibility in the industry. This encourages the students to appreciate and respect tutor viewpoints, and to accept the criticism and challenges to change and grow given them by tutors. Students, he feels, also have to recognise they will ever be dealing with change in their professional lives, especially in relation to technologies – he referred to the field of photography as *“a medium in flux”.*

## Course design and rationale

Alan was able to articulate a clear and coherent rationale for the course design in terms of guiding students’ progression to independence and professional belonging across the three years of study. In the first year, students are introduced to theoretical themes with aligned practical and technical modules running alongside, and to support the project work students undertake. From the outset of the course, there are opportunities built in for students to pursue their own interests eg in project work.

The second year is designed to enable more student independence. Professional practice is introduced in the curriculum with certain modules designed to prepare students for the final year. The second year supports students in further pursuit of their own interests, while honing technical skills and theoretical knowledge around these specific, individual interests.

The third and final year centres on the degree project exhibitions held at the University and in London, and in work on the research dissertation. Students also take a contemporary practice module, designed to further develop their professional ‘readiness’. Presentations and peer feedback are a constant feature, to accord with this focus on the professional context and its practices.

## Integration of digital technologies

Alan has worked hard to secure student access to photographic facilities aligned to contemporary industry standards, including access to cutting-edge technologies. He was proud to claim this mirroring of industry in the equipment and facilities provided. He claimed this high quality range of facilities and technical equipment helps to build confidence and pride among the students. For example, students have access to high-end digital photographic equipment including in Hasselblad workshops, and facilities enabling the remote control of cameras via smartphones. The course also makes significant use of a range of digital learning technologies. Alan mentioned especially the use of Photoshop software, of students creating their own videos, and especially of students creating their own digital sketchbooks as blogs, with embedded video and images in addition to text.

Alan was keen to acknowledge that his students were increasingly digitally fluent and adept in their engagement with technologies. This had to be respected and was influential on the ongoing course design and its learning activities. He commented on how multi-tasking with an array of technologies seemed natural to his students. He commented: *“They’re teaching me and that’s been an absolute revelation. Technology has been central in this shift, in the ways they are increasingly interacting with technology”*.

Students’ digital fluency in ease of use, was instrumental in leading to better content produced by them in their work. He suggested an improvement in the quality of the students’ writing in blogs that evidenced students as critically engaged and being more reflective. He claimed students’ use of digital blogs rather than keeping hard copy sketchbooks was promoting students not only to embed images and videos, but also to be writing more. He explained students now use their blogs in part as their research journals, and develop them across all their years of study. The blogging helps keep a currency to the students’ postings and means tutors can more easily and regularly check students’ progress than with a hard copy sketchbook.

Alan feels the continuous and ongoing blogging has given further advantage. He claimed the use of the blogs had positively contributed to students’ developing research skills and enabled them to better focus their own individual research interests. The blogging helps the learners to actively drive and individually shape their learning. The students’ awareness of tutors checking their postings regularly, also encourages students’ ongoing engagement. Alan spoke enthusiastically of the increasing student *“joy in what they are doing, more enthusiasm and actually more writing about it … and less as a required thing to get done”*.

The course also makes use of the Virtual Learning Environment (VLE) in giving students access to lecture slides and access to additional resources as well as use of the noticeboard facility. Alan is aware students communicate using social media eg Facebook but this is not used by tutors.

## Impact: development and strengths

Alan was asked to identify his strengths as a tutor. He commented that he was *“good at keeping calm”* and in creating stability for students. He was honest to say he used to be very opinionated about photography and had learned to be more accommodating in his viewpoints by acknowledging learners’ perspectives. This had been enabled by working closely with students, not least in him seeing their different ways of working. Alan emphasised that his learners impact on him, as much as he does on them. He described this as a learning from each other and recognising that he needed to be open and create an environment accommodating to learner views, in order for this to happen. The interchanges between learners and tutor act as a constant theme within the programme, challenging his own and students’ conceptions such as in ways of seeing and understanding an image/photograph.

Alan described himself as approachable, substantively knowledgeable and with lots of relevant experience to draw upon. He emphasised the preparation he does for all sessions, his concerns to make sessions interesting for the students, and that he updates his sessions every time, never having given the same lecture twice. He also acknowledged he was aware of his weaknesses, including in being a little disorganised. However, he felt it important that he at least appears to be organised and to maintain a clear and coherent programme design.

N.B. Alan’s course has recently received a score of 100% satisfaction from its students, in the annual NSS (National Students’ Survey, 2017).

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**Case Study 2: Arts and Humanities**

***A learning environment built around developing engagement***

Rachel works within the Arts and Humanities disciplinary cluster and has also previously worked in compulsory education. Figure 2 provides a summary of the themes that help to outline her approach to teaching and the support of her students’ learning and the relationship this has to digital learning. The case study explores in greater depth some of the meaning behind these statements, using the interview data and information from the Think Aloud design task.

**Philosophy of teaching and learning**

Rachel described her philosophy as “enabling quality learning…through the teaching which is the focus”. She explained that for her the fundamental aspect that enabled this to work effectively was through the development of effective working relationships with the learners. She reflected for some time on the challenge and importance for her in developing these relationships with the learner. She noted that for her if effective it helped to develop the confidence of the learner to express uncertainty and expose their often fragile construction of knowledge. Within this she acknowledged the value and importance, as a teacher, of having subject knowledge itself and the ability to adapt this to the needs of the different learners she has worked with. For her this has been enhanced by a growing “understanding of pedagogy” and that, combined with enthusiasm for engaging with her learners, has provided an opportunity for learning to flourish.

The close connection to her learners was important to Rachel and she explained that for her the learning that her students undertake is part of a journey that they take together and one that although she has an idea of the destination, she now appreciates that there “are multiple different routes to get to this place where we are aiming”. She mused on the notion of whether this made her a facilitator and suggested that for her ultimately she wants her students to take ownership for their learning, as she feels that this is likely to result in deeper learning ultimately. As they do this she becomes the enabler, providing the skills to each and allowing the learner to take on responsibility and hopefully the comfort to start asking questions. It is this ability to question which then allows each to clarify their own understanding and to assess the potential gaps in their knowledge. For Rachel rather than therefore impart knowledge, her philosophy rests on developing a relationship that enables a learning dialogue to evolve. As the learner negotiates and navigates between particular points she feels it is her role to enable this to occur by providing information and helping with relevance.

**Design for learning**

There was no one particular approach that Rachel felt would articulate her design process, something she repeated during her think aloud recording. She stated that she feels it is quite a “varied” approach that responded to the different frames that she encountered. These may be the frames of the actual course being taught, so whether she has a series of lessons or whether it is a more short term intervention. She described an approached based on laying out “stepping stones” and that at the outset it may be more prescriptive but starting to engage with the learners, to gain from them their understandings and interpretations and then using what she described as a “constructivist” approach, trying to assess how much has been understood. She warned that whilst this initially may appear to show some knowledge she had learned that this may just demonstrate that the learner can repeat or regurgitate something that they have read or been told.

Her planning process, which very much came from her view of learning and teaching, has a significant element of developing a dialogue with her students, to develop engagement with the learners in a variety of ways, recognising that all will not respond to particular approaches, such as questions in a lecture or through group work, and that as a consequence she needs to provide a range of different options to help develop this. For her the design process therefore is about securing or creating opportunities and spaces within which the voices, ideas and questions of the learners can be surfaced and can provide her with an opportunity to “explore student perceptions”. So, in designing she stated she tries to ensure that her approach allows them to feed her with an appreciation of what the ideas discussed mean to them, how it relates to what they have understood or covered previously. She acknowledged this is not as simple as it sounds and that this is clearly more feasible if she is working with the learners over a longer period of time. Where she provides more one off lectures and sessions she noted that her planning usually involves trying to gather information on the learners and the approaches undertaken from her colleagues so that she can understand what the learners may have covered and how.

Having taught for a number of years Rachel noted that her design process has evolved and she was aware that it will continue to do so. She recognised that she is now far more willing, and able, to be more adaptable and to focus less on her concerns about herself as a teacher and more to question what is of value to the learners that she is working with.

**Integration of technology within the learning environment**

Rachel has previously worked with students with autism and others with certain challenges in the learning environment and it was when she worked with these students that she first recognised the value that technology could provide. Here it enabled alternative methods to be applied through which the learners could engage with material so that they could have a similar ability to access information as their peers. Reflecting upon this she noted that the main learning point for her from this was that that it enabled the learners to have greater access, and ultimately control, over their learning. It allowed them to adapt and to approach their learning in ways that provided ultimately more access so that they could develop their understanding and start to apply this to the situations they faced and that she provided as the teacher.

She acknowledged that she still finds technology, and integrating this into the learning environment, a challenge. She explained that it remains “important to push me out of my comfort zone” and that she is aware that the tools available are changing and becoming more varied with a great deal of variety. She said that she has made use of a range of different resources and the focus of these, very much again reflecting her espoused theory, was to offer her learners a way of connecting with her through the development of their own understanding and to share this in ways that were helpful. Again this was related to the relationship building so that the digital technology used could help to develop this. Rachel talked for example about the use of Padlet as a way of collecting and exploring information and ideas and one in which she and the learner could focus discussions around and help to build the connections and the relationship ultimately working with what the learner was willing to share and to develop.

As with others in this study, Rachel recognised the value of enabling the learners to use digital opportunities to enhance their learning and to do so with up to date technologies. For her however this remains challenging, both in terms of being aware what is available and how to explore and understand what this may mean for her as a teacher. Having worked previously in schools she suggested that in her experience there was more willingness in the school sector to embrace different technologies and approaches and that universities may need to respond so that students feel that the opportunity to learn in ways that they are familiar are available.

**Impact: development and strengths**

Rachel reflected that she thinks one of her strengths and an element of becoming a more effective teacher, is in accessing and taking feedback. She said that she has always really enjoyed team teaching and that observing others often provides her with feedback about her own approach leading her to question and adapt. She said that her own nature is to question and she has always retained a sense of the need to evolve and continue to learn. She said that is why, although she acknowledges that it is constantly changing she is also excited by the opportunity to explore new and different technologies that appear. It allows her to challenge her own preconceptions and approaches. She feels that she has developed an ability to be more open to change, to be more flexible and adaptable to the needs of her learners and also to her colleagues, which she feels is a strength.

Her own philosophy is very much predicated on a sense of learning with and from others and she has also stated that variety is a very positive thing. She noted that as a consequence she can now allow “difference to be celebrated” and to see it as an opportunity to learn. Rachel acknowledged that as she has developed she has become more comfortable getting things “wrong” as a teacher and thinks that this is really important for teachers. She said that in her experience she feels that if you develop a good relationship with your students then they are usually pretty good at “giving you an honest view of what you have done”.

Looking to the future Rachel feels that she will continue to develop her understanding of how to develop the relationships she is looking to build with her students. She appreciates that the higher education landscape is changing rapidly and she tries to be flexible and to respond to this as best she can. Her development is something that she sees as ongoing and never ending and that the use of different technologies will come and go into her practice, some being retained and some being superseded. She smiled and said “I mean there was a time when I had never used power point and now I do without thinking”. For Rachel, progress continues and she is gaining more insight into how she can question and interrogate her own practice as she develops her understanding both of herself but also what she can learn from students and her colleagues.

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**Case Study 3: Health**

***Being part of the learning with students***

Robert is an Associate Professor within the Health disciplinary cluster. He is a Senior Fellow of the HEA. Figure 3 presents some of the key aspects of Robert’s approach to teaching and the support of students’ learning, including some examples of the digital technologies he employs. The case study explains more on Robert’s conceptions of teaching as related to the professional field within which his work is located.

## Philosophy of learning and teaching

Robert sees his role as an academic tutor focused first and foremost on helping his students to develop and grow in their own knowledge, skills and understanding. For him, he sees his work with learners as helping them to realise the limits of what they already know or understand in order to reveal areas for growth and refinement of their understanding. He described his role as about making his learners feel a bit uncomfortable with what they are learning and about what they think they know. He suggested he encourages his students towards a sense of discomfort with their own knowledge and understanding, but that this actually helps encourage them to be open to hearing different viewpoints and perspectives, in order to extend and clarify their own understanding. Robert makes regular use of discussions, to elicit these views and alternative perspectives, and enjoys having open discussions with learners.

Robert also places emphasis on the learning environment as a place for engaging learners in active exploration. He suggested the learning environment as one in which learners and tutor(s) are doing things together. He commented on the importance for real learning of learners ‘doing’ rather than passively listening, stating: *“talking at them for an hour and a half – that’s not how learning works”.* He also views his role within this active, learning context as “*being part of that with them”* and emphasised he enjoys a relationship as equals with his learners. Robert refers to developing a learning: teaching contract with his students. *“I will do my best, that's the deal I have”* with his learners, implicitly signalling by this statement there is a reciprocity for learners to also do their best.

To create this mutuality with his learners, Robert makes a number of efforts to create a partnership with his learners, including through his use of humour in his interactions with students, and in taking direct steps to make his learning and teaching sessions both fun and stimulating for the students.

### Challenge

Challenge was a key theme raised and explored with Robert in relation to his philosophy. In relation to this, he commented: “*I try to make it hard*” in students having the uncomfortable feeling of not knowing and that he realises that his approach is hard for them, but that this is always balanced by the students recognising they will be supported by him as the tutor in dealing with the challenges presented to them to resolve. He also commented *“we don't challenge enough in the undergraduate programme”* suggesting a desire to promote this aspect of challenge further both in his own and in other colleagues’ practice.

Robert emphasised that he wants his students to leave face-to-face classes with further questions to ponder and motivated by a curiosity to find out more for themselves. As part of this, he sees his teaching in the classroom as premised on never giving students a complete or whole answer. He suggests the role as a tutor should be to inspire and motivate, but also to engage learners to think critically for themselves and to learn how to deal with the questions that arise from their own criticality. This leads Robert to focus his teaching on promoting learners to want to grow and explore more, and for them to keep questioning. He also takes regular steps to draw learners into active engagement in the discussions, by sharing authentic examples that they can relate to, and by encouraging them to share their own authentic examples, from their lived experiences.

Challenge was also identified by Robert as important in respect of his practices as an academic professional. He claimed this includes that he reflects a lot on his teaching. He went further to suggest that a state of curiosity needs to sit at the centre of his practice. This curiosity is often channelled into trying new things in his teaching, and in doing so he is quick to recognise there is always a risk in having things fail. But he also acknowledged a need to accept and have confidence to fail when trying new approaches. Robert’s sense of a need to be adaptable was portrayed. For example, while he felt a need to have a plan prepared in advance of a session with students, he equally feels he needs also to be willing to adapt and to have the confidence to change a session on the fly, to gear it more around the emergent learners’ interests or needs. This clearly requires him to elicit a need to adapt eg from questions to his learners and for him to reflect-in-action in dynamic ways, such as on potential adaptations needed to be made.

## Design for learning

## In the interview, Robert focused on describing his teaching and learning practices primarily in relation to his interactions with learners in the face-to-face context. Within this context, as an environment designed for questioning and exploring ideas, Robert was keen to comment there should and will be considerable variation needed in how a specific session might be structured and the types of activities he designs for learners. The designs would be dependent on not only the content to be covered and learning outcomes for the session, but also scoped by the level of the learners and, where possible, based on his own knowledge of these learners, such as from previous interactions with them. He was keen to emphasise that in order to keep learners engaged throughout a session he always regularly varies the kinds of activity for students to do. This variation he argued, is also underpinned by him remaining aware of the students’ level of study, the size of the group, as well as of the subject and curriculum to be addressed.

Robert signalled the importance in taking a highly reflective, agile and adaptive approach to his teaching that included a need for him to be reflecting-*in*-action: ie by actively drawing upon his working knowledge and experiences as he engages in the teaching and support of students’ learning. He explained that while in advance of a session he would pay attention to the intended learning outcomes, once he was in the classroom with learners, it was important for him to quickly get a feeling for the students, including where they are in their understanding, while he is thinking continuously about how to keep them interested and active. He suggested he tries to make all sessions really active. For example, he prompts the students with lots of questions and uses a mix of both group activities as well as individual ones. He also mentioned that he tends to chunk the activities into time periods, with no more than 30 minutes for any particular activity.

Robert was especially keen to state his aversion to the use of PowerPoint, other than for presenting images eg anatomical ones. He does hoever frequently make use of video in his sessions to engage his learners. He elaborated on an enlightening experience, when finding the display technology was not working in a session and therefore being unable to use PowerPoint, he had ‘resorted’ to talking directly to students, rather than presenting in a transmissive fashion using PowerPoint slides. He said the experience had a profound impact on him and his practice, since it had made him realise there were much more engaging and interesting ways to work with learners than boring them (and himself) with the endless linearity afforded in PowerPoint slides. He does however prepare handouts for the students, that provide the key points in a session.

among numbersare located and studyingwithin his discipline/subject areaawareness in his all his in theirwith all students illustrated this in eg ta concept or particular theory and first presenting the key ideas in as a way as possible so that everyone beforeing in complexity and detail

## Integration of digital technologies

Robert has an interest in learning technologies and this is partly due to him doing his first degree in IT before becoming a health professional. His current PhD studies are related to technology-enhanced learning (TEL) within healthcare education. But in undertaking this research, he was quick to point out he is critical of how technology gets used in learning contexts, notably of the imperative within educational contexts for the application and use of digital learning that he suggests often comes from a questionable, technological determinism perspective.

Robert talked in the interview of the uses being made of Technology-Enhanced Learning (TEL) for motivating learners, and he recognises we live increasingly in a technologically shaped and managed world and acknowledges also that it is important for students to feel part of what is current and emerging. But he also problematised about the strong pressure on the organisation (the University) to keep up with technological advances, especially as part of an increasingly consumer-focused education sector. He felt there was pressure from people seemingly doing fancy things with TEL in the HE sector that creates a pressure on others to keep up. He suggested there is a constant seeking of transformations in education from the application TEL, and suggested we seem to be forever just on the cusp of a new innovation, that rarely if ever actually leads through into any true kind of pedagogical transformation.

Robert is equally aware that technology can be a fun thing for learners, and using new gadgets and tools in the classroom, can help to motivate students and him as the tutor, at least from a curiosity in the newness and contemporary feel offered. But he also questioned the value offered by technology *per se*, and felt it more important that emphasis is given to the enduring value in human-to-human connectivity, in real interactions within the classroom between and among learners, and with the tutor. He made the following comment on using technology for its novelty value:

“… *did it enhance their learning and did it enhance my teaching? I was never so sure and actually, the feedback I tended to get from the students was, the best lessons they enjoyed were where it was just me and them talking about something, debating something, examples from my clinical practice or examples from life and they liked those sessions much more”.*

In terms of specific digital tools used in teaching and learning, Robert spoke first and specifically about his use of podcasts, as a means by which he is able to talk to individual learners or groups of learners about an assessment. But his view on them as useful for his learners is tempered in seeing use of digital tools just as one aspect of things that he might make available, stating:

*“I think things like podcasts are very useful if a student wants to get access to me talking about an assessment, they can listen to me on a podcast, for example – and that’s very useful. So in that respect, I suppose, it has benefit and there’s always going to be benefit from it so I think the things they can do, things like podcasts can be useful … but that’s just alongside a raft of other things which are non-technology as well.”*

Robert also talked about the distance learning programme he has designed and now runs for work-based learning students. He explained how the programme is structured in a specific way, in learners following two week blocks of study with online sequenced tasks built in and some additional activities with online resources available for developing students’ wider knowledge. Another key part of the provision built into the pedagogical design of this programme, is in an enhanced personal tutor for each student. The tutor goes out to visit the students face-to-face in practice.

## Impact: Development and Strengths

In considering his professional practice overall, Robert was keen to emphasise the importance of him continuing to grow in his professional role. He feels it is important for him to have not only a credible knowledge base, but to remain current and up-to-date in his knowledge, and also to stay motivated and interested, to appear eager and keen.

Robert illustrated a real commitment to his learners and their learning, not least in how he undertakes and enjoys some additional teaching work that he does annually around his subject area, with primary aged children in a local school. He values this work especially for focusing his attention on ways of keeping his talks simple, but without ‘dumbing down’ the content. He suggests doing this teaching really helps him learn how to impart ideas and concepts in accessible ways.

Robert also recalled a colleague who had been influential on him and his approach to teaching, who had been a mentor to him, saying:

*“… ‘cause he was different, interesting, he knew his subject. He said to be a good teacher you need to know your onions, which is true because you need to know your stuff first of all and you need to be motivating and interesting and show them I’m keen and eager to teach … it sounds simple but that’s what we forget sometimes and what he had, … I talked to him a bit just to see how he talked – I went in with his class … he talked very slowly but he used lots of humour, he told interesting stories, he used the appropriate time to deliver the knowledge to them in between all of this and students left with a great deal from him and they always had questions for him.”*

While Robert does hold a critical view on technology, he does experiment with different tools as part of the challenge he feels is essential both for learners and himself as a tutor. He recognises that taking himself and learners out of one’s own comfort zone is critical, that doing things and telling stories helps encourage learners to want to know more and collectively these approaches help to feeds a natural curiosity.

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**Case Study 4: Health**

***Encourage independence and responsibility through trust***

Terri works in nutrition and has previously worked for a number of years in the private sector. Figure 4 represents Terri’s approach to teaching and the support of students’ learning, including some examples of the digital technologies used. The case study below explores in more detail aspects of the approach taken and how this has developed to this point in her career, using the interview data and information from the think aloud design task.

**Philosophy of teaching and learning**

Terri noted that her approach is underpinned by a strong sense of wanting to encourage the students to be challenged and to start from where the learner is. She feels strongly that it is important to pose questions, to draw out where learners are before you can consider helping them to learn. She says that this approach is not always comfortable and that it would be easier for her to stand in front of her students and inform them about a great deal of information she is aware of. However, she does not feel that this is appropriate and it is not something that she feels comfortable doing. Terri explained that she wants the learners to develop the ability to ask questions, and that these questions should be appropriate and relevant.

On reflection she notes that what she teaches is often viewed as somewhat on the periphery of the subject and not always immediately valued. However, she says that this has enabled her to look closely at what is important and to focus on this and also because this has allowed her to question her approach and that of others she has gained some important insights. Her philosophy is subsequently based very much on questioning, thinking about relevance and how to enable the learners to justify their approach. On reflection she stated that she believes that much of this stems from working in the private sector for a number of years before coming relatively late to teach at a university. She feels, as a consequence, that it is important to draw upon real life experiences and that learning needs to be “grounded in reality”. She tries to do this by posing questions that are based within practice and that can be related to by the learners. She believes that she needs to stimulate interest and that this can be done by relating to reality and helping the learners challenge the “known” and not merely accept what they are told.   
  
A great deal of this philosophy was based on challenging expected ideas and behaviours and Terri acknowledged that to do this and to enable learners to feel able to challenge and to question, they need to develop trust in their relationship with her. This trust and how this was developed and then maintained was something that Terri explained was fundamental to her approach. She says that this was something that was always important to her prior to coming into higher education teaching. Trust has always been something that she feels is key to establish and maintain and she feels that this is key learning. If she expects, as she does, the learners to challenge and question she believes they need to be able to trust her and to feel able to make mistakes and to be willing to try and innovate. She feels that the students already feel that she has the knowledge so for her the trust is something that develops when they “realise that you care about what and how they are learning”. It is however a challenge because she feels that both the students and some academics like to believe that learning can be the delivery of information that does not need to be challenged. The struggle however and the recognition of the need to struggle with information, the meaning and interpretation of it, are key and cause discomfort as a consequence. For Terri it is her role to create and then support that struggle. She said that her own values were important to her and that to some extent she has been surprised by the attitude of some learners. She wondered whether the rhetoric of the “customer” may have created a feeling in some that they expect everything served up neatly for them as if she were “a waiter”. However, she feels it is important for her to challenge this and she feels that whilst the learners may not always like it, that she has a responsibility to get them to think beyond the simple and to take on the complex, subsequently developing a more holistic view to their learning.

**Course design**  
  
Reflecting the views expressed by Rachel, Terri stated that much of her own designing was based on what she saw and learned from those teaching in schools where she feels they are willing to be more innovative. She stated that she has learned a lot from colleagues working in schools and taken ideas from them as she was starting out teaching. She noted that so much of the learning is outcome driven and that planning has to take account of this as you are developing the approaches for the learners. This was clearly evident from her reflections during the think aloud design activity.

Terri commented on the fact that there can be some constraints imposed because of institutional requirements to provide information to the learners for example in advance of sessions online. This, she noted, can sometimes stifle approaches although she also recognises that for particular learners there is a real value in this. She reflected that the danger can come if people then merely produce a set of slides without thinking too carefully about what lies behind these and what are you hoping to do in the session. Again this approach to design, questioning what she wanted the learners to achieve, was evident when listening to her design task commentary where she constantly referred herself to what she wanted the key learning outcome to be. She says for her she hopes to be more innovative and see the slides provided in advance as an opportunity to work in class beyond these, to extend and stimulate interest. The slides therefore provide the grounding and the clarity over the path being taken which then allows more freedom to explore through conversation as a group.

Terri said that she found the outcome approach useful. She said that for her they help provide a frame from which she can then evolve around. She said that she tries to use the Virtual Learning Environment (VLE) as a platform to provide additional information, although she acknowledged that at present a great deal of the time it is used mainly as a repository of information that can be accessed by learners as a support. For her, she tries to use the VLE as a way of getting the learners to prepare to come to class ready to discuss and to problem solve. Her design is based on the importance of active learning and she attempts to put together challenges and scenarios in the classroom using authentic examples and real props to help bring the learning opportunities alive and so that they have a more meaningful context. This was evident from her approach that she described in the design task.

The learners are central to Terri in her planning and she says that engaging with them in active learning allows her to develop her understanding of the level of knowledge available. She tries therefore to develop a strong working relationship with them based on the twin towers of trust and respect. She feels that this is important and that learning is more productive when this is achieved. When planning Terri likes to provide problems that the learners are likely to encounter and to work with them through the challenges, providing support when necessary. She bases value in out of class activity and saw that technology can help to facilitate this as well as provide an opportunity to enable greater contact in class which is a fundamental aspect of excellent teaching to which she aspires.

**Integration of digital technologies**

Digital technologies can be challenging. Terri reflected that in the private sector where she previously worked she would often come across a challenge but that she would have the facility to pass this on to someone else who had greater understanding with the digital technologies available and would create resources and so forth for her. She said that coming into higher education she has found that much of this she needs to facilitate herself and that she may not always be successful at this. For her she remains on a steep learning curve, although she feels that there are significant opportunities. She has already learned from observing colleagues who have made significant use of digital resources and as a result is developing her own understanding. For her, digital technologies offer an additional method through which to support learning. They offer an opportunity to provide what may otherwise be provided in a face to face format so that the contact time can concentrate more on the application and demonstration of the knowledge and understanding that is held. For Terri, the digital environment offers the capacity for information to be available for the learners to access and use as necessary. She also acknowledged that it can provide opportunities to show and develop models that would otherwise not be available to learners because they cannot be brought directly into the learning environment or cannot be accessed so easily in the classroom or laboratory.

Terri said that one area she was continuing to explore was using digital technologies in interdisciplinary teaching, so that different disciplines could come together and help learners explore real world problems which she believes is key to excellence. The interdisciplinary approach is more realistic Terri believes and the technology available allows this to be facilitated more easily than previous paper based iterations. The different skills brought together by different disciplines offers opportunity to combine skills and knowledge and to be creative with the development of problems that learners can then engage with. The online environment offers opportunity for feedback and engagement to be managed by different disciplinary experts and to make the learning more integrated and in Terri’s view, more realistic and authentic. Whilst she recognised the value of students learning particular information, she is concerned that the majority of challenges they will face in practice are not isolated always to one particular fragmented domain and therefore there is a need to respond to this by providing challenges that reflect the work places that the learners will face once they graduate.

**The future: development and playing to strengths**

In the future Terri wants to continue her own evolution. She is comfortable with her approach and recognises one aspect she will continue to undertake is to “challenge established practice”. She says her own confidence has developed and that because she fundamentally cares about learning and the subject, she feels it is part of her role to challenge some of the established practice so the learners receive the optimum opportunities to learn. She qualified this saying she herself is continuing to evolve and develop as well and recognises the need to develop her own understanding of her role in and out of the classroom and to continue to learn from and with her students. However, she said part of her development is to continue to question so that learning how we teach the subject itself, as well as our understanding of the subject, continue to evolve.

Terri believes working to develop trust and respect with her learners enables her to try out ideas and to help the learners to engage with the problems and challenges she sets them. She feels that if she can further utilise the digital resources that are available and learn from those around her who have greater understanding of these, she can enable more space for what she wants, contact time and engagement with the learners. As student numbers have increased, making the contact time count is something that is increasingly challenging but remains key for Terri.

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**Case Study 5: Social Sciences**

***Research as learning and teaching***

Frank, is a Professor within the Social Sciences disciplinary cluster. Figure 5 presents the key aspects of Frank’s approach to teaching and the support of students’ learning including some examples of the digital technologies he uses. The case study below, looks at Frank’s conceptions of teaching and students’ learning, including especially in relation to the research field within which his work is deeply rooted.

## Philosophy for teaching and learning

Frank placed a strong emphasis on his approach to teaching and learning as one centred on him and his learners *“learning together”* and not being a transmissive, *“dispensing of wisdom kind of model”* in his teaching or in students’ learning. To elaborate, Frank described how he regularly makes use of case studies, as problems for him and learners to work on together. He suggested this was valuable in enabling students to work collaboratively and for them to come up with their own ideas. He believes the use of case studies encourages students to investigate for themselves. In this approach, he especially values that students might come up with novel ideas and sometimes good solutions to the case study problems. Frank further indicated that opportunities arise for his own learning within this process.

Frank identified he has been an academic for a number of years, has a confidence in his subject and that he is able to draw upon the richness of his own experiences, as well as tapping into his own knowledge in his work with learners. He articulated on the value of the tutor, in helping students see connections they have not already made, and of being able to flex one’s thoughts in agile ways. From this Frank acknowledged there is not an equal relationship between him as the tutor and his students. He sees his role as one to help learners become aware of the ways those more knowledgeable in the field deal with such problems as presented in case studies and how they might gather relevant evidence and use appropriate methods to resolve.

Frank further suggested his tutor role is in helping students to develop and become within the discipline, especially in using research and live issues within the field as a means to bring the subject to life. This led Frank to assert the importance in his teaching for him to make things interesting and exciting and fresh for the students. He talked also of breaking things up such as in chunking teaching and learning activities, rather than him giving any extensive or prolonged lectures.

**Course design for flexibility**

In exploring how Frank’s philosophy for teaching and learning translates into course design, Frank was concerned to avoid what he described as: *the sterility of the syllabus and lack of flexibility*” in the course and content covered. Frank highlighted that he wants learners to care about the subject, to share his passion not just attending and doing what is needed to pass the assessments, but genuinely being immersed and deeply engaged in the learning process. To help promote this, Frank talked about the importance of him being responsive to the learners especially in creating more fluidity in topics covered, such as in the use of the case studies.

He sees the case studies as actively helping learners to apply their developing knowledge to relevant areas, but also useful in promoting students thinking about their own potential careers. Indeed, he commented how vital it was that the tutor helps to prepare students for employment. He was able to explain that the case studies exemplify real world actions and illustrate working in such areas as preparation for students’ potential careers. To this end, he draws upon examples from all over the world as a means to open up a world of possibilities to his learners. He also valued case studies as an approach that avoided looking at topics in purely theoretical ways. Frank spoke of the need for ‘authenticity’ in his teaching, and in students’ knowing and being in the subject. He described his role as one of aiding learners to know, and also towards them being part of the knowledge community.

Over time, Frank explained that the case studies are discussed with different groups of students and this has led to a set of supporting notes that include the student inputs from those discussions. Frank has deployed these rich resources in building up a bank of learning resources around the case studies, that are refined from what is found to work in their use (and what did not). He sees the resources as especially valued because the students have been actively influential in their creation; that students are impacting on the knowledge and the learning of succeeding group of students. Frank emphasised also the value from successive groups of students being able to keep adding to and honing the resources, describing this as “*learning as iteration”* in a growing body of resources, built around learner interests and responses. He suggested an authenticity came from having the student viewpoints, rather than purely the tutor’s conceptions.

**Engagement in research**

It was apparent Frank has a passion for his subject area, and believes in trying to spark the same kind of passion also in the learners. He encourages students to draw upon their own experiences and is always keen to encourage learners towards alternate ways of looking at things, and to be creative in their thinking. Connected to this, Frank asserted how important it was for the learners to be reading around in the subject and coming back to him with questions and comments. He feel this creates lively discussions, which sit at the heart of his interaction with learners. He strives to unlock students’ interest to want to know more, not only from his questioning, but also from their reading and finding relevant research and, at times, even undertaking their own research. Frank spoke of getting learners encultured into research processes, especially for the Level 5 and Level 6 undergraduate students, spaking an excitement in finding things eg in online databases.

Frank also believes he gains credibility with his students in that students can see he is ‘known’ in the field.

*‘My engagement in research helps explicitly to show scholarship isn’t static, that people are adding to a body of knowledge and helping students to see that encourages them to approach things differently. I blog regularly on my research and share that with students.’*

**Integration of digital technologies**

Frank is indeed an enthusiast for technology-enhanced learning and makes extensive use of digital tools and systems in his teaching and support of students’ learning. He regards technology as valuable and influential, in enabling not only his own, but also students, in greater and easier access to data, especially to newer, emergent data sources. This access to the latest information he stated comes especially via social media, in blogs and on digital systems such as academia.edu, including offering access to greater currency than is certainly available in books and now increasingly more so than is accessible in published journals.

The ease of access to digital information sources, such as social media, has increasingly influenced the acceptance of digital resources as valid academic sources, Frank asserted. He also emphasised the impact of digital technologies in enabling students to directly engage in research themselves. He stressed that he encourages students’ involvement in research, including by them using their own data in their research.

In his use of TEL, Frank sees the Virtual Learning Environment (VLE) as a crucial aspect and the central portal for students to gain access to a number of tools eg for blogging, and to add-ins such as YouTube. Frank worries though that often the VLE is used purely as a repository. For him, use of blogging helps learners to share ideas and is valuable for students while on placement, including to use to keep a reflective diary of their experiences. The use of blogging and tweeting he feels enriches the students’ experiences as within a community of academics. Frank makes use of the announcements feature on the VLE regularly as well, to share new things with his students.

Frank commented on previously making use of eg Google glasses and ipads in his teaching. But he highlighted that currently he makes frequent use of Google Earth such as for geo-tagging. Equally, in using PowerPoint, Frank suggested he tries to make use of images to promote discussion rather than using just text. He expressed concern that were he just to use PowerPoint to present text, there is a danger students would simply write down what is displayed verbatim, and switch off. Frank prefers to use images, graphs and infographics on his slides, as a means to help get students discussing. He further suggested the use of illustrations helped to fire students’ imagination and unlock students’ interests.

Frank clearly has an adeptness in his use of digital technologies, but was concerned to express his awareness that technologies are constantly changing and was keen especially to pick up on students’ use of smartphones. He noted especially concern around the influence of the size of devices, in becoming ever smaller eg students’ use of mobile phones, that this is likely also to be influential on how students engage with information in the use of these small devices. He worried that small devices might encourage students to prefer accessing information rather more as snippets than pieces requiring students’ extensive interrogation and discursive engagement.

## Impact in development and strengths as a teacher

At the centre of Frank’s reflections on his role as a tutor in higher education, was an expressed commitment to maintaining his authenticity, especially as an active researcher in the field, appreciating that his own scholarship is never static but ever evolving. He sees this as a key strength in, and for, his teaching.

Correspondingly, Frank stated he is always looking for ways to improve his teaching and support of students’ learning. For example, he seeks to promote more opportunities for student interactions and ways of having less rigid structure in course designs, including in students helping to shape the course and its resources. He also wants to inspire students to make them ambitious in positive ways, encouraging them to say to themselves ‘*I can achieve this’*.

Frank intends to continue and grow his use of digital images and use of digital collaborative tools eg wikis in support of students’ learning. But he was keen to express the importance of good physical learning spaces too, especially in those providing opportunities for learners to be able to work together in small groups.

As a senior figure within his department, Frank sees it part of his role to be supportive and encouraging less experienced colleagues in their teaching and learning. This thought led Frank to caution on the influences of both the National Student Survey (NSS) and student fees on tutors’ practices. He expressed concern some tutors might seek to not upset students for fear of getting bad scores, or be dumbing down their courses and making the student experience more bland.



**Case Study 6: Social Sciences**

***Dialogue as a way of learning***

Ann works within the Social Sciences disciplinary area as a lecturer. Figure 6 provides an overview of the key aspects of Ann’s approach to teaching and the support of students’ learning with some examples of the role of digital technologies within this. The case study below articulates this in more detail and incorporates feedback from the think aloud design process

**Philosophy of teaching and learning**

Ann explained that her philosophy is based on providing support and being an “enabler”. She acknowledged that her practice has evolved and that she has become more focused on the process that learners develop, rather than merely focusing upon the content. This is more in line with her own underpinning values which focus on the facilitation of opportunities for the learners as they become more independent. She stated that for her the implication is that she is there to help signpost when needed so that the learners can move forward in their understanding. Over time she feels that done well she can make herself almost “redundant”.

Key to this is developing effective communication with the learners so that all can be honest and open about their knowledge and the meaning that they ascribe. Developing an effective dialogue with learners, whether undergraduates or postgraduates, is important and for Ann that is crucial for her to encourage and support the learners into areas where they are likely to struggle. For Ann this area of ”uncertainty” is key, and she believes that it is her role to set up the opportunities for the learners to trust her to go forward into these areas and struggle. Ann can then offer alternatives and signposts, although she recognises that she has become more comfortable not providing answers and allowing the learners to consider the alternatives and to provide a rationale and defence of their decisions. For Ann, similar to others in this study, developing an open and effective dialogue is key to achieving this although it remains challenging not to revert sometimes to past behaviours. Ann stated that this transition is something you have to experience and go through and that there was nothing “specific to change thinking but it has come with experience” and that has developed as she has become more “confident and comfortable”. She also noted that she wants to encourage the learners to demonstrate their understanding and that this comes through the development and engagement with more active learning opportunities.

Ann noted that she sees her role as helping each student to develop towards a more independent approach. She stated that this is fundamental to her approach but she also recognises that there will be uncertainty in many learners and they are not able to change without time and support. For students starting their courses all this can be new and often “daunting”. Subsequently Ann reflected on the value of the “pastoral” element of her role. Ann stated that for her she needs to develop a role which is based around support for each student and work as a guide so that they can develop a more independent approach in their learning as they progress. This can happen at different rates as the learners respond to the challenges in different ways. Reflecting on her own experience as a student Ann acknowledged that it is important for her to also not impose a particular approach or view of learning on to the students and that to recognise that for each of them they are on their “own journey” and come with their own and “different styles of learning”.

**Design for learning**

Ann recognised a potential contradiction in her own statement of her philosophy and the practice of design that she follows. She noted that as a starting point of her design task that she tends to think about where the learners need to get to. This can be problematic potentially with her espoused value of developing independence at times. They need not be mutually exclusive but Ann noted that there may be a tendency at times to suggest the intention to develop learner independence but then to devise learning opportunities which do not require or necessitate this. Ann noted that she sees the design process as a little like a “jigsaw”, where she considers the assessment, the needs of the learners in terms of what is required of them to graduate and enter the professional world and that this typically is encompassed within a set of defined learning outcomes. All of these need to fit together as best as she can achieve. This outlook, Ann reflected, is one that enables her to be creative which she increasingly enjoys, although she said that typically she uses power point and develops slides. She feels that she probably does more of this than necessary and may therefore provide too much information but she also thinks these provide a very useful resource for the learners as well as acting as key prompts for her as the teacher. She also noted that she is increasingly using a different set of slides to teach from, so that the learners have a more extensive set to refer to as necessary but that her own teaching is potentially less constrained.

Ann noted that she feels that where she has developed as a teacher is helping the learners to understand her approach and why she is doing what she is doing. This is something that she thinks is important and that the communication and clarity of the approach to the learners is key. Ann noted that for her excellence involves her being adaptable. She noted that she tries to adapt her teaching and the approach depending on the format, so whether she is teaching a large audience or a smaller one (often the difference between lectures and seminars), and what level the learners are at (first year or final year for example). Ann said that she is increasingly aware of the influence of the “physical space” and what this allows or supports you to do as a teacher and is taking more account of this as she designs learning interventions.

Whatever the environment, Ann noted that one aspect that she always brings in as some element of interactivity. She reflected that technology often helps with this, particularly in lecture theatres with large groups of students. Ann noted that she designs this to enable her to gain an insight into the level of knowledge and understanding of the learners and also to provide her with a break from being the focus of attention. She also noted that through experience she has also learned to arrive in the teaching situation with a plan B for when the initial design proves that it will not work or is not achieving what you had anticipated.

Ann noted that with the increased emphasis on employability that she is also mindful in the design process of developing the learners so that they have the opportunity to develop the knowledge and skills which will allow them to respond in the workplace and to develop professional practice skills. Ann noted that this has become a growing requirement in her time in higher education and she acknowledges the learners appear to experience greater pressure. A good teacher she argued is aware of the context and adapts the design accordingly.

**Use of learning technology**

Ann reflected that she is certainly not a ‘techno junkie”. She has however evolved in her thinking. She noted that initially as a teacher new to higher education she felt that she needed to embrace new technology and use all the things she could find. However, “I have changed and now think about it and whether I need it and see what it might add and ask myself if I need it rather than assume it is good”. Ann noted that her interest has led her to incorporate a number of techniques which she believes encourage more active engagement, such as the use of videos and demonstrations. Referring to the interest in stimulating conversation and engagement with key aspects of learning Ann noted that she felt that peer marking online and discussion boards were excellent ways of sharing knowledge and extending understanding. Reflecting on these she felt that whilst some were not convinced of the value of such approaches she said that in her experience communicating and discussing the value of these approaches with the learners, so they are aware of the reason behind peer marking (for example that they will get to understand the criteria for assessment and be able to respond themselves) helps to encourage more positive responses.

Ann noted that she feels it is only fair that she has stepped out of her own “comfort zone” to try and utilise the new technologies she has been introduced to. She stated that as she expects the learners to do the same with the ideas she expects them to engage with, it is valuable for her to model the same. Doing this has helped to remind her of that feeling of discomfort with new things that are not fully understood and where there is often mistrust. She noted it would be easy to reject the new and return to the old, tried and trusted method but an excellent teacher finds a way to help the learners in the area of struggle.

Although at times the technology used may be quite simple, Ann suggested that her own experience has shown the value for her as a teacher. She reflected for example that using video or electronic voting can allow her to become more of an observer as well as to draw in people who are stimulated to learn in different ways, such as through image or sound. The use of video with a set of areas to look for or questions to seek answers for provides a role for the learners and helps move them more towards the independent learner Ann is aiming for, rather than merely to respect to the words she speaks. For her, she stated that the technology “acts as an enabler” as it allows her to shift roles, to provide alternative ways of experiencing material as she encourages the learners to become more “autonomous”.

For Ann the technology provides more options for her as a teacher, allowing her to work towards her ultimate aims, These relate to the learners and for them to see different perspectives and alternative ideas and approaches and increasingly be able to take responsibility for considering these, interrogating them and deciding which to support and which they feel are flawed. This leads them towards a more independent state. However, this can be a struggle but for the learner but also for Ann and is not always supported within the context of higher education learning.Ann explained, noting that she feels that there is a lot of pressure on the learners to be “successful” and this can put pressure on the relationship with the teaching staff to limit the “struggle” and to provide clarity and an “answer”. Whilst many of the learners acknowledge the value of being uncomfortable which ultimately leads to more meaningful learning, this is not always easy to achieve.

**Impact: Development and Strengths**

Ann reflected that for her she can recognise that she has changed and continues to do so as a teacher. She recognises that within her approach there remain potential contradictions as she tries to support learners towards a more independent approach to learning but that she is aware that she is developing a greater comfort in her approaches and her ability to critique these so that she does not just incorporate them because they are “shiny and new”. She is more aware of the need to justify why she has developed the learning events as she has to herself and her learners. So if there is a new technology available she is now more likely to consider how it might be of value, or seek out a colleague who may have used it, rather than immediately incorporate it into a session. Ultimately she feels that she has, and continues, to work towards opportunities in which the student can take and is encouraged to take greater control. Within this she has adapted her own position to respond to and acknowledge that there are different approaches.

These different approaches are both present in the students and recognised in how they react and respond to information as well as in her own teaching. Increasingly she feels that she is able to adopt new strategies, often supported by technology which allow her to offer different approaches for her learners, developing her ability to adapt to the situation. She expressed this as developing conversations through “different dialogues” and that this was being supported through technology which allowed different expressions and connections to be developed.

Overall Ann reflected that as she has grown more experienced she has been able to embrace the uncertainty she has felt and to welcome the unfamiliar and the unknown. She recognises the discomfort now as an opportunity rather than as something to fear and she reflected that this has been helpful both as she gains the confidence to act and evolve but also to help learners who are experiencing potentially similar feelings that she can then relate to. She also feels that as she develops new strategies it also allows here to think differently and offer new insights and perspectives that can encourage the “student to rethink something in an entirely different way”. This she believes is helpful and an area she is increasingly finding of value as a teacher.

The confidence in her own approach has also enabled Ann to feel comfortable to be observed and to observe others and she says that getting feedback (both giving and receiving) has been a very valuable process. She says that it has often been through the observation of others that she has developed understanding of different technologies which are often unknown to her until she attends the sessions her colleagues run. She says that this has also stimulated her to engage with the technology enhanced learning team who have provided valuable insight both in how to use different approaches but also why they can be useful.

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**Case Study 7: STEM**

***Learning and teaching as constant questioning***

Susan, works within the STEM disciplinary cluster, as a Senior Lecturer. Figure 7 presents the key aspects of Susan’s approach to teaching and the support of students’ learning including some examples of the digital technologies he uses. The case study explains more on Susan’s conceptions of teaching as related to the professional field within which her work is located.

## Philosophy for teaching and learning

Susan described her teaching and support of students’ learning as an ongoing, evolving process, in that it is ever-changing and never static. Susan expressed a central teaching theme to be in creating challenges for students, including by her constant questioning of their views and understanding. She referenced to a ‘Socratic maieutic’ approach to learning and teaching. Maieutic[[3]](#footnote-3) has been defined as: “*of or relating to the Socratic method of eliciting knowledge by a series of questions and answers”*. The maieutic approach is also mirrored in her own role as a tutor, in constantly questioning herself and her practice, leading to her own constant change and evolution.

Susan asserts that students come to understand relevant ideas and concepts by active reasoning around the concepts and ideas for themselves, but importantly also, through engaging in dialogue with others. She was keen to assert that teaching in higher education must not be about ‘spoon-feeding’ learners but by creating processes of dialogue, so that learners’ knowledge is built and developed through engagement in the dialogic process. She commented on working with students in ways that enable: *‘the knowledge to come through them and from them’.* She also suggested the learning process needs to be one of both osmosis and evolution: with students engaging in a process of gradual assimilation of knowledge and ideas; and that lead to the students’ worldview being in constant change and evolution.

A close, working and learning environment is feasible on her course she claimed, because of the small size of tutor groups. She spoke of establishing the learning environment as a protected space that is safe and confidential, one where “*nothing bad is going to happen”* so that students can and are encouraged to ask questions, in enabling the constant questioning she feels is essential for learning. She contrasted her approach to that of tutors who remain distance and detached from learners. Susan also likened her teaching to midwifery, describing her role with students as a nurturing process of “*bringing forth”*. In speaking of the creation of the learning community with and for students, she included organising a range of extra-curricular activities such as field trips, to help develop mutual trust and positive relationships both among the students and with the tutors.

### Learner empowerment in course design

Susan described her teaching role as one centred on facilitating students’ learning by making them feel empowered. She fashioned this notion of empowerment in helping students to handle the struggles and overcome the hurdles they face in their learning and development. She felt it important for learners to prepare themselves for the challenges and noted a true sense of empowerment is realised “*when students are able to recognise success and know it came from their own hard work*”. She described it as akin to a gym package subscription, in which to see results the individual needs to do the hard work. By contrast, she worries about students’ increasing conceptions of themselves as consumers, and higher education as a product rather than as a process.

To counter such trends to consumerist conceptions among students and in practical terms, Susan spoke of setting up regular challenging practical tasks and groupwork opportunities for students to undertake, with regular reporting back to her. She felt this active learning and her overseeing it, enabled her to get to know her learners and their characteristics, including by her watching how students interact within the groups. For example, in lab-based sessions, she will talk through/demonstrate a procedure protocol for student groups then to enact, while she walks around the lab, asking questions to elicit levels of understanding. The task can sometimes lead to unpredicted outcomes, and this becomes an important opportunity to help the learners reflect on why this outcome may have resulted. So, the activity also promotes learners to self-evaluate their learning. Regularly, she will also encourage students to reflect back on how their knowledge and understanding had developed over time.

Susan also suggested exploiting the positive, but competitive influence of peers within the learning community. She spoke of focusing on the example of good marks achieved by those learners that fully engage in attending and participating in the set tasks, in order to influence any less engaged learners. By so doing, she seeks to encourage all learners to emulate the successful behaviours (and achievements) of their peers.

When asked further about the design of her course, Susan likened her knowledge inputs to being *“the tip of the iceberg”* in structuring and providing information, and in helping students to build their own knowledge. Learners are required to find more (of the iceberg) for themselves – partly through the independent and group tasks set, and within the readings suggested to them.

### Relationship with learners

Susan was especially keen to emphasise the importance to be clear in her course design about what she does, what learners are asked to do and why ie to have a course rationale and articulate it explicitly to learners.

*“Students need to recognise your role and that you are not their friend as a peer but the role is to guide and support them and that there’s a flow between us and a developing relationship.”*

Susan emphasised the need to be inclusive to all learners in her pedagogic practices, including when using digital technologies for supporting or enabling students’ learning. She foregrounds the importance of knowing her learners and identifying any with specific learning needs, requiring adjustments to be made. She seeks advice from the University’s support services if she becomes aware of a learner with a specific learning difficulty. She described this as working in a triangulated way ie with the learner and with student support staff. She sees it as important to keep the communication flowing between all parties, but especially vital to keep the learner included in the discussions.

## Integration of digital technologies

Susan ascribed a blended approach to her course design, in making use of the online environment, in addition to face-to-face sessions. She emphasised the blended nature because she sees strong value in face-to-face interactions with students and the need for a rationale for using digital learning. She is aware that some of her students can feel daunted by technology and may need help in order to break down any barriers of resistance. Clarity in purpose in the use of digital technologies was essential.

In the face-to-face context, Susan presents information to students using PowerPoint but primarily by using images or schema, rather than as text. She does this to engage learners visually and to encourage them to take their own notes. Voice recordings as podcasts are also used periodically and online quizzes to supplement the teaching sessions and planned learner activities.

Susan talked about using the Virtual Learning Environment (VLE) in communicative ways and not simply as a repository for course materials. She regularly shares videos with students in the VLE, including recordings she has made of her own lectures, created to assist learners in revision for the assessments. She has also designed ‘VLE weeks’ into the course structure, when typically she might use a video to set a task for learners to do, followed up by a face-to-face meeting to discuss performance on the task. She utilises the adaptive release facility of the VLE to individualise access to relevant resources and to enable tracking of learner activity and progress.

Susan also felt it important that she monitors use of the VLE, to track when and how her learners are engaging with the materials and tasks online in the VLE. She likes to actively find out from her students how they are perceiving things. She recognises it as hard to prove anything derived on limited statistical evidence given the small numbers of students involved.

## Impact: Development and Strengths

In terms of impact, Susan problematized the module evaluations as giving a skewed picture of success or otherwise in her design and running of a course or module, since she has found many learners choose not to complete them, leading to only minimal evidence upon which to make any kind of analysis. Her own questioning, monitoring of attendance and gauging of student participation in tasks she feels give better indicators of the quality in her teaching and course design.

The importance for her teaching of actively engaging in research within her own subject area was highlighted, as well as engaging with the research of cognate peers. This helps to maintain her own knowledge and to be aware and abreast of current trends and developments.

She additionally identified as important to be continuing to develop and push herself in terms of pedagogic knowledge and skills; including through seeking a better understanding of learners, learning about teaching, and learning from seeing teaching in other subject areas. She feels participating in the University’s Reflective Peer Review (of teaching) scheme is helpful to her own continuing professional development, commenting on her practice as “*an ever-changing piece of art …”* and of *“having a growth trajectory in mind*”. She also stressed how she values that she has a sense of responsibility and ownership for her own teaching and in her relationship with her learners and colleagues, within her working context.

When asked to elaborate on excellence in teaching, Susan questioned if one can ever say they are excellent and that it was unlikely there could ever be a single model of excellence. When pressed to suggest what might be part of her own conception of excellence in teaching, she said it would include:

“*setting attainable goals for yourself as well as for your learners. But it’s also about always trying to push the boundaries, recognising struggle is necessary. Learning from others, learning about your learners in a journey together, you put yourself in the same boat. Travelling with the learner, going through what they are, being in the process together.”*

Susan believes respect, trust and courage are central themes to excellence, but that it also should involve keeping aware of what is coming next and being open to try new things and to face the challenges or barriers that might be painful or a struggle. But she emphasised teaching as a positive process and that the tutor’s enjoyment and enthusiasm would be picked up by learners.

She also enjoys seeing and having a part in enabling learners’ transition from entry into Higher Education, so that by the time they leave they are very different individuals. This impacts also on her she feels, as *“we adapt and mould ourselves with learners to help establish relationships that are professional but friendly.”*

Susan was recently awarded a University Development Award in 2016/17. The award is made to small-scale projects designed for enhancing learning, teaching and assessment and Susan’s project focused on promoting research and scholarly practices linked to teaching and learning within the degree programme she leads.

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**Case Study 8: STEM**

***Problem-led and evolving***

Albert works within the STEM disciplinary cluster as a lecturer. Figure 8 represents key themes from Albert’s approach to teaching and the support of students’ learning and includes some examples of the digital technologies that he has utilised. The case study provides greater depth and explains some of the conceptions of teaching he holds as related to the field that he works within, incorporating interview data and evidence from the think aloud design process.

**Philosophy of teaching and learning**

Albert explained that he sees his role very much as a facilitator. He explained that he genuinely believes that he can help the learners to understand and to do this he sees one aspect of his role as being a source of encouragement for the learners. He noted that he does not believe that he can make them learn but rather he can “support” their approach and help them to find meaning and develop their own understanding of what is often complex technical information. He explained that prior to coming into higher education he had worked in industry for quite a long time. As a consequence, he feels that he has a fairly developed sense of helping people with their performance and that when he made the move into the learning environment he feels he brought this with him. He believes that this is translated into a belief that he cannot make the students learn. Rather he can encourage the students to try and learn and provide the best conditions available to enable the learners to develop an understanding and how to apply principles to particular problems.

He noted that in his working life he became familiar with how you apply your understanding and adapt this to each particular context and therefore you go from the defined problem and abstract from here using the information and skills available to solve each individual problem. He says that as a teacher he initially thought it was about teaching the abstract and getting the learners to memorise this and then try and apply it. However, he now believes that his own belief that rather than memorising a lot of facts and information and then trying to construct meaning from this abstract list, it is more useful to help with the principles and encourage people to then apply these and adapt to the context. This Albert feels is best achieved through facilitation. He reflected on the need to “visit real situations” so that learners can apply their understanding and see how well it works for them and to adapt and develop when they need an alternative.

A key aspect of his own teaching is to observe others. He stated he has for example learned from seeing how his own daughter has been taught at school and how to ensure that students are not afraid and to try and help people to enjoy learning. If people enjoy their learning Albert feels they are more likely to engage. For Albert learning “should be joyful” and he reflected for some time on this notion of enjoyment and then added that he believes that a really skilful teacher also has the ability to take the complicated and simplify it so that it becomes “understandable to anyone”. When this is achieved he feels that the learners become more confident and with this enjoyment and confidence comes an increased willingness to take responsibility for the learning that they are engaged with which in turn can increase the student independence which he stated was a key aspect of his philosophy.

Albert stressed that although he is relatively new to teaching in higher education he believes strongly in the value of teaching and that for him he sees it very much as process based, enabling the learner to develop the skills that they will be able to adapt and use across a range of different future opportunities that they encounter. To this end, Albert said he constantly questions his own role and is trying to “understand myself and reviewing what I am thinking and what is happening and how I can improve what I am doing”. He says that he probably takes aspects from his life in industry into his role as a teacher which allows him to see himself as a long-term project, learning himself through trial and error, making changes to practice and being prepared for “failure” but learning from this and acknowledging that not everything works.

**Engagement and problem based learning design**

When designing learning events Albert stressed that following his own philosophy he tries to provide opportunities within which the learners are encouraged and supported to go and apply ideas to problems and challenges that he presents. He says that he often utilises a story telling approach because he feels that this is how many people have learned in the past and therefore this can be a useful approach to adopt. He says that in developing material he spends quite some time thinking about what might work and the most useful approach to adopt before deciding what he will do. He says for him this thinking time is valuable. Although at times it may appear not to be particularly productive, it is the approach he finds works well for him and usually results material that he is comfortable trying and he feels is aligned well to the opportunities that he wants to facilitate for the learners. Once this is planned he is aware that his own actions within the class itself then influences how much responsibility the learners will take. However, he noted that if given the space to respond to the challenge provided in his experience the learners are both willing and able to do this.

Much of the approach he utilises is built around solving problems and doing this through group engagement and through a team based approach. He feels that this is valuable for a variety of reasons. First it mirrors the working environment where people work , utilising the different knowledge bases and skill sets available and that this is a really useful and valuable skill for the learners to develop. In addition, he feels that students can learn useful information from one another and that if he designs the right challenges and sets up the groups effectively they are more able to respond through group engagement and present him with useful and challenging ideas which he finds helps stimulate him making him a more effective teacher. He therefore described his design process as one that tries to encourage student led learning, where together the learners take responsibility for the outputs they achieve and use him as an additional resource to help to support this when and where necessary.

Within the design process Albert said he tries to consider a range of different methods that can assist the learning. This may mean input from him, it may mean input from other learners, or even outside experts. It may be a video or the use of additional material available online. It may be that the best method is through a whole group discussion or smaller group interactions. Albert noted that when he is designing he tries to think about the principles he is wanting the learners to be exposed to and to learn from and that these then guide what he does and tries to engage the learners with. Fundamental to his approach is the need to create constant feedback and conversation. He may be involved in this or more peripheral, but there needs to be communication, testing ideas and applying principles to see what people can articulate clearly and justify.

**The relationship with the learners**

Fundamental to his own approach was developing an effective working relationship with and between the learners. Communicating expectations and making clear what these are and then checking how they are understood was something Albert feels is really important. Whilst he maintained that learning should be a joyous experience he acknowledged that it can and is a challenge and which is often uncomfortable. To encourage the learners to remain engaged and to continue to address the problems and challenges faced Albert said that he felt developing a good working relationship with the students was valuable. This did not mean they all had to be “friends”, but that they respected each other and the skills and experience that each person brought into the classroom. He said it was important for him to listen and for them to understand that as their teacher he “wants them to progress” and to be “successful” and that this is displayed through a diverse range of different things, including for example his “appearance and habits”.

Communication was an important aspect and one that Albert feels contributes to the relationships that are developed. He said that for him he tries to listen to what is said and also that which is not. He takes note of the evaluation feedback received and feels that if he has been successful in developing an effective relationship with his learners that this feedback is valuable because it is constructive and helps him as he reflects and analyses his own approaches.

**Integration of digital tools and technologies**

Within this he covered a range of different technologies that he has utilised. He has explored the notion of anonymous responses and the utilisation for example of electronic response systems to facilitate this. He has also utilised videos and simulations and says that in the design process it is always a question for him of considering what the most appropriate facility is that will help the learners to get to the point that is most useful for them. He acknowledged that this may be different for different learners and noted that as a result he was constantly examining approaches, looking at different technologies with the aim of ultimately supporting the development of greater independent learning. He expressed concern that at times there may be a desire to use technology for the sake of it and that it is important to get the “balance right between the theory and the practice”. Where technology can be used to “simplify” a challenge or a response then this was an excellent utilisation. However, he also noted that if it was not deployed well the technology can also be limiting because it can become obstructive and get in the way of the opportunity to learn. For Albert technology is another opportunity at his disposal to assist but it was not anything more and he would have to come up in his reflections and planning with a good reason to use it beyond the fact that it exists.

**Impact: development and strengths**

Albert stated that he feels the comments from students about the learning experience are often quite telling. Whilst he is aware that the value of end of module evaluations can be skewed by different factors he noted that they are also useful to him. He feels that he has an open attitude and that he “likes them to tell” him “what they felt worked or if there are things that they feel have not”. He says that these end of module evaluations are supplemented by his weekly conversations with the students and that by ensuring that feedback is constant the final evaluations rarely provide him with anything that comes as a significant surprise.

Excellent teaching is based for Albert around supporting and developing student independence and he feels that as long as he focusses upon this and designs around such principles then he will have a positive impact on his learners as they progress through their learning and then take up roles in different companies. This to him comes from a willingness to constantly question. He encourages the students to constantly question, to review and consider whether they should trust the outcome or the idea or the information and that he tries to model this by constantly questioning. He feels that his previous experience of working in industry has supported this approach.

His experience to date in higher education has not changed this approach or this view of learning. He feels that high quality learning can be achieved when you place the learner in the central position and encourage them to develop their confidence to try and test ideas. He stated that this is supported by the teacher but also by peers and that through time the learners become more independent and willing to take risks which are supported through evidence. If the learners are going to enter the profession able to respond to constantly evolving problems then he feels it is a mark of a good teacher to be able to help the learners to develop the ability to adapt and apply their ideas to each particular problem and recognise the different contexts within which this can occur.

**5. Online student survey**

As a complementary activity to the case studies of HE tutors being developed within this SEDA-funded project, an online survey using SurveyMonkey, was designed and administered at both the University of Suffolk and the University of Surrey (see also Appendices 3 and 4). The survey sought to elicit students’ views on the teaching and support of learning on their specific courses/modules, including in the use of digital learning resources.

The initial literature review undertaken within this project, and presented in the interim progress report to SEDA in February 2017, focused on the constructs of teaching excellence and digital fluency. The review was useful in helping to shape the aspects of exploration within the student survey. In addition, we drew from the UK Professional Standards Framework (UKPSF), especially the Dimensions of Practice, made up of areas of activity, core knowledge and professional values as standards for teaching and support of students’ learning, to inform and help shape the statements used in the survey. The survey sought to explore in particular the specific aspects linked to teaching, learning and assessment with which we might anticipate students would be aware, across the range of their experiences on courses and modules.

The survey was made up of 18 questions (Q1-Q18). In the first question (Q1), students were asked to select their area of study within 4 disciplinary clusters. The following 17 questions asked students to express their level of agreement-disagreement with a set of statements (Likert scale), all linked to aspects of teaching and support of students’ learning.

The survey was open throughout May 2017, being promoted to students through each Universities’ central student email system. The survey was open to any registered student (ie studying at undergraduate/postgraduate level) in these two Universities.

## 5.1 Findings from the Survey

The survey questions were completed by 367 students although 4 did not complete all the questions. Q1 was answered by the lowest number of 363; whereas Q2, Q6 and Q14 were completed by all 367. In addition to the 363-367 student who completed most of the 18 questions in the survey, there were a number of unusable submissions, which have not been included in this analysis of the data collected.

58% of respondents were from the University of Suffolk with 42% from the University of Surrey. For the University of Suffolk, this equates to approximately 214 students completing the survey. When compared to the total student body of the University (ie approximately 5000 students), these 214 students represent 4.38% of all University of Suffolk students. The percentage was lower for the University of Surrey and was approximately 153 students, representing 1.30% (i.e. of approximately 11,500 undergraduates).

The survey was completed anonymously, though students were asked to declare the disciplinary cluster that they identified most closely to and within which they were studying. In terms of association to a particular disciplinary cluster, the split of the 363 respondents to this question was:

* 37% were studying in Health-related areas (135 students);
* 28% in Arts and Humanities (100 students);
* 24% connected to the Social Sciences (87 students); and
* 11% in STEM subjects (41 students).

In terms of the statements presented in the survey, positive agreement (in strong agreement or agreement) was shown by 58% or more of all respondents against every one of the 17 statements (ie Q2-Q18). Table 1 below, shows the statements and responses ranked according to the percentage scores in positive agreement, ie spanning between 83%-58% in agreement.

The highest level of agreement (including strong agreement) with any single statement was indicated by 83% of respondents (302 of all 366 responding students). This was given for the statement on the course enabling students to develop subject knowledge and relevant skills for their ongoing development and potential professional careers (Q5). This was also the statement for which there was the lowest level of no opinion in agreement or disagreement expressed, at 7% (26 of the 366 responding).

As indicated in Table 1 below, 9 of the 17 statements received positive endorsements of between 72%-79% of all respondents (ie for Q2, Q3, Q4, Q6, Q7, Q10, Q14, Q15, and Q17).

3 of the statements gained positive endorsements of between 61%-65% from all respondents ( ie for Q8, Q9, Q12, Q13 and Q18).

The lowest positive score of agreement (including strong agreement) was given by 58% of all respondents (to Q11, by 215 of the 366 respondents). This question asked about feedback and the extent to which students felt it was timely and approporiately detailed to help their learning. This was probably to be expected and reflects consistent evidence from the annual NSS survey in which feedback is regularly the least positive area of response. [Add something about NSS on feedback scores?]

Question 11 on feedback to students also gathered the highest proportion of disagreement (including strong disagreement). This came from 25% of the respondents (91 students of the 366 who answered this question). For all other statements, the percentage of disagreement was low, being between a range of 9-18%.

Two of the statements (Q10 and Q17) each scored just 9% as disagreement (including strong disagreement), the lowest levels of disagreement. 33 students out of 366 (9%) responded in disagreement to Q10, on the methods of assessment used being related to the learning outcomes. 37 of 364 students (9%) responded in disagreement to the statement on good access to relevant learning resources. Again these responses reflect reported evidence that learners are concerned about the availability of learning resources. However, the relatively low level of concern may indicate the action has been taken at both institutions to improve access and the work to ensure learning outcomes help to support the learning with which students engage.

Two statements (Q13 and Q18), each received the highest percentages as no opinion indicated, represented as neither agreement nor disagreement with the statements by respondents. 24% of the respondents to Q13 (ie 88 of the 365 responding students) disagreed that there were effective links in place with industry, enabling learners to develop relevant skills. For Q18, concerning the provision of teaching and social accommodation of the 364 respondents, 88 (24%) selected to offer no opinion.

We have therefore presented the results in the table below, in a ranked order of agreement (including strong agreement) with the statements, as a means to illustrate the aspects presented to students (in the statements) with which there was expressed the highest levels of accord across survey respondents.

The generally positive responses to the questions posed are clearly only the views of a small number of students and may also represent a group that, as the survey was voluntary, are more inclined to be engaged and provide more positive reflections. However, the responses do appear to reflect the anecdotal experience of the researchers, the literature examined and were in line with the evidence that was gathered from the case studies.

## Table 1: Ranking in agreement with statements in the student survey

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Ranking** | **Statement** | **Total No. responding** | **%age in agreement or strong agreement** | **Comments or additional information** |
| 1 | Q5: My programme of study is enabling me to develop subject knowledge and relevant skills of benefit to my ongoing development and potential professional career(s) | 366 | 83% | 48% agree  35% strong agree |
| =2 | Q6: The courses/modules are run by qualified and committed staff whose teaching is underpinned by awareness or engagement in research | 367 | 79%\* | 41% strongly agree  38% agree  \*Highest score for strong agreement and only statement where strong agreement scored higher than agreement |
| =2 | Q7: My course tutors generally demonstrate a clear commitment to good teaching that promotes student learning | 366 | 79% | 42% agree  37% strongly agree |
| =3 | Q3: The aims and outcomes of modules and sessions are conveyed clearly to me | 366 | 78% | 50% agree  28% strongly agree |
| =3 | Q17: There is good access to relevant learning resources on my course/modules | 364 | 78% | 52% agree  26% strongly agree |
| 4 | Q4: A broad and flexible subject base is used on course/modules to match the aims and outcomes, and informed by up-to-date knowledge and relevant research | 365 | 77% | 52% agree  25% strongly agree |
| 5 | Q2: The aims/purpose and objectives of programmes and modules are well understood and applied by my tutors | 367 | 76% | 48% agree  28% strongly agree |
| 6 | Q10: Methods of assessment relating to the learning outcomes are used | 364 | 75% | 51% agree  24% strongly agree |
| =7 | Q15: Use is made of contemporary digital technologies within/across the programme/modules eg clickers in lectures, the Virtual Learning Environment, media rich resources such as video/audio, social media, etc | 366 | 74% | 47% agree  27% strongly agree |
| =7 | Q14: There are constructive and positive relations between student and staff | 367 | 74% | 41% agree  33% strongly agree |
| 8 | Q16: There are sufficient relevant and well-managed resources on my course/modules | 366 | 72% | 48% agree  24% strongly agree |
| 9 | Q8: My tutors use a range of teaching approaches that are relvant to enable my learning | 365 | 65% | 40% agree  25% strongly agree |
| =10 | Q18: There is suitable and sufficient teaching/social accommodation used on my course/modules | 364 | 62% | 44% agree  18% strongly agree |
| =10 | Q9: The academic and pastoral arrangements on courses are well matched to the subject area and to my needs | 366 | 62% | 41% agree  21% strongly agree |
| =11 | Q12: Systems for gathering, considering and taking action on student feedback are in place and used | 365 | 61% | 42% agree  19% strongly agree |
| =11 | Q13: There are effective links with industry which contribute to my learning by developing relevant skills | 365 | 61% | 41% agree  20% strongly agree |
| 12 | Q11: There is timely and appropriately detailed feedback to help my ongoing learning | 366 | 58%\*\* | 39% agree  19% strongly agree  25% disagree (including 8% strongly disagreeing)  \*\*Highest %age of disagreement shown for this statement |

**6. Discussion**

The methodology adopted in this project aimed to enable rich descriptions of the complex and contested notions of digital fluency and teaching excellence to be articulated and explored. It was anticipated that each interview would demonstrate aspects that were uniquely defined but that within areas of overlap, descriptive congruence could be drawn. This proved to be the case with aspects described and situated within disciplines that on initial reading may appear distinct and yet similarity can be discerned. There were however descriptions that do appear not to share particular characteristics. Whilst this may appear to limit the application of particular threads, it reflects the challenge faced by those engaged with attempts to interpret and explain teaching excellence in higher education and in particular trying to understand the intersection with digital technologies that first stimulated this research. There often appeared to be an imbalance for those attempting to define teaching and teacher excellence, where ideas are freer flowing and more familiar, whereas articulations relating to digital fluency typically proved more difficult to express. Descriptions around the topic of teaching and teacher excellence were usually fuller, whereas those related to digital fluency were typically possessed of less depth. Such an experience may of itself betray the inherent challenge of researching emergent themes within a broader perspective.

**6.1 Effective design, based on a philosophy of teaching and learning**

Each tutor explained their philosophy in different ways, which Breakwell (1986) suggests results from the unique experiences each tutor has had. They subsequently generated unique perspectives shaped by their own individual experiences and contextualised by the work that they had done. This was sometimes prior to entering higher education, in memories and experience of being a learner themselves. Despite this uniqueness, plural explanations existed and there were intersections that resonated both within and between disciplines. The overarching theme of commonality that was apparent was the modelling of the practices expected from students in the way the tutor acts with them. This modelling was facilitated through a variety of different approaches and methods, many of which were similar and are summarised in the list below (in 6.2).

The tutors spoke about the creation of spaces within which dialogue could surface. These spaces were both internally within themselves, so that they recognised the struggle and debate they had about how to provide the learning environment they felt was the most appropriate and would achieve the development of learner confidence. The spaces could also be for other voices as well as their own and were ones in which they also wanted learners and peers to inhabit, which could enable further internal feedback. The spaces could also be physical and virtual, where ideas were exchanged and views could be critiqued and refined.

Each tutor discussed an interest in developing questions and promoting in learners a search for knowledge. When explored this usually resulted from a discomfort with an assumption that knowledge was static. Instead of believing that teaching excellence was predominantly about delivering ideas or knowledge each appeared curious and willing, despite the potential limit to authority, to acknowledge that they were not there merely to transmit a set of defined ideas or information. Rather, they were involved in learning *with* the students and often identified, when contextualising this against the background of digital technology, a sense of uncertainty and a feeling that the learners often knew more than they did. Whilst this was not always entirely a comfortable experience, the tutors appeared to see this as a necessary part of their role and inevitable. The sense of vulnerability that resulted was seen as a state that was necessary in order to remain connected with the curiosity that they wanted the learners to have. As with many previous studies, this sense of a growing willingness to relinquish authority in the classroom came typically with increased experience and tutor confidence. As suggested by Hatano and Ignaki (1986), the tutors appeared to be explaining how the experiences they had, increasingly allowed them to become more adaptable. The more experience they developed through engagement with the learners, the more they were able to adapt and respond as each situation unfolded ie in a continous refining of the tacit, working knowledge around their practices as tutors (Polyani, 2009).

Within the descriptions tutors gave, it was clear there was an acceptance that effective relationship-building with learners was important. It was through this that spaces could be established where uncertainty was acceptable and where learning could then occur. This building of relationships relies on mutual trust and it was acknowledged that this can often take time to be established. In some instances, this was not always feasible depending on the course being taught for example. This was further described as the need to “create spaces of confidence” in which people can try things out, take risks and do so within a supportive environment.

These ideas around trust building were further supported by tutors who spoke of establishing connections with the learners. These connections, explained well in the work of Parker Palmer (1998), acknowledge the different roles brought to each situation, but recognise that the focus is on connecting the learner to the ‘knowledge’ in ways that are useful and not limited, or limiting. The tutors suggested that limiting can occur if they, as the teacher, try to maintain control of the knowledge and how this is conceived of by learners. Such an approach was suggested to potentially significantly limit students’ creativity as it would be bounded by the teacher alone. It was acknowledged that this connectivity usually needs to be developed over time, because there is often a period of transition for learners, who cannot be expected to take responsibility immediately for such a shift in perspective, especially if they are new to the higher education environment. The approach needs to be supported and it is potentially through the utilisation of digital technologies that this can be achieved, as new and flexible spaces to enable the support needed can be established.

Whilst there seemed inherent a shift towards the learners taking responsibility in these rich descriptions given by tutors, this does not remove the role of the teacher. Rather it requires the teacher to establish the conditions within which this taking of responsibility can occur; a focus more on process for learning and working with the content, rather than on the content delivered entirely through a systematic and uniform process. It requires the teacher to be aware of the knowledge held and how able the learners are to be able to use this knowledge in ways that are meaningful. As a teacher, this may be enabled by using resources that bring to life authentic examples, challenges and ideas from the disciplinary field. Such variety was seen as important and this was often where digital resources were seen to be especially relevant and potentially useful. They were regarded to have the potential to offer different ways of providing information, enabling content interrogation and stimulating responses from the learners.

As the learners, through teacher design that is based on the above principles, grow more confident, then they become more able to shift from a dependent approach to establish and enable themselves as more independent learners, responding to a greater variety of approaches that tutors and peers create with them. Ultimately, establishing greater independent learners appeared to be something that resonated within the work of all the tutors in this study, handing over, through time, greater opportunity for the learners to take control of their learning and working towards great independence. This was not uniform for each tutor and may happen in different ways within disciplines. However, the consistent aim appeared to be working towards this for each tutor. There was a recognition that the learners themselves approached this with different levels of comfort and some needed greater time and support than others. It was ultimately though explained as fundamental to the approach taken and to defining teacher excellence.

**6.2 Summary of common themes in relation to modelling**

1. Asking questions constantly to students but also to oneself and challenging both students and oneself, ie creating a sense of being uncomfortable with one’s knowledge and understanding that promotes curiosity and wanting to find out more. This was often expressed through ideas related to digital technology.
2. Always learning about oneself, especially from students and eg in use of TEL. This enabled an opening up of new spaces and therefore opportunities where new conversations could happen.
3. Building trust and creating *spaces of confidence* in which it is possible to try things
4. Learning about one’s learners all the time in their level of understanding
5. Bringing learning to life and making it active eg using real life examples, use of authentic contexts and tools, use of the VLE to share examples and enabling new forms of dialogue
6. Use of TEL is always premised on a sound pedagogic rationale and not from its gimmick or novelty value, in allowing greater integration of context specific material which enhanced the potential for meaningful dialogues
7. Giving or passing control of learning to the learners themselves over time and in developing learner independence, in a shifting from dependence to independence
   1. **Impact and individual description**

It would be disingenuous to suggest that the data collected was entirely uniform and easily categorised into similar themes. As noted above there were a series of elements that were either described in similar, or sometimes in identical ways. However, there were also distinctive themes and these are potentially no less valuable in understanding how to frame intersections between digital fluency and teaching excellence. Whilst these may not have been strongly associated across interviews, they may nonetheless resonate or can be interpreted by others as sharing meaning or being relevant. These are therefore discussed below.

One particularly distinctive theme related to the notion of ‘becoming’ within a professional community. Whilst the notion of the transference of the authority for learning was described by a number of those in this study, there was a particular description of how this related to a professional community and a sense of becoming within this that was of particular importance to one individual. The description provided, had strong resonance with the notion of legitimate peripheral participation, as described within some of the initial work on communities of practice (Lave & Wenger, 1991). The notion suggests that novice members of a community initially participate in low risk tasks and that through involvement in peripheral tasks, they become drawn in so that their participation over time becomes more central to the community and how this is enabled and functions. The notion rests on how the novice has access to the ‘expert’, in this case a teacher, and how this relationship is bounded and enables the learner to move from the periphery towards a more central role. This can become more complicated when learning to become is located outside of the professional community. The role of the teacher in such cases centred on helping to simulate the environment becomes key, as the learner is likely to remain peripheral without the tutor support and realising the learner’s moves towards gaining greater control, are not easy to undertake. Enabling the learner to become in this setting, drawing him or her towards a more central role is a key challenge for any teacher.

Another perspective pursued was on challenge as central in a learning community of practice and this was outlined in particular by one tutor. This tutor focused on the role of competitive challenge between learners as a device used for stimulating learning; in that learners can be encouraged to do their best by engaging with and seeing the work of other high achieving peers, a form of vicarious learning (Bandura, 1986). This accords with views on communities of practice as contested spaces, such as seen in the work of Hill & Plath (1998), for example.

Another individual related excellence to constantly reviewing and researching practice; in many ways representing the classic action research approach initially outlined by Lewin (1946). For others in the study, excellence was described as a way of enhancing what was done, constantly being open to the new and recognising that everyone had the potential to be a learner. However, for one individual in particular there was more to the process than this. It included a need to actually ask questions and gather evidence and then use this as a way of evolving practice, linking rather than separating teaching and learning into distinct and separate activities.

7**. Dissemination and outputs**

This SEDA project has produced (and will be producing) a number of outputs and resources available for dissemination purposes, as follows:

1. The data and findings from analysis of the interviews and the audio recordings, have been used to create a set of rich case studies (as presented in Section 4).
2. We have produced two project reports: an interim report (February 2017) and this, final report (September 2017).
3. We intend to utilise the cases studies as resources for running an open developmental workshop for colleagues in HE (eg to tutors and academic developers) to attend and ideally to be held in London eg at Woburn House if possible. We propose to run the workshop as an open event, eg in October/November 2017.
4. We will also offer a Teaching and Learning Conversation as part of a collaborative project with which both institutions are engaged (<http://www.celt.mmu.ac.uk/flex.tlc.php>).
5. The analysis of data from the student survey and in the case studies will also be used to enhance learning and teaching strategies and resources: for the recognition and development of teaching excellence and digital fluency across our own institutions (Universities of Suffolk and Surrey).
6. The findings will also be available to feed into the design of approaches to enhance the recognition of digital fluency, as an integral aspect of teaching excellence at both universities.
7. A paper derived from the project work in progress, was submitted for the SRHE’s Annual Research Conference, to be held in December 2017. This has recently been through peer review and is now accepted as a paper for presentation at the conference.
8. A short paper will be produced for SEDA’s own publication, Educational Developments to be submitted in October 2017.
9. We will submit a paper proposal on the project to the annual SEDA conference in 2018.
10. Finally, but not least, a journal paper will be derived from this final report and submitted to a relevant peer-reviewed journal in 2018.

**8. Conclusion and acknowledgements**

This project has centred on active collaboration between two very different HEIs offering opportunities for comparison, and to identify implications for educational development around understanding the intersections of digital literacy with teaching excellence, across 4 disciplinary clusters. This project has been timely and opportune, especially with the Teaching Excellence Framework established now across the UK HE sector

We have undertaken a mixed method research study, focused on examining the relations between digitial fluency and teaching excellence. This qualitative study explored the attitudes, conceptions and practices with eight Higher Education tutors working in one of four disciplinary clusters: STEM; arts and humanties; health and social care; and social sciences (with four at the University of Suffolk and four at the University of Surrey).

Primarily, this was a small-scale, qualitative research study using in-depth case studies of tutors, focused on attitudes, conceptions of teaching excellence and ‘digital fluency’. Certain of the case studies have included analysis of recorded observations of these HE tutors engaged in digital practices, using a think aloud protocol, as part of their ongoing and real teaching and/or support of students’ learning. Complementary data was gathered from a student survey, on expectations and attitudes towards teaching excellence.

The data and findings from the project will next be used as resources for running an open developmental workshop for colleagues in HE (eg to tutors and academic developers). The analysis of data will also feed into enhancement strategies and resources for the development of ‘digital fluency’ as an integral aspect of teaching excellence within our two institutions. These findings will also be available to feed into the design of approaches to enhance the recognition of digital fluency as an integral aspect of teaching excellence.

We have produced a set of eight rich case studies, illustrative of tutors’ unique stories in their conceptions of excellence in teaching and in relation to their uses of digital resources and by association, their development of digital fluency. The case studies also touch upon some of the challenges encountered by tutors, as well as their understanding of pedagogical progression and teaching excellence.

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## 9. References

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# 10 Appendices

Appendix 1: Project Proposal

Appendix 2: Notes for the HE Tutor Interviews

Appendix 2: Think Aloud Protocol (TAP) Guidelines for Tutors

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Appendix 5: SRHE 2017 Conference paper

## Appendix 1: Project Proposal

**SEDA Scholarship & Research Committee**

Research and Evaluation Small Grants 2016

**Application form**

|  |  |  |
| --- | --- | --- |
| Project Leader: | Co-leads: Dr Christine Smith1 and Dr Simon Lygo-Baker2 | |
| Department: | 1. Quality Enhancement  2. Department of Higher Education | |
| Institution/organisation: | 1. University Campus Suffolk  2. University of Surrey | |
| SEDA membership: | x Institutional ❑ Individual | |
| Application type: | ❑ Developing researcher x Standard grant | |
| Contact address: | 1. University Campus Suffolk, Neptune Marina, Ipswich, IP4 1QJ  2. University of Surrey, Guildford, Surrey GU2 7XH | |
| Email: | [Christine.smith@ucs.ac.uk](mailto:Christine.smith@ucs.ac.uk)  [s.lygo-baker@surrey.ac.uk](mailto:s.lygo-baker@surrey.ac.uk) | |
| Telephone: | 1. 01473 338684  2. 01483 683350 | |
| Partner(s) in proposal: (names and affiliation) | University Campus Suffolk and University of Surrey | |
| Project title: | **The intersections between digital fluency and teaching excellence: case study-based, media-rich explorations with HE tutors** |
| Project start date: | 01/05/16 |
| Project completion date:  (Projects must be complete by 31/07/17) | 30/06/17 |
| Funding amount requested: £1000 | |
| **Project Budget and justification:** Please outline the budget for the project including detail on staff costs and days allocated as appropriate. | |
| **Staffing**: We do not wish to claim any staffing costs – these will be covered as part of the institutional contributions to the project  **Non-staff expenditure**: (e.g. travel, equipment, dissemination)  Funding will be used towards travel costs for 4 project meetings and in relation to the data analysis process (transcription of interviews) at the two participating institutions. We request funding to support these aspects of this project as follows:  (i) a contribution towards the travel costs for project meetings to be held alternately at the University of Surrey and at University Campus Suffolk of £500.  (ii) a contribution towards transcription costs of £500. | |
| **Abstract (max. 250 words):**  We offer a mixed method research study, focused on examining the relations between digitial fluency and teaching excellence. This qualitative study will explore attitudes, conceptions and practices with at least eight HE tutors working in 4 disciplinary clusters: STEM; arts and humanties; health and social care; and social sciences (4 at University Campus Suffolk and 4 at University of Surrey).  Primarily, this is a small-scale, qualitative research study using in-depth case studies of tutors, focused on attitudes, conceptions of ‘digital fluency’ and of teaching excellence. The case studies will include recorded observations of these HE tutors engaged in digital practices, using a think aloud protocol, as part of their ongoing and real teaching and/or support of students’ learning.  Complementary data (to triangulate with the data gathered from tutors) will be gathered from 2 key sources: (i) a student survey, on expectations and attitudes towards teaching excellence; and (ii) interviews with learning technologists on developing academics’ digital literacies and digital fluency.  The data and findings will be used as resources for running an open developmental workshop for colleagues in HE (eg to tutors and academic developers). The analysis of data will also be used to enhance strategies and resources for the development of ‘digital fluency’ as an integral aspect of teaching excellence across an HEI. Findings will also be available to feed into the design of approaches to enhance the recognition of digital fluency as an integral aspect of teaching excellence. | |
| **Proposal (max. 1000 words excluding references) which should demonstrate how you will meet criteria a-c below:**  This project is focused on exploring the intersections between the development of tutors’ digital fluency (ie in their ease and confidence in the design, use and application of technology enabled learning (TEL)) *and* HEtutors’ pedagogical progression and professional development, and in their conceptions of teaching excellence.  **Background and contextual settings**  University Campus Suffolk (UCS) and the University of Surrey are contrasting higher education institutions (HEIs) but both share strong interests in tutors’ digital fluency, linked to their ease and confidence in use of digital tools and environments, *and* in relation to professional development towards the notion of ‘teaching excellence’. Within these HEIs, we will foreground the importance of conceptualising teaching excellence linked to digital fluency in nuanced ways, eg across contexts of learning; as well as in individualised and programme-based approaches. This is in recognition of teachers’ practical wisdom as situated, social, dynamic, and contested. We also acknowledge teachers’ conceptions and working practices need to be examined in relation with their individual sense of professional identity.  ***Conceptions of teaching excellence***  We are aware of ambiguities and contentions around ‘teaching excellence’, ‘teacher excellence’ and their relationships with student learning (eg Kreber, 2002; Skelton, 2005; Gunn & Fisk, 2013), not least in how excellence might be assessed in a Teaching Excellence Framework (THES, 2015).  Gunn and Fisk (2013) acknowledge the need for diverse conceptualisations of teaching excellence, including characterised by tutors who are *dynamically engaged* in practice and inspiring *dynamic engagement* in their students. Skelton (2009) suggested excellence involves the reflexive development of a personal teaching philosophy and should be conceived as part of the whole of academic life, reflecting the values outlined within SEDA (SEDA). Meanwhile, Devlin & Samarawickrema (2010) suggest engagement with changing technologies be integral to excellence. Laurillard (2012) emphasised a connective perspective between learning and technology, in teaching as a ‘design science’.  These conceptions will be explored with participants, investigating eg the extent to which excellence in teaching might also be relatively mapped to digital capabilities and approaches (as suggested by JISC) eg as *transaction* (focus on content) or *transformation* (focus on learning and conceptual change).  ***Digital fluency and expertise***  HE institutions need to take a systemic approach to development of staff’s digital capabilities in designing and using TEL (JISC). The elements of the JISC framework will be used for discussion in the interviews with participants, and in observing them engaging with and articulating about, their digital practices. Teachers confident with digital tools and in a digital environment can make a real difference to students’ learning, working collaboratively, interacting globally, facing new challenges in the supercomplexity of higher education (Barnett, 2000).  **Key research questions**  **What practices and conceptions of digital fluency are associated with teacher development and conceptions of teaching excellence among tutors in two very different HEIs?**  **Can these be further distinguished among the disciplinary clusters of: STEM; Arts and Humanties; Health and Social Care; and Social Sciences?**  We will elicit rich, thickly descriptive responses (Geertz, 1973) by using a series of sub-questions, including:   * How do academic tutors perceive their digital fluency in relation to teaching excellence? * How is excellence in teaching understood by tutors? * Can this understanding be linked to different stages in academic careers? * Can understanding and evidence of excellence be linked to digital engagement, digital competence and digital fluency? * Are the digital practices and fluency of those who teach tied to the specific context and/or to the specific discipline or subject area, and if so, in what ways?   **Methodology and milestones** *Please also see Appendix 1 for the proposed project timeframe and key activities*  Qualitative, phenomenological case studies will be the basis of our research strategy, exploring how academics in a range of disciplines experience ‘digital fluency’ and ‘teaching excellence’: ie how they perceive these conceptions; how they describe them; how they make sense of them, within their natural settings (Geertz, 1973). Moreover, case study enables triangulation, using multiple sources of data and a variety of research methods (Denscombe, 2010).  We will conduct in-depth interviews with eight HE tutors in a range of subject areas, who are using digital technologies and resources as part of their professional practice (Patton, 2002). We will explore these tutors’ uses of technologies in teaching and scholarship, looking across a range of activities eg: in-class teaching; supporting students’ digital learning skills; curriculum design (Beetham & Sharpe, 2015).  We will augment the interviews with video-capture of the tutors engaging in real aspects of TEL teaching or student support using a ‘think aloud protocol’ (Eriksson & Simon, 1993), verbalising on actions and reflections-in-action (Schön, 1983). These media-rich resources will be analysed and lead to authentic resources to support the succeeding project dissemination activities.  ***Analytical framework***  The analytical frame for the study will be shaped by an initial desktop literature review, focusing on the constructs of eg: teaching excellence; teachers’ professional development; teachers’ digital literacy and digital fluency; digital capabilities and competencies.  ***Sources of data***   1. Interviews with HE tutors. A schedule will be used to ensure key areas are covered, drawn from the project research questions. Using open questions, these conversations enable participants to construct accounts with their own emphasis and focus, offering insights into experiences and conceptions (Kvale, 1996). 2. Video capture of tutors engaging with TEL. The ‘think aloud protocol’ will provide further media-rich data for analysis. 3. Student survey data on their conceptions of teaching excellence and particularly in relation to use of digital learning technolgies 4. Interviews with learning technologists on the development of HE tutors’ digital literacies and conceptions of digital fluency.   ***Ethical implications***  All data-gathering processes will conform to BERA’s ethical code: participants fully informed of the purposes of the research; interviews will be confidential; participants’ identities protected. Proposed purposes for the videos will be explained fully to participants.  **Analysis, presentation and dissemination of findings**  The process of phenomenographic analysis is strongly iterative, inductive and comparative, and we will further draw on interpretevist approaches and specifically a constructivist grounded approach (Charmaz, 2014). The grounded analysis will identify specific categories of description to relate to one another, typically by way of hierarchically inclusive relationships, although linear and branched relationships may also be revealed, as dimensions of variation.  ***Coding and analysis***  Interviews will be recorded and transcribed in full and these ‘texts’ categorised and coded. This allows for genuine exploration and fluidity, with opportunities to focus on further data collection. Central in this approach is the constant comparative method, facilitating a systematic analysis of experiences and expectations and providing insight into differences and similarities across disciplinary clusters and at different kinds of institution (HEIs and FE).  We will produce a set of eight media-rich case studies, illustrative of tutors’ unique stories in the development of digital fluency, challenges encountered and conceptions of these in relation to pedagogical progression and teaching excellence.  Once data have been collated, and a final report with recommendations prepared, a workshop will be held with tutors and developers from the collaborating HEIs, but open to others to attend (ideally to be held in London at Woburn House if possible). The foci for the workshop will be on using the findings and resources in designing strategies that promote alignment of digital fluency with teaching excellence. We will also use the findings for systematic developments around teaching excellence at institutional level.  A paper derived from the project final report will be submitted to a relevant peer-reviewed journal.  **References**  Barnett, R (2000) *Realizing the university in an age of supercomplexity*. Buckingham: SRHE & OU Press  Beetham, H & Sharpe, R (Eds) (2013) *Rethinking pedagogy for a digital age: designing for 21st century learning.* 2nd Edn. 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| **Implications (max 250 words): This section should demonstrate how your proposal meets criterion d)**  This project is centred on active collaboration between two very different HEIs offering opportunities for comparison, and will identify clear implications for educational development. The proposed project will contribute to understanding in the intersections of digital literacy with teaching excellence across 4 disciplinary clusters. This goes beyond our immediate practice as educational developers and is timely and opportune to HE, especially as the Teaching Excellence Framework is introduced across the UK HE sector. | |
| **Applicant(s)’ experience or interest in pedagogic research and evaluation (criterion e, max. 250 words):**  Dr Christine Smith is an Associate Professor at University Campus Suffolksupporting the development of teaching, learning and assessment practices across UCS through staff development, team consultancy, research and the promotion of new and effective approaches. Christine has been involved in a broad range of external projects and consultancy work including research looking at students’ transition into HE (QAA funded). Examples of recent research/evaluation projects are given below:  **2015** *Towards a connected approach for inclusive and positive transitions into HE.* QAA Subscriber Research funded project. Co-lead with Dr Clare Gartland, UCS.  **2014-15** *Evaluating teaching development in HE: towards impact assessment.* HEA funded project led by Plymouth University.  **2013-14** *A mixed method analysis of participation and learning engagement in online discussion forums on UEA’s MSc in Oncoplastic Surgery (distance learning programme for surgeons).* Funded by University of East Anglia.  **2013-2014** *Learning Diaries: a mini project as part of the Learning (lolla)Paloozahs project.* Funded by Changing the Learning Landscapes (CLL) Embedding Learning Technologies small grant call.  **2012-2013** *e-PiCE (e-portfolios in continuing education).* Funded by Canadian Association of Universities for Continuing Education (CAUCE)  Dr Simon Lygo-Baker is Head of Department in the Department of Higher Education: a research-led and evidence-based department giving direction to enhancement of teaching and learning across the disciplines; providing academic leadership for the continued development of excellence in academic practice. Examples of recent projects are given below:  **2015-16** *Piloting and Evaluating Learning Gains.* HEFCE funded project with the Open Univeristy, Oxford Brookes and University of Surrey.  **2014** *The Provision of new Disciplinary Programmes.* Internally funded University of Surrey research project.  **2012** *Enhancing Learning through Technology.* University of Surrey funded project with KPMG. Institutional lead with particular responsibility for international understanding and comparative work.  **2010-11** *Creating a 21st Century Curriculum: The King’s Warwick Project.* HEFCE Funded project. Co-researcher working on International Understanding and scoping. | |

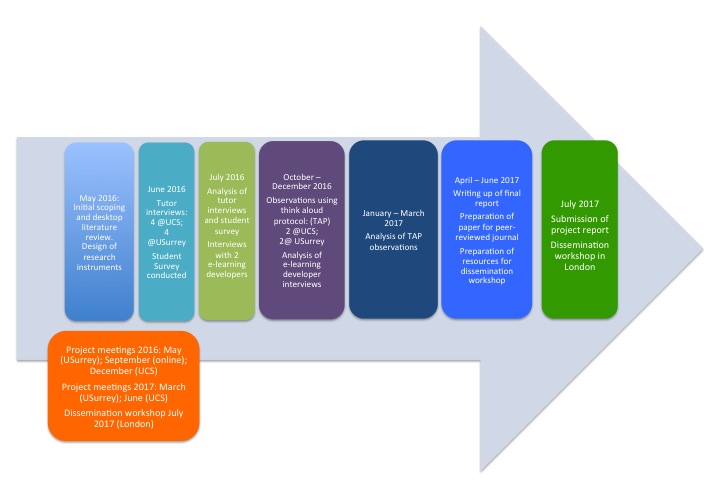
**Criteria**

Projects will be judged on the extent to which they:

1. Demonstrate awareness of, and build on, current literature in educational development
2. Entail appropriate and achievable methodology within the context and timescale of the project (including ethical implications where relevant)
3. Include a realistic project plan with timescale, deliverables and providing value for money
4. Involve collaboration and identify clear implications for educational development, beyond the individual’s immediate practice
5. Indicate any experience or an interest in pedagogic research and evaluation

***Please return the completed form to [office@seda.ac.uk](mailto:office@seda.ac.uk) by 29th January 2016.***

**Appendix 1: project timeframe and key activities**



## Appendix 2: Notes for the HE Tutor Interviews

A common semi-structured interview schedule was designed, from which we were able to deviate as needed, in response to the tutors’ comments and replies.

## Teaching philosophy/approach

The issue here is to get a broad overview of what underpins their practice. Areas to consider:

* Role of teacher in learning environment
* View of how student learning and teaching interact

## Design approach – the activities taken *before*

The issue here is to consider how they approach the design of the learning environment. Areas to consider:

* Approach to learning design
* What sort of TEL they favour and why?
* What are these approaches encouraging learners to undertake?
* How inclusive are these approaches (ie disability)?

## Engagement with learners – the activities taken *during*

The issue here is how they adapt and engage within the learning environment. Area to consider:

* Interactions – how are these encouraged/managed

## Evaluation – reflection *after and that feeds back*

The issue here is to consider how the tutor’s approaches are informed and revised. Areas to consider are:

* Aspects of critical reflection
* How do tutors evolve?

## Sample aspects for exploration with tutors in the interviews

1. We want to hear tutors’ articulations of their own teaching and learning philosophy – ie what it is? what’s important? what does it mean for their practice? what does it mean for their own development?
2. What does excellence in teaching mean? For practice? For one’s discipline or professional community(ies)?
3. Can excellence in teaching be ascribed in different ways to different stages, roles and responsibilities of a tutor’s/academic’s career?
4. What kind of approaches do the tutors use when designing learning activities? Perhaps ask the tutors to work through a couple of specific examples.
5. When planning for a session how do tutors seek to ensure all learners will be able to get involved?
6. What’s important when the tutor thinks about students’ learning? – in terms of their role, actions, provision, and interaction with learners.
7. How does the tutor help their learners to develop and progress in their learning? – what things do they do, provide, design?
8. Does the tutor encourage learners to take risks, face challenges? How, why and how do they know this?
9. What does the tutor provide in the way of learning resources and support materials (perhaps matched to the examples shared)
10. Do the tutors make special additional provision for eg students with disability?
11. How do the tutors interact with their learners?
12. Do tutors feel it is important to enthuse and inspire learners? How do they do that?
13. How would the tutor know the learners are doing OK, understanding and making progress?
14. How does the tutor (help to) motivate learners?
15. How does the tutor use feedback from learners?
16. Has the tutor examples of actions from student feedback?
17. Would the tutor describe their practice as critically reflective? How would they justify such a claim?
18. What’s important to the tutor in T&L– being risky and experimental OR being organised and reliable?
19. How do tutors learn and develop their practice as HE teachers?
20. How do tutors keep up to date, current or ahead in their practice?
21. Do the tutors feel part of a professional community(ies)? Are these connected to a course, department, the institution, subject/discipline, professional body, …
22. How do tutors engage or interact in these communities?
23. Would tutors describe their practice as scholarly? How would they justify that?
24. Do tutors feel they have/should have a professional obligation to others esp. newer or less experienced colleagues?
25. Where and how does TEL fit into the tutor’s TL&A?
26. Where and how does TEL fit into broader practices as an academic?
27. How is/has the tutor’s use of TEL changed in last few years?
28. When designing a new module or a teaching session where and how does TEL come into that?
29. How does the tutor regard their own digital capabilities? Are they a confident, fluent user or less than that?
30. Does the tutor feel digitally engaged, competent, fluent?
31. How do digital skills and understanding fit into the tutor’s L&T philosophy?
32. What are the challenges in use of TEL and digital technologies for the tutor, for their learners, for courses?

## Appendix 3: Think Aloud Protocol (TAP) Guidelines

# A think aloud protocol for HE tutors: a guide for participants

## SEDA project: The intersections between digital fluency and teaching excellence: case study-based and media-rich explorations with HE tutors

### Dr Christine Smith and Dr Simon Lygo-Baker

## Introduction to this Guide

In this small-scale, qualitative research project we are exploring HE tutors’ conceptions of teaching excellence, but especially in relation to tutors’ knowledge and skills in the use of digital learning and teaching resources. We have been interested to understand more about HE tutors’ perceptions of digital fluency ie in ease and confidence in the design, use and application of technology enhanced learning (TEL) within practices as academics, but centred on tutors’ beliefs and practices in teaching and support of students’ learning. As the HE tutors participating in this study (with four tutors at the University of Suffolk; and four tutors at the University of Surrey), you each work in one of four disciplinary clusters: STEM; Arts and Humanities; Health and Social Care; and Social Sciences

The ‘think aloud protocol’ asks you to self-record (using a digital audio recorder we will supply if needed) your own engagement in a short learning- or teaching-related digital practice. We are expecting you to create your own single audio recording (of approximately 30 minutes) during March-April, 2017. You are asked to share your recording with us as soon as it has been created. To assist you in this process of creating your recording, we have put together this guide to the think aloud protocol (TA), drawing upon relevant research and scholarly reports. A couple of references are given at the end to select resources, if you wish to read more about TAs.

Think aloud protocols have become an established practice for needs analysis and eliciting user feedback in a range of contexts, but particularly within eg software engineering for usability testing. The think-aloud (TA) protocol is one of the primary tools used by usability professionals when conducting usability tests. In usability, a TA consists of observing a relevant user working with an interface while encouraging them to "think-aloud"; to say what they are thinking and wondering at each moment. Usability practitioners use the TA protocol because they cannot directly observe what a user is thinking and the TA is regarded of particular value because it focuses on the problems a user meets. It is at times when a specific problem arises which slows the user down that the TA method really shines, as it allows the observer to correlate between the actions and statements of the participant. In such situations, rapid and high-quality, qualitative user feedback can be gathered including:

1. direct observation of what the user is doing;
2. hearing what the user wants, or is trying, to do;
3. the observer has the chance to help clarify the situation, if the user gets into difficulties;
4. a high degree of flexibility is offered as the observer can steer the user in their interactions with the software to specific areas or aspects needing attention; and
5. the presence of the observer with the user, enables opportunities for meaningful and direct dialogue.

Furthermore, in usability testing, the protocol can be used in two distinct scenarios:

1. The observer specifies a definite task to be accomplished by the user. This allows the observer to concentrate on a specific task in which they are interested.
2. 'Open-ended'; where no specific task is specified, and the user is free to choose their own pathway. This allows the observer to concentrate on naturally occurring problems.

## The Concurrent Think Aloud Protocol

One of the TA protocols often employed by usability professionals but also by researchers is the concurrent TA. When using the concurrent TA, the user or participant is encouraged to “think out loud” while working on a specific task. The concurrent TA protocol is applied in order to make the thought processes (of the user or participant) as associated to the task, *and* occurring during the task performance itself, as explicit as possible for inspection and analysis. The use of concurrent TA can offer direct and authentic opportunities to capture participants’ expressions in thoughts and feelings as a task is performed. It offers the potential to be an antidote to the likely more abstracted or tidied-up accounts participants might offer when describing, explaining and/or reflecting on a performed task eg in interviews or debriefings.

Within research contexts, using the concurrent TA, participants can be asked to say whatever comes into their mind as they complete a designated task. This might include verbalising about what they are looking at, thinking, doing, and feeling. This can give the observer insights into the participant's cognitive processes related to the task. In a formal research protocol, all verbalisations would be transcribed by the observer and then analysed. Such sessions are often also audio- and video-recorded so that the researchers have a recording that they can go back and refer to, ie in what participants did and how they reacted.

## Using the concurrent TA in this study

It is a nuanced form of the concurrent TA that we propose to ask you, as HE tutors, to engage with in this study for the SEDA project. We outline the key points of this form of the think aloud protocol below.

1. We want you to identify a digitally-focused task related to your teaching and/or support of students’ learning. The task must be associated to your teaching and support of learning. Some possible examples might involve you:

* preparing a teaching session in which you make use of technologies eg clickers, video
* preparing a podcast for your learners or your course
* setting up and creating an online learning resource eg on the VLE (Learn at University of Suffolk) such as an online quiz or a discussion board/forum
* creating or adding content to a module/course blog
* preparing online, or audio or video feedback
* or anything else you might wish to suggest!

1. We want you to record yourself engaged in the digitally-focused task, using an audio recorder. We can supply you with a digital recorder if you do not have your own. We want you to record (by thinking out loud) all your thoughts, actions and feelings as they occur to you *and* as you engage in this teaching- or learning-related digital task. The recording needs to be in the style of “stream of consciousness” verbalisations, rather than a carefully considered narrative please!
2. You do not need to explain in any detail the nature of the task at the start or during the recording, though we ask you to tell us about why you do this task in a very brief statement of 100-200 words maximum, as you share with us the audio recording made (eg putting the statement in the email with the recording attached).
3. We suggest the audio recording lasts for about 30 minutes, made up of you thinking aloud, while solely performing the task. You might choose to make it slightly longer if this enables you to talk through the complete process of the task. But we do not expect you to make long recordings eg over 1 hour as this would be far too demanding to ask you (or indeed anyone) to keep consciously verbalising thoughts and actions and feelings.

We are also forgoing the potential advantages of observing you, by asking you to make the audio-recording yourself as you work on the task. Our reasons for *not* observing you while using the TA protocol concern:

a) not to impede or inhibit you by our presence ie in airing your thoughts and feelings while working on the task; and

b) enabling you to make the recording at a time and in a place to suit you, rather than defined by our availability to observe.

If you have any questions or concerns about making your recording, or if you wish to discuss any aspects associated with the task, please do not hesitate to contact either:

* Dr Christine Smith, University of Suffolk x38684 [christine.smith@uos.ac.uk](mailto:christine.smith@uos.ac.uk)
* Dr Simon Lygo-Baker, University of Surrey [s.lygo-baker@surrey.ac.uk](mailto:s.lygo-baker@surrey.ac.uk)

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## Appendix 4: Notes for the Student Survey online

### 1. What does excellent teaching mean to you as a student?

Which of the following do you feel are important for excellent teaching in Higher Education – please signal the extent of your agreement or disagreement with the following aspects:

1. The subject aims and objectives on my courses or modules are well understood by my teachers, explained to me and achieved by me
2. A broad and flexible curriculum to match the aims and objectives and informed by contemporary scholarship and research
3. Programmes of study that enable students to develop subject and transferable skills
4. Well qualified and committed staff whose teaching is underpinned by scholarship and research
5. Clear commitment to good teaching, staff development promoting good teaching and learning
6. A range of teaching approaches relevant to the learning objectives
7. Academic and pastoral arrangements well matched to course structure and the nature of the student intake
8. Clear course documentation from induction to graduation
9. Methods of assessment relating to the learning objectives with timely and appropriately detailed feedback
10. Active systems for gathering and considering student feedback and taking action on feedback
11. Means of gathering, considering and responding to external opinions eg from external examiners, PSRBs, etc
12. Establishing and effective arrangements for reviewing provision
13. Effective links with industry and commerce contributing to curriculum, good teaching and development of transferable skills
14. Constructive relations between students and staff
15. Well stocked and managed resources
16. Good access to learning resources
17. Suitable and sufficient teaching and social accommodation

## Appendix 5: Student Survey (Survey Monkey)

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| Digital Fluency and Teaching Excellence |

## SEDA Project on Digital Fluency and Teaching Excellence

### This survey is part of a SEDA (Staff and Educational Development Association) funded project entitled ‘*The intersections between digital fluency and teaching excellence: case study based and media-rich explorations with HE tutors’*.  The project is run between the University of Suffolk and the University of Surrey (led by Dr Christine Smith and Dr Lygo-Baker). The project is interested to understand firstly if and how, academic tutors see connections between digital technologies they use/apply in their teaching and support of student learning, and how they conceive the notion of ‘teaching excellence’.  But we also wanted to canvass among you, as students, to find out:

### *1. What seems to be important to you in terms of excellence in teaching; and  2. The extent to which the use/application of digital technologies is important for excellence in teaching.* This survey can be completed anonymously and the option to withdraw remains available to you, at any time. The survey is open to all students at the Universities of Surrey and Suffolk. The survey should not take you more than 15 minutes to complete and we really value your participation. Your consent to participate is asked at the outset of the survey and all data derived from the survey will be analysed for use in project reporting and in peer reviewed journal paper(s). However, no individual will be identifiable and all data will be stored securely and confidentially.

Top of Form

#### 1. We would be grateful if you could identify the broad discipline area that you feel best identifies your area of study: Arts & Humanities; Health; Social Sciences; STEM

*Statements 2-18 were presented to students against which to express their level of agreement/disagreement* ie as:

Strongly agree Agree Neither agree nor disagree Disagree Strongly disagree

#### 2. The aims/purposes and objectives of programmes and modules are well understood and applied by my tutors

3. The aims and outcomes of modules and sessions are conveyed clearly to me

4. A broad and flexible subject base is used on courses/modules to match the aims and outcomes, and informed by up-to-date knowledge and relevant research

5. My programme of study is enabling me to develop subject knowledge and relevant skills of benefit to my ongoing development and potential professional career(s)

6. The courses/modules are run by qualified and committed staff whose teaching is underpinned by awareness or engagement in research

7. My course tutors generally demonstrate a clear commitment to good teaching that promotes student learning

8. My tutors use a range of teaching approaches that are relevant to enable my learning

9. The academic and pastoral arrangements on courses are well matched to the subject areas and to my needs

10. Methods of assessment relating to the learning outcomes are used

11. There is timely and appropriately detailed feedback to help my ongoing learning

12. Systems for gathering and considering student feedback and taking action on feedback are in place and used

13. There are effective links with industry which contribute to my learning by developing relevant skills

14. There are constructive and positive relations between students and staff

15. Use is made of contemporary digital technologies within/across the programme/modules eg clickers in lectures, the Virtual Learning Environment, media-rich resources such as video/audio, social media, etc

16. There are sufficient relevant and well-managed resources on my courses/modules

17. There is good access to relevant learning resources on my courses/modules

18. There is suitable and sufficient teaching and social accommodation used on my courses/modules

19. If you have any additional comments please add them here. Thank you.

**Appendix 6: SRHE Annual Conference 2017 paper**

Case studies of HE tutors exploring teaching excellence and digital fluency

## Dr Christine Smith[[4]](#footnote-4) and Dr Simon Lygo-Baker[[5]](#footnote-5)

This paper presents a qualitative research project, funded by the Staff and Educational Development Association (SEDA). The project was designed to contribute to understanding around the intersections of digital literacy with teaching excellence, across four disciplinary clusters in Higher Education (HE). We explored these constructs of teaching excellence and digital fluency by examining the attitudes, conceptions and practices of eight tutors, working in: STEM; Arts and Humanities; Health and Social Care; and Social Sciences.

The project involved two very different higher education institutions (Universities of Suffolk and Surrey) to identify commonalities and distinctions. Both Universities have interests in tutors’ digital fluency, in ease and confidence in use of digital tools and environments, *and* in relation to professional development towards ‘teaching excellence’.

## Analytical framework

A desktop literature review considered the constructs of teaching excellence and tutors’ digital fluency. We focused on highly personalised conceptions of teaching, and as relating to digital fluency. We considered the ‘expert teacher’ in offering some close association to, and similarity with, the notion of an excellent teacher.

### Personalised conceptions of excellence associated with the individual tutor

Teacher excellence might be characterised in the practices of an individual tutor, in creating the conditions for optimal learning and for learning to thrive. Skelton (2005) identified ‘psychologised’ understandings of teaching excellence focused on transactions between individual teachers and students. Further, Skelton (2009) suggested excellence involves the reflexive development of a personal teaching philosophy and should be conceived as part of the whole of academic life.

Shulman (2004) suggested the expert teacher not only knows the subject matter being taught, but also how to transform the particular subject being taught into terms students can understand. Meanwhile, Kreber (2002) connected expertise to excellence, in ‘scholars of teaching’, sharing knowledge and advancing knowledge of teaching and learning in ways that can be peer reviewed.

Weavers (2003) described the excellent teacher as one maximising each students’ learning, utilising a wide range of teaching and learning approaches and supporting materials and encouraging students to experiment with different learning approaches. An awareness of specific student needs is identified as important, as well as the need for actively seeking feedback to critically analyse and take actions to improve.

We noted confusions between excellence in teaching and ‘good enough’ teaching (eg Gibbs & Habeshaw, 2002; Glasner, 2003). Gunn and Fisk (2013) identified a lack of sophistication in conceptualisations to accommodate changing expectations and roles across an academic career. Furthermore, they identified a lack of representatively diverse conceptualisations to mirror the differentiated nature of the HE sector, instead creating ‘*a normative universalising of teaching excellence*’ (p7).

Cashmore, Cane & Cane (2013) suggest the need for a flexible framework of criteria for teaching excellence, aligned to levels of seniority and stages in an academic career. Similarly HELTASA (HELTASA, 2015 p1-2) assert:

*An excellent teacher is a reflective practitioner who has grown more effective over a number of years in relation to increasing knowledge of teaching and learning, experience in teaching and the facilitation of learning, and systematic observations of what happens in the classroom with a view to improving student engagement and learning outcomes. An excellent teacher has a clearly articulated teaching philosophy informed by educational theory and appropriate for the university context*.

Gunn and Fisk (2013) identified emerging themes on teaching excellence since the CHERI report (Little *et al,* 2007) including: active research-teaching activities (Brew, 2007; Jenkins & Healey, 2007); dynamic student engagement and notions of student partnership; flexibility of provision and access to provision (Nichol *et al,* 2012); Scholarship of Teaching and Learning (SoTL) and the need to be evidence-based (Gibbs, 2008; Kreber, 2013) with SoTL involving students seen as ‘particularly’ excellent (Gale, 2007); and on leadership, both hierarchical and distributed.

### Excellence in relation to digital literacy or fluency

JISC defined digital literacy as those capabilities which equip an individual for living, learning and working in a digital society (Beetham, McGill & Littlejohn, 2009). In the same JISC-sponsored report, Professor Peter Chatterton privileged pedagogy to inform practice in a digital age:

*‘in a complex and fast-changing technological world, we must always remember that there are enduring principles of good teaching and ways of engaging students which transcend different media and technologies’* (Beetham, McGill & Littlejohn, 2009)

According to Skelton (2005), teaching excellence is inescapably connected to broader social and technological changes, highlighting the use of technologies as one of the significant innovations in teaching and learning (see also Hannan & Silver, 2000). Teachers confident with digital tools/environments can make a real difference to students’ learning and working collaboratively, interacting globally and facing the challenges of “supercomplexity” (Barnett, 2000). Beetham (2016) offers a set of digital capabilities as six interconnecting elements: linked to proficiency, information literacy, digital communication and digital identity. Devlin & Samarawickrema (2010) suggest engagement with changing technologies should be integral to claims of excellence. Laurillard (2012) emphasised a connective perspective between teaching, learning and technology, in the construct of teaching as a ‘design science’.

## Methodology and method

Qualitative case studies are the basis of our research strategy, exploring how academics in a range of disciplines describe and experience teaching excellence and digital fluency, and how they make sense of them, within their natural settings (Geertz, 1973). The constant comparative method facilitates a systematic analysis for insight into differences and similarities across disciplinary clusters and at different kinds of HE institution.  Moreover, the case study approach enables triangulation of multiple sources of data or methods (Denscombe, 2010).

Rich, thickly descriptive responses (Geertz, 1973) have been gathered from which elaborate case studies are being created. The case studies illustrate tutors’ unique development pathways towards digital fluency in relation to their own philosophies of ‘teaching excellence’: such as in the challenges encountered; and their individual conceptions of digital fluency in relation to their pedagogical practices. These are tutors who are using digital technologies and resources as part of their professional practice (Patton, 2002).

We augmented the interviews with audio-capture of five of the tutors using a ‘think aloud protocol’ (Eriksson & Simon, 1993) while engaging in authentic, design aspects of teaching involving digital technologies. The tutors verbalised their actions and reflections-in-action (Schön, 1983). Complementary data, has also been gathered in an open, online student survey at both Universities: on students’ beliefs and attitudes around teaching excellence and tutors’ digital fluency.

## Conclusion

Within this study, we have foregrounded the importance of conceptualising teaching excellence linked to digital fluency, but in nuanced ways: eg across contexts of learning; as well as in individualised approaches. We acknowledge teachers’ practical wisdom as situated, social, dynamic, and contested. We recognise teachers’ conceptions need to be examined in relation to their sense of professional identity, and in their espoused beliefs and practices in teaching. Our study has also investigated the extent to which individual tutors’ excellence might be mapped to digital capabilities as *transaction* with a focus on content; or as *transformation* with a focus on students’ learning and conceptual change. The case studies assist in the recognition of digital fluency as an integral aspect of aspiring to teaching excellence at both universities.

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1. University of Suffolk [↑](#footnote-ref-1)
2. University of Surrey [↑](#footnote-ref-2)
3. Collins English Dictionary [↑](#footnote-ref-3)
4. University of Suffolk [↑](#footnote-ref-4)
5. University of Surrey [↑](#footnote-ref-5)