Bridging the Digital Gap: Supporting the development of lecturer’s digital literacy capabilities. An exploratory case study.

Dissertation submitted in part fulfilment of the requirements for the degree of MSc. in Information and Library Management At Dublin Business School

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January 2018
Declaration

I, Dimphne Ní Bhraonáin, declare that this research is my original work and that it has never been presented to any institution or university for the award of Degree or Diploma. In addition, I have referenced correctly all literature and all sources used in this work and this work is fully compliant with the Dublin Business School’s academic honesty policy.

Signed: Dimphne Ní Bhraonáin
Date: 7/01/2019

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And to all my colleagues in Griffith who took the time to complete the survey.

Dedication:

This dissertation is dedicated to my husband Conor, and my two beautiful children Saoirse and Fionn. Thanks for sticking with me, you can have your mammy back at last, we’ve loads of time for hanging out and wandering walks!
Abstract

The importance of the digital literacy capabilities of educators has emerged as a key concept in Higher Education in recent years. Lecturers are at forefront of harnessing the potential of new technologies in education, and as such are under increasing pressure to develop their digital capabilities to meet the demand of these new learning spaces.

National policy recognises the challenges that they face, and there are many calls for the enhancement of educator’s digital literacy skills to develop their teaching practice and professional identity. In response to a need for an Irish digital literacy model, the *National Digital Skills Framework* was developed and mapped closely to the *National Professional Development Framework*.

This dissertation explores the suitability of the *National Digital Skills Framework* as a tool to support the implementation of a digital literacy programme of support for lecturers in an independent private, third level institution. Findings from a mixed-methods survey support the theory that there is scope for a boutique version of the framework to be mapped to the strategic, continuing professional development objectives of the college. In order to maximise its relevancy as a conceptual model, examples of situated digital practices were mapped to the six pillars of the framework to engender a deeper understanding of the relevance of digital literacy skills to participants.

While this case study revealed similar barriers to engagement with digital enhancement programmes as are found in the wider literature, there were positive indications that lecturing staff were willing to develop their digital skillsets. It also concludes that for any digital literacy capacity building programme to be successful, there must be collaboration across all relevant departments, top-down institutional support and strong evidence of a sense of ownership for participants.
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## Abbreviations

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<td>DigCompEdu</td>
<td>Digital Competence of Educators</td>
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<td>CPD</td>
<td>Continuing Professional Development</td>
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<td>DL</td>
<td>Digital Literacy</td>
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<td>HE</td>
<td>higher Education</td>
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<td>ICT</td>
<td>Information and communications technology</td>
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<td>IL</td>
<td>Information Literacy</td>
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<tr>
<td>MOOC</td>
<td>Massive open online course</td>
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<td>NFETL</td>
<td>National Forum for the Enhancement of Teaching and Learning</td>
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<tr>
<td>OECD</td>
<td>Organisation for Economic Co-operation and Development</td>
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<td>OER</td>
<td>Open Educational Resources</td>
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Chapter One: Introduction

1.1 Research Context

There is a growing recognition internationally of the increasingly expansive, digitally sophisticated competencies that educators must possess, both to enhance student learning and to operate successfully within the wider profession.

This ability to interact with digital technologies is widely recognised as a fundamental right for all citizens, enabling them to participate fully in society. The OECD identifies digital literacy as an essential skill for meaningful inclusion in the digital economy and society (2015, p.15), while the European Commission's Digital Agenda (2015) highlights a persistent exclusion of many citizens from the digital society. The most recent European progress report currently available on digital skills highlighted as much as 47% of European citizens have either "low" or "no" digital skills (EUA, 214, p. 14)

Access to Higher Education (HE) is not an automatic guarantee that these essential digital literacies will be developed in learners. Recent discussion has begun to focus on the pivotal role that the digital literacies of educators play in their ability to support the educational development of their students and their ability in turn to engage with technology and self-directed, life-long learning (McKnight et al., 2016, p. 12). However, despite teaching staff having been identified as being “at the frontline” of delivering any new strategies for harnessing the potential in technology in education (High Level Group on the Modernisation of Higher Education, 2014), there is concern that there is a persisting shortfall in their expertise that must be addressed (Johnson et al., 2014).

Considering these findings, there are many calls from within International, EU and National policy to prioritise the development of educator’s digital literacy to support their own professional development to allow them to keep pace with technological developments. This issue is recognised by the European Framework for the Digital Competence of Educators (DigCompEdu) which contends that “educators need a set of digital competences specific to their profession in order to be able to seize the potential of digital technologies for enhancing and innovating education.” (Redecker, 2017, p. 8)

1.2 National Digital Skills Framework

The shift towards an active institutional support of educator’s digital capacity building is reflected within HE policy in Ireland (DES, 2011; NFETL, 2015, 2016). In line with developments
within international policy, the Irish HE sector is at a crossroads where educators are being encouraged to move away from traditional modes of delivery, towards embracing emerging best international practice.

The National Forum for the Development of Teaching and Learning in Higher Education (NFETL) was established in 2012 to determine and develop best practice in teaching and learning in the sector. To achieve this goal a major objective is to engage with and develop educators’ professional capacities, supported by the National Professional Development Framework (NFETL, 2016).

In pursuit of this aim, the NFETL has funded many innovative projects which underpin the principles of capacity building in the area of digital literacy. A key recommendation from the Roadmap for Enhancement in a Digital World 2015-2017 (NFETL, 2015b), called for ‘a co-ordinated, multi-level approach to foster digital literacy, skills and confidence among students at all levels of education’. Responding to this recommendation, the All Aboard National Digital Skills Framework (All Aboard, 2015a) emerged from a research project funded by the National Forum (Dore, Geraghty and O’Riordan, 2014) through its Teaching and Learning Enhancement Fund.

This initiative’s emphasis was on building digital capacity and confidence “in terms of people, their skills, their levels of confidence and their ability to critique and challenge pre-conceptions.” (All Aboard, no date) It is a collaborative project involving contributors from a wide variety of support staff including librarians; e-technologists; IT support; Teaching and Learning; Centres of Academic Excellence and Learning Support. The New Media Consortium singled it out as one of a number of international Exemplar Projects in its Digital Literacy in Higher Education report (Alexander et al., 2017, p. 15).

1.3 Defining the Terms
Before proceeding to examine how best to address digital literacy support within HE institutions, it is necessary to clarify what is meant by the term. An understanding of the term digital literacy is often dependent on the context, as is reflected by the range of organisations, disciplines, industries that articulate them. A programme of support for digital literacy cannot be successfully implemented without a clear understanding of terms of reference, as perception of the meaning behind the term digital literacy is often influenced
by the perspective of the user and their community (Dore, Geraghty and O’Riordan, 2014, p. 11). Choosing which concept of literacy to align to within an institution, is “a matter of judgement based on a thorough understanding” of that institutions’ intention (Stordy, 2015, p. 472).

There is an ongoing tension between the terminology of digital capacity and digital literacy, among many other terms that have gained some traction over the years. Librarians traditionally approach digital capacity building through a digital literacy lens (ANZIL, 2004; ALA, 2013; SCONUL, 2016), while other departments coming from other disciplines can approach from a more skills-based capacity building vantage point, as is demonstrated in a JISC report summarising twelve baseline projects (JISC, 2012b). In addition, many studies show that teaching staff do not have a consistent understanding of, or recognition of, the term digital literacy.

In fact, digital literacy is not a new a concept; its origins are rooted in Zurkowski’s original coining of the term, information literacy. An information literate person is defined as someone who has learned techniques and skills to use a wide range of information tools and sources to provide solutions to problems in work or daily life.” (1974)

In the intervening years since Zurkowski’s influential definition, there has been considerable discussion internationally on how digital technologies are transforming what it means to be literate. Gilster recognized the connection between IL and ICT skills and spoke of the concept of digital literacy, defining it as “the ability to understand and use information in multiple formats from a wide range of sources when it is presented via computers.” (Gilster, 1997) A major evolution of terms has emerged in the intervening years, resulting in a myriad of definitions and frameworks such as computer literacy, digital literacy, digital information literacy, visual literacy, media literacy, internet literacy, transliteracy, metaliteracy and multimodal literacy.

This proliferation in interpretations and concepts and the sheer scale of the definitions and discussions around the terminology make an agreed vocabulary difficult to be achieved. Spante et al’s extensive study of HE institutions confirm this difficulty (2018), and demonstrates that context imposes a strong influence on how the concept is articulated.
However, despite this lack of a concrete, universally accepted concept, on examining the variety of terms it is clear that there is some level of commonality in approach. A recognition of the importance of a holistic approach that recognises the needs of the individual has emerged.

This is evident in Knobel and Lankshear’s recommendation (2008, p. 3). They propose that in order to address the difficulty in choosing an agreed term, it is not necessary to have an all-inclusive definition. Rather, a more user centred approach should be taken, to develop a method that allows for the growth of a more personal, life-long development rather than a prescriptive, skills-based approach.

In one of the most influential definitions within HE, JISC describes digital literacy as, “the capabilities which fit an individual for living, learning and working in a digital society” (JISC, 2014). This definition has been slightly moderated for use as a working definition by Ireland’s National Digital Literacy Skills Framework as:

“the capabilities which fit someone for living, learning and working in a digital society, with the knowledge that a digital society is ever evolving,” (Dore, Geraghty and O’Riordan, 2014, p. 18)

Whatever definition may be chosen in a given circumstance, As Zurkowski had recognized over forty years ago, and it still holds true, an array of “access routes and sources have arisen in response to this kaleidoscopic approach people take to fulfilling their information needs. These are poorly understood and vastly underutilized” (1974, p.4)

1.4 Griffith College – A Case Study
Griffith College is a private college providing education to over 7,000 students across campuses in Dublin, Cork and Limerick. It offers a range of undergraduate, postgraduate and professional and corporate training courses, provided through full, part-time and blended learning. Its lecturing staff teach a wide range of cohorts, ranging from school leavers entering undergraduate programmes for the first time, to those returning to education, and those seeking to pursue professional programmes. This dissertation seeks to aid lecturers within
Griffith College in developing their digital literacies to facilitate their support of this diverse range of students within an increasingly challenging digital landscape.

A key recommendation from the *Professional Development Framework* is that every HE institution should have a strategy supporting the development of digital capacity to enhance teaching and learning. It further calls for CPD programmes to be integrated into the *Professional Development Framework* (NFETL, 2016, p. 8)

Griffith College has committed to enhancing the digital capacities of the institution and those of the college’s lecturers (Griffith College, 2014). In pursuit of the support of the professional development of lecturing staff, the College has begun to map all CPD opportunities and activities to the *Professional Development Framework* (figure 1).

![Figure 1 CPAE CPD Griffith College (2017) p12](image)

This case study dissertation seeks to investigate how an in-house, Digital Literacy CPD programme might be structured within these existing systems currently in place.

**1.5 Research Aim**

The aim of this dissertation is to investigate the awareness among lecturers in Griffith College of the digital literacy supports available to them. It further seeks to explore their perceptions of how developing their digital capacity links into their continuing professional development (CPD).
It will be an exploratory case study that will seek to identify how CPD for teaching staff can be supported by the adoption of the National Digital Skills Framework to develop a digital literacy skills programme in Griffith College. It will seek to identify which department, or departments, are best positioned to deliver a digital literacy capacity building programme.

It will be informed both by the current CPD policies in place that support digital capacity building, and the perceptions of and current uses of digital tools among teaching staff in Griffith College across the institutions’ three campuses (Dublin, Limerick, Cork).

1.6 Research Objectives
1. To examine current digital capacity building policies and offerings in Griffith College, and to propose potential programmes of support linking digital literacy to CPD activities
2. To measure lecturer’s perception of institutional digital literacy supports within Griffith College.
3. To capture attitudes of lecturers towards digital literacy within their teaching and learning practices, with regard to its role in the support of continuing professional development.
4. To discover the level of teaching staffs’ knowledge of the National Forum, Professional Development Framework.

1.7 Research Questions
1. Can the National Digital Skills Framework provide a meaningful scaffold to present relevant digital literacy skills to teaching staff?
2. What are the factors that affect the use of digital literacy tools among teaching staff in Griffith College?
3. How can the provision of digital literacy supports be improved?
4. How can the uptake of digital literacy CPD offerings be improved?
5. What department or departments are best placed to provide a central hub for digital literacy skills?
5. Are lecturers aware of the National Forum, Professional Development Framework?

1.8 Dissertation Structure
Chapter One introduces the concept of digital literacy and gives an overview of its relevance within the context of higher education and provides a rationale for the research. Research aims and objectives will be stated, the scope and research limitations will be explored.

Chapter two is a critical review of the selected literature relevant to the topic and is presented in themes relevant to the research objectives.

Chapter three discusses and explains the decisions behind the methodology chosen to undertake the research. It will outline the methodology that was used in undertaking the research and detail the data collection methods.

Chapter four describes how the quantitative instrument was designed and will present the data that was collected and analysed.

Chapter five discusses the findings of the quantitative research and relates findings to those outlined within the literature review.

Chapter six draws conclusions from the findings and makes recommendations in relation to the case study, and for future research.

Chapter seven is a reflection on the learning experiences of the researcher gained throughout the process of the dissertation process.

1.9 Research Rationale

While there are collaborative, multi-institutional projects that have piloted the National Digital Literacy Framework through the National Forum’s Pilot Study Implementation (O’Keeffe and Geraghty, Aoife, 2013; ‘T1Step Resources’, 2016; Leinster Regional Cluster, 2016), and a number of HE institutions recommend the framework to their staff and students, as yet no institution has officially implemented the framework to support CPD opportunities for teaching staff in-house.

A central tenant of this dissertation is to explore the potential for the adoption of the National Digital Skills Framework as an institutional tool to support the provision of digital literacy CPD training of lecturing staff within Griffith College. It will explore attitudes of lecturing staff towards their use of and perception of technology in relation to their teaching practice, and their attitudes towards engaging in CPD opportunities in Griffith College. It will further present examples of CPD in practice through the six pillars of the National Digital Skills
Framework, in a bid to identify if this enhances the understanding of the concept of digital literacy among lecturers.

Findings from this research will be mapped and cross-referenced with existing research datasets where possible to correlate results. Several variables will be tested with Griffith College teaching staff, to build on current understanding in this area, which can provide future researchers with a valuable dataset. Findings from this case study can contribute to informing similar projects within institutions with similar profiles.
Chapter Two – Literature Review

2.1 Introduction

Digital literacy (DL) is well documented within the literature as an essential, underpinning skill for those teaching and studying within HE. Much research has explored the demands placed on learners to use digital technologies to underpin their research and lifelong learning. In more recent years there has been a shift in focus towards a better understanding of the pivotal role DL plays in supporting increasingly the digital competencies that educators must possess.

Those teaching within Higher Education (HE) are operating at an intersection between traditional modes of delivery and a digitally enhanced environment (Devlin, Feldhaus and Bentrem, 2013). Consequently, they are increasingly being called upon to deliver in a rapidly developing technological environment that can be unfamiliar and daunting. A recent NMC Horizon report identifies the difficulties educators face in "staying organised and current" in a HE environment where software and technology is moving forward at "a strenuous rate" (Becker et al., 2017, p. 23). In order to stay up-to-date with new digital learning environments, educators are becoming increasingly involved in a range of teaching and learning practices which, as Wall cautions, while having the potential to enhance the learning environment for students is resulting in a challenging and labor-intensive bottleneck for those delivering (Wall, 2013).

The many calls from within International, EU and National policy for the development of educator’s digital capacities attest to a wide, mainstream acceptance of the importance of this aspect of professional teaching practice within the HE sector. Many funded reports demonstrate the implementation of such polices (UNESCO, 2013; European Commission, 2015; OECD, 2015). The UNESCO policy brief examining the use of technology in education is representative of the prevailing view, in which Karpati calls for digital literacy to be embedded within the professional development of educators (Karpati, 2011).

2.2 National Policy - Digital Literacy of Teaching Staff in Higher Education in Ireland

In parallel to this international drive, the Irish government has similarly strongly embraced the goal of the development of digital capabilities for staff working within the Irish HE sector. A number of key policy documents have followed on from recommendations made by the National Strategy in Higher Education to 2030 (DES, 2011) which emphasised the importance of an ongoing support of academic professional development. The National Forum for the
Enhancement of Teaching and Learning in Higher Education (NFETL), established in 2012, carried out a sector-wide consultation process and has since published two significant reports that specifically refer to continuing professional development (CPD) in relation to building digital capacity and by extension, digital literacy.

The first of these documents, *Irish Higher Education: A Roadmap for Enhancement in a Digital World 2015-2017* (NFETL, 2015b), recommends the provision of all necessary resources to enable teaching staff to achieve the critical goal of “the development of innovative and engaging learning through technology.” This report further explicitly links the development of DL among HE staff to DL“(p. 40).

The *National Professional Development Framework for all Staff who Teach in Higher Education* (NPDF) (2016), likewise views digital capacity as an essential part of creating a lifelong learning environment, nurturing educators throughout their career, referring to the importance of digital capacity throughout. It explicitly identifies digital literacy development as a potential output to be included in the “planning for professional development activities in institutional contexts.” (2016, p. 4)

However, while a review of national policy indicates that DL is a priority, less is understood as to how these recommendations might translate into a successful programme of professional development. A clearer understanding of how this may be achieved can be gained through a closer examination of how changing professional development demands may be met by Continuing Professional Development (CPD) models and frameworks operating within academia.

2.3 CPD for Academia

In addressing the growing complexity of teaching roles within HE, and consequent pressure to develop professionally, Donnolly (2015, p. 9) reflects in her own position as an academic developer on the importance of an ongoing professional reinvention. This is not a new challenge, as Freeman (1992) forecast in his paper on professional practice, CPD “overcomes the limitations of the initial professional qualification and its gradual obsolescence,” offering the potential of a broad choice of professional activities (p26). This perspective holds especially true when considering developing teaching practice around the use of digital technologies. As Beetham et al (2009) advocate, in order to successfully embed the technologies that are challenging traditional methods of delivering education, both in the
classroom and online, the emphasis should be less about simply integrating more digital technologies. Rather the intention should be to develop digital literacies practices that encourage a critical and reflective use within professional teaching practice. A useful resource to facilitate this is the JISC series of role profiles that examine a range of departmental stakeholders, identifying specific digital capability skills and mapping them to the relevant professional frameworks (Beetham, 2017b), further maximising their relevancy. These profiles may be usefully employed in support of The National Professional Development Framework (NPDF) (NFETL, 2016), which also places a strong emphasis on "personal and professional digital capacity and the application of digital skills and knowledge to professional practice" (p.7).

The National Professional Development Framework identifies a variety of CPD opportunities incorporating learning gained both through informal, non-formal and formal routes. (2016, p. 2). These typologies recognise that much of the development of a teaching professional takes place through on-the-job training or self-directed, CPD. While institutional recognition of these activities can maximise their impact, it is important to maintain a sense of self-ownership. Bridges and Grierson advocate that informal CPD should be “self-motivated, self-directed and self-monitored” (2000). However, Leaton Gray cautions that with self-directed learning CPD, there is still a responsibility on the parent institution to provide the means for teaching staff to take responsibility for their own professional and lifelong learning development (2005).

Non-formal CPD may consist of attendance of workshops, seminars, or taking part in MOOCs. Formal, accredited CPD can typically include post graduate formal training courses, online eLearning modules, digital badges, live workshops or accredited seminars. This type of supported learning can be accompanied with an awarding of a certification that can be used towards a record of CPD.

What is apparent from the review of the literature, and is echoed by Newland and Hyland, an essential component for the success of any CPD programme is that it cannot exist in isolation and must have targeted institutional support. (2016)
2.4 CPD Identifying institutional supports
A recognition of the array of departments providing support is a vital means of a successful implementation of any institutional digital capacity building programme. As the growing recognition for training and development to support academic staff’s digital practices first gained traction within Irish HE, Donnolly recognised that the responsibility for the development of e-learning lay with a variety of stakeholders, including librarians, teaching and learning support, and e-learning technologists (Donnelly and O’Rourke, 2007). The importance of this coordinated, collaborative institutional approach continues to be apparent in policy, (High Level Group on the Modernisation of Higher Education, 2014, p. 27; NFETL, 2016) as well as within the wider literature (Almpanis, 2016)

Despite this progressive recognition of the multiple roles and departments that support digital capacity building in HE, a disconnect persists with top-down, institutional recognition. Among many e-learning, IT and support staff there is dissatisfaction that their expertise is not being used strategically to steer the institution towards new opportunities. (Beetham, 2015, p. 12). In the review of the progress of the National Forum (2017) Hénard noted a lack of library involvement and recommended that it “would be advantageous to involve other HEIs’ libraries when reconsidering future projects on digital skills and capacities.” There is positive evidence of a growing sense of inclusion however, with a number collaborative departmental pilot projects in the National Forum Teaching and Learning Enhancement fund. (O’Keeffe and Geraghty, Aoife, 2013; L2L, 2016; HECA Librarians, 2017).

It should be noted that the context of which department offering DL support within the institution influences the scope of the project. An initiative led by IT Services, centre’s for academic excellence, lecturer support, library or e-technologists can each have a different scope (JISC, 2012b) Beetham et al make that point that recognition of each departmental stakeholder will help to avoid institutional silos, and an ad hoc, fragmented support structure (2009, p. 7).

2.5 Barriers to Engagement
The literature reveals a range of barriers that can interfere with engagement with DL CPD programmes. A recurring theme is a lack of time. Many academics are finding they have limited time to engage with and keep track of new developments and there is a lack of flexible training options available (Hagyard et al., 2012; NFETL, 2015a; Farrelly, Raftery and Harding, 2018). Another significant factor commonly stated, was that lecturers are often unaware of
how digital technologies can contribute to their teaching, leading to a lack of willingness to participate due to an already loaded timetable. (Gregory and Lodge, 2015). This failure to upskill feeds into a key challenge highlighted by a 2014 NMC Horizon report, which highlights an overall low digital fluency rate among teaching professional in HE. (Johnson et al., 2014)

There is also some evidence of a correlation to be seen between lecturers overestimating the digital fluency of their students. Hattie and Yates (2014) argue that there is evidence of a lingering misunderstanding among many lecturers of the largely debunked theory of digital immigrant and digital natives as advocated by Prensky (2001). This is despite the reality of wide-ranging student body demographic, with many returning to higher education. Supporting the digital literacy of lecturers can allow them to re-engage with the reality of their learners experiences.

Increasing digital fluency requires institutions to provide the necessary supports to encourage a shift in educators own willingness to embrace new technologies and digital literacy within their own teaching practice and professional development. There is some evidence of a positive shift towards a growing engagement and interest among many academic teaching staff however. In an EDUCAUSE study, findings show that academics acknowledge that both they and their instruction can benefit from being supported at becoming ‘better skilled at integrating various kinds of technology into their courses (Dahlstrom, D. Christopher Brooks and Bichsel, 2014, p. 4). This more positive stance is also evident in a NFETL survey of teaching staff across the HE sector in Ireland, (2015) more than 80% of teachers expressed confidence in their use of technology in teaching, with a majority of that sample still showing a strong willingness to experiment with technology to enhance their teaching. However, while there are positive indications, there is an argument to approach these figures with caution, as users will often over estimate their technical ability (Kaarakainen, Kivinen and Vainio, 2018). This is most often due to the fact that users will generally stick with familiar technologies and rarely challenge themselves unless otherwise guided.

Many studies have examined if there are potential relationships between the incorporation of DL into practice and variables occurring within lecturing staff (Hagyard et al., 2012; JISC, 2012a; NFETL, 2015a). Participants motivation in using new tools for teaching and learning can be influenced by many factors, including areas such as discipline, experience, age,
teaching style, library usage. Through work on the Llida project, Beetham et al (2009) referenced the “academic skills gap”, where there are many academics that established their reputations in a time where their professional practice was almost entirely analogue, and digital skills were not an influence on their success in their fields (‘Delivering Digital Literacy, JISC On Air’, no date) This is at odds with academics who have embarked on their careers when they have had to engage with technology from the outset.

The wide range of departments offering support in the use of digital technologies can also present a barrier to inclusion. The communication of this support to teaching staff however is not always successful. This is evidenced by a core factor identified by the National Survey on the Use of Technology to Enhance Teaching and Learning, as a barrier to engagement which was simply an unawareness of the range of technology and supports that were available. Of respondents that were aware, they reported less barriers overall, which is a strong incentive to put resources into developing a strong outreach message. However, it is possible that there may be an element of self-selection at play, and any outreach or marketing plan would be well advised to ensure reaching as wide a demographic as possible.

2.6 Enabling factors
The issue of how to best teach new digital literacies must be considered. Any CPD initiative should recognise the range of perspectives and experiences of the target group. In order to a build meaningful, transformative programme, rather than simple a skills based one, educators autonomy and individual learning preferences must be respected (Carril et al., 2013). In a study on how to improve the digital capabilities of language teachers, Tour counsels that further to identifying specific skills, educators personal “digital mindsets” and experiences should also be considered (Tour, no date). This is not to say that a programme should be learner led. Tour concludes that participants should be given opportunities to examine their own preconceptions in creative and innovative ways, by actively reflecting on their own practice within the classroom. There can be difficulty in bridging the gaps between lecturer needs and their professional values and those of the institution. Appleby and Pilkington (2014, p. 26), counsel that to encourage engagement the “socially constructed” learning of academic staff must be acknowledged, and can be provided through a myriad of provisions including from online courses, peer to peer, face-to-face, workshops, and seminars. Recognition of participation on activities is an essential part of engagement. These can range from accredited qualifications, awards, professional development and advancement and
digital badges. There are also opportunities to support cross-referencing CPD activities to other professional frameworks and appraisal processes to formally recognise achievements both institutionally and in the wider profession.

There are many other examples of exemplar engagement practices. In a review of institution case studies, Beetham encourages the use of institutional digital champions, and institutional rewards to recognise and reward good practice (Beetham, 2017a). Donnolly and Maguire (2018) identify peer mentoring as a meaningful enabling factor among participants on the NFETL pilot projects. Other key factors that emerged were the use of PD e-portfolios, opportunities to experiment, peer support groups and interdisciplinary collaboration. Funding was also identified as a strong motivator and of course, time allocated to engage.

As has been discussed it is essential to create personal relevancy to promote digital literacy supports, and to this end there are a number of research studies that have explored how best to identify specific digital skills for educators. Various frameworks have been viewed through a digital literacy lens to identify relevant digital tasks and skills that may be offered within meaningful CPD programmes. (All Aboard, 2017; Beetham, 2017c; Jisc, 2017) The National Forum funded T1Step Shannon Consortium project, used feedback surveys and the All Aboard National Digital Skills Framework as a diagnostic tool (O’Keeffe and Geraghty, Aoife, 2013), to develop its online resources (‘T1Step Resources’, 2016).

2.7 DL Frameworks in HE
In addition to a recognition of professional frameworks within an institutional programme of digital capacity building programmes, DL frameworks provide a valuable focus for engagement, acting as “a point of reference” for conversations around “a shared understanding” of what digital literacies are (JISC, 2014),

Much as there are challenges in choosing a recognisable definition of digital literacy, the sheer proliferation of DL frameworks also poses a challenge for institutional alignments. This was highlighted in the NFETL funded review, *Towards a National Digital Skills Framework for Irish Higher Education* (Dore, Geraghty and O’Riordan, 2015).

Of the many DL frameworks that may be drawn on to inform bespoke DL frameworks. Beetham & Sharpe’s pyramid model, as illustrated in figure 2, is one of the most widely adopted and adapted models.
In the JISC funded PADDLE Digital Literacy Framework, in order to facilitate teachers, learners and managers to take responsibility to develop their own digital literacies, Beetham and Sharpe’s model was drawn on to create a bespoke framework reflecting the needs of the five FE institutions in North Wales.

Ng’s Model, as shown in figure 3, (Ng, 2012, p. 1067), provides a holistic approach that draws on the New London Groups multi-literacy model, which champions the concept of being “comfortable with fuzzy-edged, overlapping concepts. Teachers and learners should be able to pick and choose from the tools offered” (The New London Group, 1996, p. 77). Ng’s work was also based on Eshet-Alkalai’s conceptual framework of skills and strategies, (2004), who sought to acknowledge the myriad “dimensions of user activity in the digital environment”, positioning this early model as a basis for future research “on the ever-changing directions of digital culture.” (2004, p. 103)
JISC’s Digital Literacy Framework model, figure 4 below, further draws from Ng’s integrated approach, placing technical proficiency at the centre and identity and well-being as an encompassing layer containing all other elements.
Ireland's *National Digital Skills Framework in Higher Education* (Figure) seeks to address the tension between a theoretical model and one that provides a practical, granular and adaptable term of reference for both learner and educators (All Aboard, 2015b).

This framework, as presented in the current tube map form in figure 5, does have its critics, who cite its complexity in design as difficult to understand and relate to. Brown, of DCU's National Institute for Digital Learning, questions the station metaphor as overly restrictive and is “counter-productive to developing a more integrated approach to digital literacies.” (Mark Brown, 2017) The authors themselves acknowledge these restrictions, but counter that their approach is a pragmatic one (All Aboard, 2015b). They seek to establish a single digital literacy framework that could be applicable across the HE sector within Ireland, acknowledging that for any framework to be successful, it should be informed by the “experience, knowledge and professional networks of the collaborating partners and Irish HE institutions” (Dore, Geraghty and O’Riordan, 2014, p. 32) The final framework that was developed, *All Aboard: Digital Skills in Higher Education* (All Aboard, 2017), maps to the NFTEL’s Digital Roadmap (2015, p. 10), and was further informed by surveys, focus groups and feedback from stakeholders across the sector, internationally.
On balance, considering the nature of the ongoing, open invitation for collaborative materials, the National Digital Skills Framework can be seen as a testament to a practical inclusive approach. It defers to the principle of inviting the user to engage and localise the framework to create personal relevance.

There is a case to be made for larger institutions producing a bespoke framework, with many examples across the sector (Cardiff University, 2013; Deakin University Learning Futures, 2013; Wall, 2013; University of Brighton, 2016). These individualised approaches promote institutional relevance, and stakeholder recognition and buy-in, the NMC have identified a number of exemplar institutions supporting this view (Alexander et al., 2017, p. 15) In the case of a smaller institution, a nationally recognisable model could assist in mapping into a larger community, promoting a wider collaborative system of support.

While localised developments of digital literacy definitions could be taken as a duplication of effort, it can equally be taken as positive contextualising action, affording a
visible opportunity for the all stakeholders to contribute toward their own institutional definition of digital literacy (Walton, 2016). In this environment it can be concluded that, in order to successfully embark on defining a digital literacy support strategy, it is necessary to begin from a point of identifying a framework that is well-matched to the institutional culture (NFT&L, 2015, p. 57).

2.8 Embedding the National Digital Skills Framework within and Institutional CPD programme

The review of the literature has demonstrated that one of the most effective ways of engaging stakeholders in embracing a DL programme is though maximising it’s relevance through both an institutional, top-down approach and a bottom-up needs analysis of the individual participants. The full range of stakeholders within the institution should be involved in a collaborative approach enabling its design, implementation and management.

Despite some discussion around the National Digital Skills Framework heavy reliance on the urban imagery of the tube map image (O’Regan et al., 2016), it has proven itself as a useful resource to promote conversation and self-diagnosis within a number of National Forum projects. (‘T1Step Resources’, 2016; Leinster Regional Cluster, 2016; UCC et al., 2016)

Nevertheless, while its use of the imagery is an attempt to help users make sense of an increasingly complex digital landscape, it does open it up to a challenge of wider accessibility and adaptability. The links between stops are not always apparent and neither is the logic of separation of the metro stations. Those of Teach and learn, from Tools and technologies for instance, is potentially counter-productive to developing a more integrated approach to digital literacies.

The use of a more simple, conceptual DL model has been used to engage dialogue around DL. In the UK, for example, a number of institutions have adopted an overall conceptual model such as JISC to facilitate initial, exploratory discussions on digital capabilities with academic staff. York University appreciate that the JISC model it is not a curricular framework in itself, and as such use it to promote group discussions to explore shared and personal understandings. (York University: DRAFT Digital Literacy tools for programme design, 2015)
In their original document, towards a National Digital Skills framework for Irish Higher Education, the project team produced a draft, conceptual model, as illustrated below in figure 6, which formed the basis of the resultant national framework. The overall concept of the framework was strongly influenced by Beetham and Sharpe’s Digital Capability model, however the authors overall aim was to “construct some general, accessible and ‘action-oriented’ pillars. (Dore, Geraghty and O’Riordan, 2014, p. 33)

This prototype framework could form the basis of a bespoke framework which would still benefit from a broad recognition from, and mapping to, the Professional Development Framework as well as the NFTEL’s suite of supports (NFETL, no date).

There is a wealth of further supportive tools and materials from alternative DL frameworks that may successfully be mapped under each heading (ANZIL, 2004; SCONUL, 2016; Jisc, 2017; DigCompEdu, 2017) thus broadening and building upon current examples in the NDS Framework. JISC for example provides access to numerous supportive tools (Jisc, 2017) that drill down into various roles and recommendations. While highly useful and adaptable however, their very depth of detail could also be considered difficult to navigate.
In this light, a simplified model based on the All Aboard framework headings could provide a link between concept and practicality. In order resolve the disconnect between a conceptual model, versus a practical, tools based framework, the Digital Skills Framework’s original, more simplified wheel model may be better utilised in abstract discussions, with its 6 pillars mapping to many other resources, and recommended digital literacy capabilities in the literature. (Wall, 2013)

To this end the final section of this literature review will examine the Six Pillars of the *National Digital Skills Framework* acknowledging its relevance to current national policy and to the *Professional Development Framework*. It will seek to map relevant digital literacy skills under each heading to practice-based tasks, by conducting a thorough study of Digital Literacy Frameworks and exploratory studies within other HE institutions, as is outlined in the examples in Appendix 1.

2.8.1 Tools and Technologies

“The technical and the practical aspects of the range of tools and technologies available and useful in the support of learning, teaching research, managing and thriving in the digital age.”

The authors of *the National Digital Skills Framework* recognise the concept of ICT skills as having developed from a basic, skills-based set of competencies into a set of more “complex multi-literacies’ that equip individuals to engage fully in a digital society. (Dore, Geraghty and O’Riordan, 2014, p. 13) They highlight the growing need for teaching staff to understand how to use and incorporate digital tools into their teaching practice, given a major shift in the expectations of their students and a growth in online, blended and part-time programmes. (p.6)

This pillar maps closely to the central, underpinning Jisc attribute of ICT Infrastructure (Jisc, 2015) which, while it looks at a skill-based approach to technology, also examines its higher level functions (Beetham, 2017b). These can involve the ability to critically assess the potential and limitations of specific applications and deploying them in a meaningful and responsive way. It allows the development of skills that may be used to respond to technical challenges, and support judgement in the choosing of appropriate tools.
On examining the content of other frameworks that could be mapped to the National Framework Digital Literacy Framework, SCONUL’s Digital Literacy lens (SCONUL, 2016), does address the ability to identify, select, assess and evaluate relevant tools as new technologies become available. However, it does not lend itself as readily to this pillar as others in identifying specific areas that may be presented as examples in practice.

2.8.2 Teach and Learn

*How to get the most out of technologies and materials to encourage engaged learning to encourage engaged learning and make sense of new knowledge.*

The literature review reveals that a strong motivation for engagement with digital literacy development is the goal of supporting teaching practice. Beetham and Sharpe’s influential pyramid of digital literacy development (2010) conceived as a means to model the digital literacies of students, was applied to the digital literacy practice of lecturers in a study in the University of Huddersfield (Bennett, 2014). In reviewing the outcomes, the author notes that while the ‘pyramid model’ has use in developing teaching staff as digital practitioners, their main motivation is less about achieving this aim than a “desire to achieve their pedagogic goals”. This circumstance fits positively with Lea and Jones’s assertion that the embedding of students digital learning is influenced by their teachers design and delivery of the curriculum, which in turn is informed by institutional strategic digital literacy practices that supports CPD (2011). Acknowledgement of this motivation and approaching educators through the lens of this pillar can support the overall digital literacy development across other pillars.

For example, in support of the previous pillar, *Tools and Technologies*, this higher motivation of teaching staff can be noted on closer examination of specific tools and technologies. In the Y1 multi-institutional study exploring the support of the transition of first year undergraduates into HE (O'Regan *et al.*, 2016), the authors acknowledge that initially they had assumed that they “would focus on identifying technologies and supporting digital literacy among staff.” In practice it became clear that many were already familiar with the technologies such as VLEs and Turnitin and the emphasis naturally evolved into a “focus on the principles of good assessment and feedback.” This again supports an approach of suggested technologies presented within a teaching practice scenario.

2.8.3 Find and Use

*“The skills and literacies needed to find relevant information and data and how to apply such information in an effective way, and subject it to scrutiny, whether for effective learning or for research, scholarship and professional purposes.”*
This pillar resonates particularly strongly with institutional views of academic librarians activities, and by association SCONUL’s 7 Pillars framework (SCONUL, 2011), which is widely recognised internationally as a model for information literacy. Its updated successor views the framework through a digital literacy lens, however, according to Sconul’s own review, (Inskip, 2012, p. 12), it has not been adopted to the same degree, and would benefit from a re-design to overcome it’s perceived complexity. However, it is still a useful tool to approach an examination of the many areas that this heading can be applicable to the professional development of teaching staff.

Mapping from other frameworks revealed a wealth of potential of digital technologies that may be utilised by teaching staff both for their own professional development and the support of their student’s digital literacy development. For example both the Jisc model heading of Information, data and media literacy and DigCompEdu (2017, p.78) identify digital tools in the support of research and sourcing resources, as well as curating and sharing resources for personal learning as well as supporting teaching practice.

Understanding the rules of Copyright, Intellectual Property Rights (IPR) and plagiarism, as well as alternatives such as creative commons licensing have clear application in the classroom, as were identified in an extensive literature review conducted through Trinity College (Kiersey, Devitt and Brady, 2018).

2.8.4 Communication and Collaboration
“Connecting with each other and sharing idea, regardless of distance or time.”

Digital technologies supporting professional collaboration features strongly in the DigCompEdu framework. Collaboration with peers, sharing knowledge and building innovative pedagogic practices are called for, as is digital communication with student learners to “foster and enhance learner collaboration.” (Redecker, 2017, p. 56)

SCONUL further identifies effective participation in digital networks of scholarship, research and learning that may be mapped successfully to this pillar and highlights digital scholarship as an important aspect in relation to professional development. In a study of senior manager members of SCONUL, MacKenzie (2012), found that Digital Scholarship as a key competency was attached a high level of importance. Staff expertise however was identified as having a corresponding low level of expertise and was seen as an essential area to develop by 77% of respondents.
Development of CPD in this area may be supported by developing scholarly identity and reputation, maintaining an academic blog or e-portfolio and making regular use of social and professional networks.

2.8.5 Create and Innovate

“Being Confident and empowered over the use of technologies to make new resources, express yourself and take opportunities to develop new approaches and way of interpreting ideas and the work around us.”

Here again there is an overlap where knowledge of how to use tools meets pedogeological innovation. SCONUL’s Digital literacy lens, (SCONUL, 2016) identifies competency in using digital technology as being marked by an understanding of “the benefits and limitations of using different forms of digital content, tools and technologies to meet specific needs”(Sheppard and Nephin, 2014). Again, this links into findings previously discussed that acknowledge educators motivations are centred around pedogeological interests, such as supporting the creation of engaging teaching resources such as online lectures and video resources for the support of Blended Learning and flipped classes. Other examples of innovations that may be supported in this area include the creation of research and training materials openly available as Open Educational Resources (OER). The European Commission, Open Education Europa website supports access to open educational resources, including learning resources and MOOCs (European Commission, 2013). It identifies competency in using digital technology as being marked by an understanding of “the benefits and limitations of using different forms of digital content, tools and technologies to meet specific needs”.

The design, implementation and delivery of technology-enabled assessment (TEA) to provide accessible and secure assessment is a key enhancement theme of the National Forum (Murphy, 2018). A literature review exploring the use of Technology-enhanced Assessment, supported by representative case studies of Irish practitioners identified a number of innovative examples (Kiersey, Devitt and Brady, 2018). This review was limited however by a lack of a body longitudinal empirical evidence to substantiate findings and would benefit from a mapping to further case studies.

2.8.6 Identity and Wellbeing

“Understanding the nature of your online self, data and information, privacy and protections, and taking care of yourself, others and information, in ways that are ethical and respectful.”
Digital Scholarship is another prime example of where there are aspects of areas that may be examined under multiple pillars. Aspects of Digital Scholarship that hold relevance in this space encompass both professional and personal well-being. However, viewed through the original All Aboard conceptual framework it is somewhat limited, and though further developed under the revised tube map model, remains so. This is evident when examined in conjunction the corresponding pillar within JISCs model, *Digital identity and wellbeing*, which refers overtly to competencies referring to both personal wellbeing and the capacity to develop and project a positive professional digital identity or identities.

There are a number of other areas under other DL frameworks that may be mapped under this heading and can include awareness of personal and professional digital footprint, identifying digital competence gaps, supporting others with their digital competence development, seeking opportunities for self-development and to keeping up-to-date with the digital evolution.

### 2.9 Conclusion

The purpose of this literature review was to examine the current landscape of the provision of digital literacy supports with CPD in the higher education sector in Ireland. It sought to identify national and institutional polices that link digital capacity building initiative to CPD for academic teaching staff. A second area to be explored was to ascertain what factors influence academic’s participation in such programmes of support.

In looking to converge best practice within the area of DL supports and the identification of relevant skills, the review mapped digital skills from number of DL frameworks to the National Digital Skills Framework in recognition of its links to the National Professional Development Framework, and the National Forum for the Enhancement of Teaching and Learning.

It is clear from the review of the literature that it is vital to include all personnel and departments involved in the provision of digital support across the institution for any successful implementation of a digital literacy capacity building programme. Equally, the range of individuals’ experience, and perspectives must also be sought in order to make a culturally relevant programme. There are many examples of good practice and many policy
recommendations to draw from. It is evident that some level of bespoke programme must be developed in recognition that one size will not fit all.

Chapter Three: Methodology

3.1 Introduction
At its root, the purpose of the research methodology is to formulate a scientific, and systematic approach to "find out the truth that is hidden and which has not been discovered
This chapter will present an overview of the chosen research philosophy, approach, strategy, population and sample choices, time horizons, data collection techniques and procedures of this study.

In choosing a research approach to inform the methodology for this study, an examination was undertaken of the systematic approach as outlined by Saunders et al. (2016). Their ‘research onion’ model presents a layered approach, beginning with research philosophy on the outer layer, working inwards towards the centre where data collection and analysis are the final steps.

3.2 Research Recipients
The primary stakeholders for this research have been identified as:

- Griffith College Lecturers.
- Departments within Griffith College that are involved with the delivery of digital capacity building initiatives and instruction.
- National and international researchers interested in conducting studies on the perception of lecturing staff towards digital literacy skillsets, and on how those perceptions map to engaging with continuing professional development opportunities.
- Irish private third level education colleges that are engaged with digital literacy or digital capacity building programmes, linking in to the National Forum’s Professional Development Framework.

3.3 Research Philosophy
Saunders et al discuss how in choosing a research design approach, it is essential to acknowledge how personal beliefs and assumptions can impact on the methodologies chosen to pursue. This insight has particular resonance in this study, as the researcher is investigating a phenomenon within their own institution, among participants many of whom they are known to. The subject of this research is therefore linked to the researcher’s current support role for lecturers. A secondary bias is that as the researcher is a lecturer on a blended programme, they are also embedded within the subject matter of the research study. This bias can be mitigated by a strict adherence to research philosophy and aligning where possible to previous research.

Saunders et al counsel that it is essential to take time to align the research study to an appropriate research philosophy which should “underpin the chosen methodological
approach, research strategy, data collection techniques and analysis procedures.” (2016, p. 126). In considering the research onion, as outlined in figure 7, Bryman supports the model noting that it is highly adaptable to many research approaches and contexts (Bryman and Bell, 2015).

In identifying a starting point, a number of philosophies are presented in the first layer; positivism, critical realism, interpretivism, and pragmatism. (Saunders, Thornhill and Lewis, 2016)

Realism is concerned with “acknowledgement of a reality independent of the senses” (Bryman and Bell, 2015, p. 168). As such it was not considered viable, as it conflicts with the nature of this case study which is based on the perception of the participants.
The positivist paradigm is concerned with the collection of data to observe the social world objectively and is often associated with quantitative survey research. On one level, this reflects the principles of data collection instruments as were identified in the literature review of many similar studies which this research aligns to. However, it has a rigidity that is at odds with those same studies, and which removes the validity of participants’ subjective value systems.

The Interpretivism position is one that requires that the researcher "grasp the subjective meaning of social action" (Bryman, 2016, p. 26), and that the social world is interpreted and constructed differently by each person. It therefore depends on the researchers understanding of these interpretations and constructions to understand the interpretations of a phenomenon. The researcher becomes a participant in the situation, acknowledging their position may affect their interpretation. Interpretivism acknowledges the subjectivity of the case study approach, where there is an understanding that data gathered is not representative outside of the circumstances being studied, in this case Griffith College. Rather it is an illuminative, representative picture of local experience, and one which can help influence the developing practice of the practitioner researcher. (Thomas, 2017, p. 113)

Nevertheless, while the interpretivist paradigm appears to fit this research study, it also has a lack of flexibility, in that it does not allow for the variables, that are called for in the research, preventing a mapping of quantitative results to the wider body of data generated across the landscape in Ireland and internationally.

Post-positivism was also considered strongly as a research approach, where the researcher recognises their connection to the research participants, and that the values of the researcher influence the study. Ryan acknowledges this vantage point, asserting that the post positive approach is more about a learning approach than a solving one. (2006, p. 18)

3.4 Chosen Research Philosophy

In the context of this research study both post positivist and interpretivist paradigms have weight. In order to overcome this duality, it was concluded the pragmatic paradigm was the most appropriate philosophical view to adopt. A pragmatist approach facilitates a mixed methods design, which Descombe (2007, p. 109) notes provides the opportunity to check results and findings gathered through one method with that of another. This approach
facilitates the mapping of data to similar studies, to gain insight and compare results to the wider research dataset available.

3.5 Research Approach
The chosen research approach for this research study is largely inductive. A deductive approach begins from a theory or hypothesis which is tested, as opposed to the inductive approach which is one where ‘theory follows data’ (Saunders, Thornhill and Lewis, 2016, pp. 146–147)

Following the inductive approach of collecting data to explore a phenomenon, the objectives in this study are to investigate the perceptions and habits of teaching staff in Griffith College, to then formulate a conclusion or theory. It is a “bottom up” approach, where participants views are used to interrelate the themes to create a theory.

As a mixed method approach is taken, where both qualitative and quantitative data collection is used in the data collection instrument, a combination of inductive and deductive is necessary. The philosophy of pragmaticism allows for a combination of approaches where necessary (Creswell, 2014).

In this research dissertation, interviews with faculty staff were mere scoping exercises to establish what supports are currently in place, and to ascertain perspectives on how these operate. The data collection instrument of a survey was largely quantitative in nature, with a majority of closed questions. However, in order to more clearly localise the study, and to allow for any new perspectives that were not captured in the questionnaire, open-ended qualitative questions were included.

Data collected, together with findings from the literature review, was examined to discover any causal relationships between the variables and perceptions of digital literacy skills. Further to this, data was studied to identify barriers to participation in digital literacy CPD initiatives, and current usage of digital tools.

3.6 Research Strategy
The exploratory case study approach allows the researcher to gain an understanding of social or behavioural aspects which, when examined in context, can provide holistic, contextualised explanations. (Zainal, 2007) Yin notes the advantage of the case study approach, in relation
to examination and inquiry into a phenomenon within a real life context, where “the boundaries between phenomenon and context are not clearly evident” (2009, p. 23)

Preliminary interviews with Teaching and Learning support, IT services, the Library and Digital Learning helped inform the design of a survey instrument to localise it, this met the need to make the quantitative instrument as specific as possible to the culture of the institution being studied.

Developing a culturally sensitive instrument, in this case a questionnaire, allows for local stakeholder viewpoints to inform the study (Creswell, 2014, p. 86). While there is a growing body of research on this topic generally, it is based on other institutions and in the majority, other jurisdictions. Specifically, no other research study utilises the National Digital Skills Framework as a CPD tool within a single institution. In this case study model, data gathered from the scoping interviews can provide contextual background to better understand and develop the research objectives within the context of Griffith College and allow institution specific variables to be identified.

As Yin concedes, there is a challenge in designing a survey. For example, in the limitation on the number of variables that can be analysed and the difficulty in distinguishing between phenomenon and context in real-life situations. It is also not possible to generalise from a single study group, as scientific facts are based on the replication of experiments. (2009, p. 18).

However, Yin does clarify that it is acceptable that case studies may be limited to largely quantitative evidence (p.19). The relevance of the results from this dissertation outside the case study itself, is less about gathering statistical evidence, but rather that correlations may be made across all campus sites examined, and within the literature. Data gathered may then feed into the general body of research to expand and generalise theories and support the validity and reliability of findings in other similar studies.

3.7 Time Horizon
The timing of this study is cross-sectional. A longitudinal timing would have been the preferred approach given that it allows for the study of a phenomenon over a set time frame; in this case an academic year would be ideal. There is no previously collected secondary data collected from the case study context, Griffith College. While there is a growing body of evidence and data being gathered nationally, this may simply inform this case study rather than map directly to it.
Regardless, in the context of this study there was no choice but to conduct a cross-sectional approach. The study began in September, with submission of the completed dissertation due in early January. Despite the time constraints, timing was largely appropriate, as it was conducted towards the end of the first semester. While this was a challenging time in regard to recruiting respondents, a similar study at a more stress-free time may have given a skewed, falsely positive perspective. Therefore, as cross-sectional studies concentrate on "analysing a phenomenon at a particular time", they are a useful way to obtain a clear image at a relevant time. This allows for future research to follow, which can draw on data gathered in the present study in a future, longitudinal study.

3.8 Research Population
Random Sampling allows for an equal opportunity of each element being chosen from the population, an advantage of this approach is that it eliminates bias from the researcher in choosing participants. Non-random sampling calls for a judgement on behalf of the researcher to be made on the suitability of the sample population. A mixed sampling approach creates a sampling frame for the population, divides it into segments from which a representative element from each is selected.

In this study the chosen method was a self-selecting random sampling technique, with an invitation to participate sent to all Griffith College lecturers employed as of September 2018.

Population: Teaching staff in Griffith College as employed as of June 2018.
Sampling Frame: Teaching staff in all three campuses – Dublin, Cork and Limerick,
Sampling technique: Simple random sampling, all units had an equal chance of participation.
A potential issue with this is a bias in self-selection, which may skew results. This was considered when examining the data.
Sample size: The population for the quantitative survey was identified as potentially 367 respondents.

3.9 Data collection instrument
A questionnaire was designed using Survey Monkey, which was distributed via the IT department, using mailing lists for all lecturers. This list is updated regularly and is a reliable source of contact for the target population.
The questionnaire was designed to facilitate an option of hard copies to be filled out. These were distributed via reception pigeon holes, with further copies being left in the Lecturer Room in the Dublin campus. A cover letter accompanied both email and hard copy surveys. This letter outlined the purpose of the research, and that no prior knowledge of the terminology of digital literary was necessary. It also made clear the anonymous nature of the study. The first page of the survey elaborated on the context of the research as is shown in Appendix 2.

The decision to use an online questionnaire as the main collection instrument was due to its efficiency in collecting responses from a large sample. Questions were designed to map to the research questions and objectives and are all informed by the literature review.

The questionnaire comprised of 26 questions, consisting largely of closed-ended questions, presented in a range of formats including multiple choice, matrix, and sliding scales. It was piloted with members of Griffith Library and faculty members to identify potential flaws and accessibility of content and language. There were several changes and adaptations made during this stage based on these recommendations, including using language and terminology that was more accessible to the target audience and simplifying and reducing the questions concerning the National Digital Skills Framework. The finished version can be seen in Appendix 3.

There were a small number of open-ended questions included, to capture additional qualitative information from respondents, to include further insights into attitudes, feelings, and understanding within the sample.

As the potential number of respondents were 367, and the total number of responses was 94, this counts as a response rate of 24%.

3.10 Ethical Considerations
Confidentiality was identified as a central ethical concern, along with informed consent from the respondents. These concerns were addressed in addressed in several ways. The survey was accompanied by a disclaimer, which outlined that any data gathered would be used to inform the study only and would not be disseminated for any other purpose.

Given the size of the college, and the long-term service of the researcher, care was taken to remove identifying variables, hence the omission of gender as an option. Recent studies
(NFETL, 2015a) show little difference in this area with respondents and so it was considered a reasonable omission. Confidence of the respondents in not being identified was essential to get a true image of their perceptions, and to limit response bias.

The questionnaire was sent via IT Services before its distribution and emailed according to a closed list.

3.11 Limitations of Research
As previously outlined, by virtue of the timing of this research dissertation, it had to be completed within a 12-week timeframe. It was not therefore possible to present a complete picture of a full academic year. The advantage of a longitudinal study was lost, which could provide a clearer record of patterns and effects over time.

The cross-sectional timing coincided with the busy first semester of the academic year, specifically, the data collection instrument occurred during a major programmatic review and marking schedule. It was a challenge to capture responses during such a busy time.

This study has no direct precedence, as such it must rely solely on primary data collected. Given the nature of the data collection instrument, a survey, the respondents were limited in their responses, where a qualitative interview stage would provide a richer data set to triangulate. Again, time restrictions eliminated this as an option.

The sampling frame also presents a limitation, in that as it was a random sample, respondents were by necessity a self-selecting group and therefore not necessarily representative of the group as a whole. Again, if time had allowed, a qualitative interview stage may have circumvented this skewing somewhat and is recommended in any future study to give a richer picture of the opinions of the sample population.

Griffith College is a private college, and as this study is a highly localised one data gathered relates to a strongly individualised context. However, the dataset gathered can be made available to other researcher to triangulated with national studies and other future studies to gain a richer picture of digital literacy provisions for lectures in HE institutions overall.
Chapter 4: Primary data findings

4.1 Introduction
This chapter will report on the findings from the primary research gathered from the survey instrument.

It will begin by briefly examining the initial, informal interviews undertaken with the relevant departments currently providing support for digital capabilities in Griffith College. The content of these conversations supported the design of the data collection instrument. It will then detail the findings from the quantitative survey, and present any qualitative comments collected.
4.2 Institutional Context
Given that this study is by necessity cross-sectional, and there are timing limitations on the researcher as outlined in chapter three, the decision was made to dispense with qualitative interviews and concentrate on data generated from the quantitative survey.

To localise the quantitative instrument, a series of short, informal, early stage interviews were undertaken with representatives from Digital Learning, Teaching and Learning, IT, and the Library. Interviewees were shown the original conceptual wheel, figure 6, from the National Digital Literacy Skills Framework document (Dore, Geraghty and O’Riordan, 2014), and asked to consider where their services might best be situated.

All participants felt that the framework as presented through this image did not resonate strongly with them or their departments provision of digital supports. Each of the participants were aware of the National Digital Skills Framework through the online All Aboard Tube Map (All Aboard, 2015a), however again, each felt that it was overcomplicated and difficult to navigate.

When shown a grid version of the framework’s headings, which provides more in-depth descriptions of digital literacy skills in practice, this prompted some further discussion. This grid is populated with examples of digital literacy practices that were chosen from an extensive list gathered through the literature review stage and is shown in Appendix 1.

On considering Tools and Technologies, Digital Learning, IT, and Lecturer Support all identified a need for training in administrative tools such as One Drive and building confidence in managing the college’s VLE for basic, intermediate and advanced levels.

A clear correlation across all departments was an enthusiasm for a collaborative approach. IT services noted that while IT staff provide support through practical workshops, it is most often done through an invitation by Teaching and Learning. Digital Learning and Teaching and Learning have formalised training and supports in place throughout the year including lecturer pre-semester days, new lecturer induction; lecturer showcase events; bespoke training and support events identified in collaboration with programme directors; annual lecturer handbook; lecturer Moodle courses. The Library offers a combination of invited support through faculty, Digital Learning, and Teaching and Learning, as well as a more informal, individualised set of face to face supports directly to lecturers, and a range of online resources on the college VLE.
4.3 Marketing Current Institutional Digital Literacy Supports

There are multiple ways that Griffith College currently markets digital supports and services to staff. The Digital Learning departmental support pages on the main college website and on Moodle offer numerous online training materials and information resources. Teaching and Learning also provides information through Moodle, and through their numerous outreach supports throughout the year. IT services offer support for lecturers throughout the year, for classroom and online lectures and for the college VLE. IT services also has a presence on the main Griffith website outlining the various supports and services available, and regularly contacts lecturers via email on new policies, innovations and services as they arise.

The Library has a dedicated page on Moodle, which gives access to the online database resources, video tutorials, information resources, and outlines the support available to lecturers through the library both online and through individual consultation.

Programme leaders are also a source of communication between services and lecturers on their programmes.

One to one support is based on lecturer needs and can range from assistance with a technical issue as it arises, to a more holistic examination of their requirements. A common thread across each of the departments offering digital support is that lecturers are encouraged to contact departments directly for individual support.

4.4 Population

This survey was emailed to all current lecturers in Griffith college, 367 in total. 94 replies were received, as seen in figure 8 below, giving a response rate of 26%.

<table>
<thead>
<tr>
<th>Population by Campus</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Dublin</td>
<td>281</td>
</tr>
<tr>
<td>Cork</td>
<td>39</td>
</tr>
<tr>
<td>Limerick</td>
<td>56</td>
</tr>
<tr>
<td>Total</td>
<td>367</td>
</tr>
<tr>
<td>Responses</td>
<td>94</td>
</tr>
</tbody>
</table>

*Figure 8: Population Breakdown*

IT services were not in a position to furnish a full breakdown of individual lecturers with regard to what campus they teach in, and what department they are affiliated to, but provided a stripped-down version the data to give limited identification of sub groups.
Figure 9 shows the full population breakdown as was furnished, from this information it could be extrapolated that there are 22 individual lecturers that have multiple roles or teach in several locations.

<table>
<thead>
<tr>
<th>Dublin Campus:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Accountancy</td>
<td>30</td>
</tr>
<tr>
<td>Business</td>
<td>44</td>
</tr>
<tr>
<td>GBS</td>
<td>34</td>
</tr>
<tr>
<td>Journalism</td>
<td>75</td>
</tr>
<tr>
<td>Computing</td>
<td>19</td>
</tr>
<tr>
<td>Short Courses</td>
<td>27</td>
</tr>
<tr>
<td>Design</td>
<td>33</td>
</tr>
<tr>
<td>English Language</td>
<td>11</td>
</tr>
<tr>
<td>Law</td>
<td>32</td>
</tr>
<tr>
<td>LSMD</td>
<td>13</td>
</tr>
<tr>
<td>Professional Law</td>
<td>3</td>
</tr>
<tr>
<td>Teaching and Learning</td>
<td>8</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>289</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Cork</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>(no departmental breakdown available)</td>
<td>39</td>
</tr>
<tr>
<td>Limerick</td>
<td></td>
</tr>
<tr>
<td>Accountancy</td>
<td>12</td>
</tr>
<tr>
<td>Business</td>
<td>16</td>
</tr>
<tr>
<td>Computing</td>
<td>15</td>
</tr>
<tr>
<td>English Language</td>
<td>18</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>61</td>
</tr>
</tbody>
</table>

| Lecturers teaching over multiple courses/campuses - As identified through IT emailing lists | 22  |
| TOTAL POPULATION        | 367 |

*Figure 9: Total Population by Department*

However, the data gathered from the survey reveals that there were 10 respondents who identified as teaching across multiple campuses. Along with this figure, the data also shows 27 as self-identifying as teaching across multiple faculties. Considering those who identified
as both Blended Learning in addition to teaching over multiple faculties, the figure is 14 as shown in figure 10.

<table>
<thead>
<tr>
<th>Self identifies as:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Teaching over multiple campuses</td>
<td>10</td>
</tr>
<tr>
<td>Teaching across multiple faculties</td>
<td>27</td>
</tr>
<tr>
<td>Teaching both Blended and across multiple faculties</td>
<td>14</td>
</tr>
</tbody>
</table>

Figure 10: Teaching Delivery Types

However, given that the response to this survey represents just 26% of the total population, this calls into question the official breakdown through IT Services of 22 individuals that appear in either multiple campuses or faculties, and it is likely a significantly higher number. The discrepancy may be largely down to IT Services not being aware of Blended Learning as a profile in its own right. This data would need to be further mined in a later study to have confidence in a definitive breakdown and will need greater consultancy with HR and faculty heads to ascertain a true number.

4.5 Response Rate

When the original web invitation was distributed, response was slower than might be expected as it occurred at a time of year when lecturers are busy with marking. There was also a programmatic review in one of the largest faculties, Journalism and Media Studies, which again was a potential impact on the response rate.

When the initial response rate to the survey peaked at 55, paper copies were distributed in faculty pigeon holes, and left in the Lecturer Room, resulting in 19 hard copies that were manually added at the close of the survey, while a further 10 added online.

Two days before the close of the survey an email was sent out from a Director of the college, which resulted in an additional 10 responses.

It must be taken into account, that as there was not an opportunity to have hard copies placed in the lecturer rooms outside the Dublin, South Circular Road campus, this potentially skewed the responses further towards a Dublin centred perspective overall.
4.6 Quantitative research findings
Reponses have been measured using Survey Monkey and Excel. Data was cross-tabulated within Survey Monkey to closer examine relevant variables. Cross-tabulation was implemented using categorical variables which included: employment contract, length of service, faculty, campus and form of delivery.

Data was exported to Excel to facilitate further calculations, and more deeply explore and present percentage breakdowns to identify relevant statistical variations. Where comments were completed, they are represented at the end of the relevant section. The data is displayed in the same order as it appears on the questionnaire and will be examined on a deeper level in the next chapter.

The statistical relevance of findings was measured using Pearson’s, chi-square fit using an Excel A/B spreadsheet calculator. However, as will be discussed, any differences between variables was largely not statistically relevant.

4.7 Survey Results
Section 1 – Variable & Demographic data
The purpose of this first section of the questionnaire was to establish the various demographic groupings across the college. All were set as obligatory to answer, to enable reliable, consistent, cross-referencing of variable data with data mined from later questions.

Question 1: What is your employment status as a lecturer in Griffith College?
A large majority of 72 % of respondents comprised of part time teaching staff, with 28% on full time contracts, illustrated in figure 11.
Question 2: How long have you been teaching in Griffith College?

As to the length of service, figure 12 shows a majority of 40% have been working in Griffith College for 5 years or less. There was a similar split between 6 to 10 years and 11 to 15 years, both of which came in at 22% and 21% respectively, The longest serving group of more than 15 years came in at with the least at 17%.

Question 3: In which campus do you teach?

This question was framed in such a way as to allow respondents to choose more than one campus if applicable.
The Dublin South Circular Road site had the highest rate at 66%, Dublin City Centre and Cork Campus both came in at 11% each, with the Limerick site rating a similar 12% as illustrated in figure 13.

In which campus do you teach?

![Campus Breakdown Pie Chart](image)

Figure 13: Breakdown by Campus

Of the 94 respondents, 84 identified as teaching in a single site, and 10 as teaching across multiple, as can be seen in the graph below, figure 14.

SINGLE V MULTIPLE SITES

![Single v Multiple Sites Pie Chart](image)

Figure 14: Single v Multiple Sites

Question: 4: What is your mode of delivery?
Classroom lectures registered clearly as coming out at the top of the range, at 67%.

Again settings on this question were set to allow multiple selection, to capture any respondents that teach both a face to face, classroom environment and a blended one.

Of the 94 respondents, 63 identified as teaching face to face within the Classroom only, 7 teaching solely on Blended courses, and 24 respondents teach on both Blended and Classroom delivery.

Therefore, the response rate of those teaching withing the Classroom only is 67%, with those with Blended teaching experience can be combined as 31 respondents which is a rate of 33%. At a third of the overall population, blended learning can be taken as representative sample within the study, as shown in figure 15.

**DELIVERY MODELS**

- Classroom lectures only
- Blended learning only
- Both

Responses 94

![Pie chart showing delivery models](image)

**Figure 15: Delivery Models**

**Question 5:** Please select the faculty or faculties you teach in.

The highest responses rate was from the Business Faculty at 29%, closely followed by Journalism & Media Communications at 22% and the Graduate Business School at 20%.

This reflects the faculties with the highest numbers of staff members:

- Business: 44
- GBS: 34
- Journalism: 75

Figure 16 shows the breakdown across faculties. There were no responses from Counselling & Psychotherapy, and just 1% from Professional Law. There was an option for Other to capture any missing information, one identified as MBA, which as a part of the Graduate Business Faculty has been added in under that heading. The second comment identified as
Music, it is not clear as to whether that should be included under the Leinster School of Music or Journalism and Media Faculty as the BA (Hons) in Audio and Music Technology is under the umbrella of the Media Faculty. However, this has highlighted a gap in the variables, where it would be more recognisable to respondents to include Pulse Music College as an associate for future research studies.

<table>
<thead>
<tr>
<th>Answer Choices</th>
<th>Responses 94</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business</td>
<td>29% 27</td>
</tr>
<tr>
<td>Computing</td>
<td>16% 15</td>
</tr>
<tr>
<td>Counselling &amp; Psychotherapy</td>
<td>0% 0</td>
</tr>
<tr>
<td>Design</td>
<td>13% 12</td>
</tr>
<tr>
<td>Engineering</td>
<td>9% 8</td>
</tr>
<tr>
<td>Graduate Business School</td>
<td>20% 19</td>
</tr>
<tr>
<td>Griffith Institute of Language</td>
<td>7% 7</td>
</tr>
<tr>
<td>Journalism &amp; Media Communications</td>
<td>22% 21</td>
</tr>
<tr>
<td>Law</td>
<td>10% 9</td>
</tr>
<tr>
<td>Pharmaceutical Science</td>
<td>3% 3</td>
</tr>
<tr>
<td>Professional Accountancy</td>
<td>11% 10</td>
</tr>
<tr>
<td>Professional Law</td>
<td>1% 1</td>
</tr>
<tr>
<td>Short Courses</td>
<td>5% 5</td>
</tr>
<tr>
<td>Springboard +</td>
<td>10% 9</td>
</tr>
<tr>
<td>The Leinster School of Music &amp; Drama</td>
<td>3% 3</td>
</tr>
<tr>
<td>Training and Education</td>
<td>5% 5</td>
</tr>
<tr>
<td>If you not see your faculty/department in the above list, please add below</td>
<td>2% 2</td>
</tr>
</tbody>
</table>

Figure 16: Responses by Faculty

There was again an option included to allow more than one faculty to selected, which revealed a divide of 29% teaching in multiple departments, and 71% in a single department only, shown in figure 17.

Section 2: Perceptions
**Question 6:** Overall, on a scale of 1 to 7 how would you rate your current capabilities with technology and digital tools? (With 7 being Advanced and 1 being Basic)

This question was concerned with ascertaining how respondents rated their own capabilities when working with digital technologies. Using a sliding rating scale, respondents were asked to consider their current capabilities with using digital technologies.

The average rating across faculties was rated at 5, this number will be examined further in the next section to discover if there are any connections between other variables and self-perception of capabilities.

Examining both Full Time and Part Time responses in isolation, figure 18 illustrates the average rating for each also registered at 5.

**Figure 18: Self rating of Digital Capabilities**

**Question 7:** Do you feel that you need to develop your digital skills?

Figure 19 show 93 out of 94 potential respondents answered this question. 81% feel that yes, they do have a need to develop their digital literacy skills, 12% are unsure, leaving 7% confident that they do not need to develop their skills.
**Question 8:** To what extent do you agree with the following statements?

The first two questions concerned student ability to use basic software necessary to support them in their learning.

One was concerned with lecturer’s perception of their student’s capacity to engage with the colleges VLE system and other relevant digital tools available through the College. There was a full response rate of 94, with an overall 71% agreement rate with the statement.

The second asked if the respondent agreed that most of their students have sufficient skills to use basic software package such as MS Word. There was 84% agreement from the 92 respondents, responses to both questions are represented in figure 20.
The weighted average of these show that teaching staff rate their students in the higher range of ability, rating between 3.5 to a 4 on a 4.5 point top-range.

Overall however, respondents did not feel that their students were more digitally capable than themselves, as demonstrated in figure 21.

The following sections as shown in figure 22 were concerned with how respondents perceive their student’s attitude to their own expertise in their capacity as lecturers.
The indication implies that there is limited expectation among lecturers that their students look to them for technology support.

**Question 9:** How would you usually learn how to use new technologies? (Please rank in order where relevant with 1 being the most important, 7 the least.)

The response rate on this question was slightly lower, with 91 responses logged, and is illustrated by the graph below, figure 23.

The first three options saw informal learning styles rating the highest, with self-taught ranking highest at a weighting of 60%. It not possible to get a confident account of the lower ratings, as when tallying the paper responses, the rating in many did not go beyond the first three responses. An assumption may be drawn from the online surveys that there was a similar drop off in engagement. However, the responses still do give a clear and reliable picture that self-taught, rather than formal training is the norm among these respondents.
Question 10: How do you usually learn about different technical support services provided by the college?

There was an allowance for multiple selection in this question. Two respondents skipped the question, making the response rate 98%. The most common method for learning of institutional supports was via email at 60%, followed by Word of Mouth at 46%, and Moodle at 29%, illustrated in figure 24.

Cross tabulation between those teaching on blended learning programmes and classroom only, revealed no significant difference in how lecturers hear of supports.
Open-ended Responses:

- when I find out I haven't completed something
- from peers and self learning
- Thanks
- Not always easy to find out about
- Flyer on pre-semester day
- I don't really interact with college technical support services.

Section 3 National Digital Skills Pillars

Respondents were asked to indicate if they would have any interest in developing their understanding of various sets of digital literacy tools, presented under the follow headings:

- Tool and Technologies
- Teaching and Learning
- Find Use
- Communication and Collaboration
- Creation and Innovation
- Identity and Well Being
Before respondents moved on to the next sequence of questions however, they were orientated as to the meaning of the term Digital Literacy, and to how it relates to the National Digital Skills Framework, as is shown in Appendix 4.

**Question 11: Tools and Technologies**

16 respondents skipped this Pillar, 78 responded, responses are presented in figure 25.

Camtasia rated the most popular under this heading, with 74% ranking it as of interest to them, making full use of OneDrive was rated at 69% and 67% ranked using Research tools as a skill they would consider pursuing.

![Figure 25: Tools and Technologies](image)

**Question 12: Teaching and Learning**

17 respondents skipped this heading, 77 responded. Moodle was the highest rated at 77%, 71% were interested in learning more on developed Flipped Classroom techniques, with Using digital tools to aid in assessment and feedback rating similarly at 70%, as illustrated in the graph below in figure 26.
**Question 13: Find and Use**

Figure 26 illustrates the responses to this heading. 23 skipped this heading, leaving a response rate of 71. Using digital tools to support online research rated highest with 85% of respondents, the other two digital supports had similar interest with Working with Data at 55% and Copyright and Intellectual Property Rights a 54% rating.

**Question 14: Communication and Collaboration**
27 Skipped on this question, with 72 engaging. The most popular heading on this topic was Webinars and Video Conferencing. Digital Online Identity rated with 61% of respondents, Keeping up to Date with Emerging Research was of interest to 65%, shown in figure 25.

![Figure 25: Communication and Collaboration](image)

**Question 15: Creation and Innovation**

72 responded. As show in figure 28, Using Video technology to create Online Lectures had a high rating of 85% among respondents, followed by Producing digital materials to create content at 75%. 71% of respondents would consider engaging with learning more on Technology-enabled learning.
Question 16: Identity and Well-being

Figure 29 shows that this topic had the lowest response rate, being skipped by 27 with 67 engaging.

Digital Learning and CPD was placed at the highest importance at 79%, with 59% of respondents expressing interest in Work-life balance and 55% would consider leaning more on the subject of ePortfolio to support CPD activities.
Comparing results across each of the pillars, Tool and Technologies rated the highest among the six. While the difference is not highly statistically significant, it does give some indication that respondents do appreciate a grounding in practical working knowledge of tools. There is a possibility that the response rate of Wellbeing suffered from a fatigue at this point. However, looking to the next question, given that the response rate increased back up to 86 this does indicate that there was a genuine engagement.

**Question 17: Prior to considering the areas listed under each of the previous six headings, were you familiar with the concepts of Digital Literacy, and/or has your understanding developed.**

Respondents were asked if they had been familiar with the concepts of Digital Literacy prior to the survey, and/or has their understanding developed following on from considering the areas listed under each of the previous six headings, the following graph, figure 30, illustrates responses.

86 respondents engaged with this question, with 8 skipping.

Of the 86 responses there are indications that there was some development of an understanding of the concept with 42% being somewhat improved, and 31% considering their understanding of the concept developed.
Section 4: Usage of Digital Tools

Question 18: Have you used any of the following digital tools?

This question was designed to get a snapshot of what standalone digital tools are being used by teaching staff in Griffith College at present. The response rate was 81.

Turnitin is rated highest, with a 65% rating, followed closely by Social Media at 60% with Zoom also rating at a reasonably high uptake at 54%. Figure 31 shows all responses.

| Have you used any of the following digital tools? Please select all that apply |
|---|---|
| **Answer Choices** | **Responses** |
| Advanced Moodle (quizzes, polls and assessment) | 46% 39 |
| Assistive and accessible technologies | 12% 10 |
| Camtasia Screencasts | 41% 33 |
| Digital Security, in support of GDPR compliance and Data Protection | 6% 5 |
| Digital Security, for secure administration of personal and sensitive data in a digital environment | 11% 9 |
| Epportfolios | 37% 30 |
| Feedback (digital tools to give feedback eg via. annotations, audio tracks). | 40% 32 |
| Lynda.com | 44% 36 |
| Mindmaps, Podcasts | 6% 5 |
| Social Media | 60% 49 |
| Turnitin (traffic light system plagiarism check) | 65% 53 |
| Wikis | 27% 22 |
| Zoom | 54% 44 |
| Other | 14% 11 |

Comments:
- MOSS Turnitin for Code
- Kahoot!
- no
- audio material
Office 365 Forms

Classroom polls and quizzes like Socrative and Kahoot (and clickers!), multimedia feedback, various apps at different times, referencing software, note taking (social and cross platform) etc.

A host of tools are used in the teaching process.

turningpoint polling

I use an array of online resources which I make available to students

One has to be skeptical about all of these as the overall objective of their adoption is obviously to reduce the lecturers' wage bill, and spend increasing monies on equipment and IP licences.

Adobe Connect

Question 19: Digital Learning and CPD: From the following list of digital literacy skills, are there any areas that would you like to learn more about?

This question was aimed at ascertaining what tools teaching staff may be interested in developing their understanding of. 19 skipped this question, leaving 75 responding. Results are presented in figure 32.

Technology Enabled Learning rated highly at 52%, with Referencing Software at 47%, and Managing a Digital Identity 48%. There was generally even spread of interest with the remaining topics.

There was one written comment also that acknowledged that what was presented for consideration is not an exhaustive list.

“Honestly, it depends on what is being offered; so my selections here are neither entirely accurate nor complete”

<table>
<thead>
<tr>
<th>Answer Choices</th>
<th>Responses 75</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic blogging</td>
<td>29% 22</td>
</tr>
<tr>
<td>Copyright and Intellectual Property Rights (IPR)</td>
<td>41% 31</td>
</tr>
<tr>
<td>Digital Scholarship &amp; Open Access publishing</td>
<td>29% 22</td>
</tr>
<tr>
<td>Managing a Professional Digital identity: LinkedIn, ORCID, Google Scholar ID, ResearchGate</td>
<td>48% 36</td>
</tr>
<tr>
<td>Measuring research impact: Analytics/Bibliometrics/Altmetrics</td>
<td>27% 20</td>
</tr>
<tr>
<td>OER's (Open educational resources)</td>
<td>32% 24</td>
</tr>
<tr>
<td>Open Access Publishing</td>
<td>25% 19</td>
</tr>
<tr>
<td>Scholarly identity and reputation</td>
<td>27% 20</td>
</tr>
<tr>
<td>Reflective ePortfolio</td>
<td>32% 24</td>
</tr>
<tr>
<td>Referencing software: Zotero, Endnote, Mendeley</td>
<td>47% 35</td>
</tr>
<tr>
<td>Social Media and Professional Practice</td>
<td>36% 26</td>
</tr>
<tr>
<td>Technology-enabled Assessment (TEA)</td>
<td>52% 39</td>
</tr>
<tr>
<td>Other (please specify)</td>
<td>3% 2</td>
</tr>
</tbody>
</table>

Figure 32: Areas of Interest in Pursuing of Digital Literacy Skills

Comments:
Question 20: What barriers are there to your use of technology-enhanced learning and development?

Of 85 respondents, the two of clearest barriers cited involve a lack of time both to attend at 55%, or engage 39%. There was also a perceived lack of training available from 52% of respondents.

There was little significant evidence in responses between part time and full time staff overall. However, in regard to Lack of time to attend training, 65% of full time and 52% of part time agreed with the statement. Using an excel A/B calculator, this is significant to 90% confidence.

13% of part time versus 21% of full are unsure of which department to approach, and almost twice as many find it difficult to access available online resources at 15% versus 8% full time.

The Blended cohort are much more aware of the possibilities of technologies, and how to access the technology. However, a higher percentage agreed with the statement that a lack of confidence is a barrier to engagement. Figure 33 shows the breakdown between each cohort.
Figure 33: Breakdown of respondent groups: Barriers to technology-enhanced development

Comments:

- Time poor! Don't get paid for a lot of admin time but can allocate some to developing my skills.
- Lack of time in general
- Lack of support from college. As in giving time off for training. There is no time off left for self improvement
- Too many tools, not enough time for the learners to become acquainted with them all even when you have one that would significantly enhance their learning if they had the support to use it well.
- Time investment that if not followed up by support from the institution is a wasted investment for me
- Comment regarding question 21: I honestly have no idea who would be best-placed, but what I think is important is that all four listed departments collaborate in designing any such programme.
- I teach at two other colleges which use different technologies that achieve many of the same outcomes, but takes a long time to learn different systems/software
- Lack of pay for time invested. I am only paid for contact hours and this seriously impacts my ability to invest time in furthering these skills.
Section 6: CPD

Question 21: Which department, in your opinion would be best placed to serve as a hub for the provision of a college-wide digital literacy CPD programme?

There was an issue with some of the written responses, some of which ticked more than one department, as such there were three left out of the total tally.

However, this in itself maps to one of the comments included above which states: “Comment regarding question 21: I honestly have no idea who would be best-placed, but what I think is important is that all four listed departments collaborate in designing any such programme.”

By the fact that there was more than one department chosen when there was an option to do so on paper, this further underlines that there a level of confusion surround this issue.

Of the 79 who expressed a single opinion, 33% highlight the Digital eLearning Department, 32% Teaching and Learning, and 29% the Library, figure 34 presents the distribution.

![Figure 34: Department best placed to serve as DL Hub](imageURL)

Question 22: In your opinion, should the responsibility for identifying areas for Continuing Professional Development (CPD) lie first with the lecturer as an individual or should it be led by Griffith College.
Of the 79 responses, 58% opted by Griffith College as the lead in provision of CPD supports, 42% feel it should the responsibility of the individual to lead their own CPD, shown in figure 35.

![Figure 35: Responsibility for CPD](image)

Question 23: What incentives could the college provide for you to pursue CPD opportunities supporting the development of your digital literacies?

82 respondents engaged with the question, see figure 36 for a breakdown of responses. 46% feel that Time allocated to Digital Literacy CPD activities could be an incentive for engagement, supported by both online CPD programmes at 43% and Face to face support being suggested by 41%

<table>
<thead>
<tr>
<th>Answer Choices</th>
<th>Responses 82</th>
</tr>
</thead>
<tbody>
<tr>
<td>Digital Badges</td>
<td>33% 27</td>
</tr>
<tr>
<td>Central website to access digital literacy supports</td>
<td>34% 28</td>
</tr>
<tr>
<td>Group Workshops</td>
<td>38% 31</td>
</tr>
<tr>
<td>Inclusion of digital literacy development in official PRP targets / Review processes</td>
<td>16% 13</td>
</tr>
<tr>
<td>Individual, face-to-face support</td>
<td>41% 34</td>
</tr>
<tr>
<td>Official CPD evaluation and recognition of achievements</td>
<td>37% 30</td>
</tr>
<tr>
<td>Online CPD courses</td>
<td>43% 35</td>
</tr>
<tr>
<td>Peer Mentoring</td>
<td>28% 23</td>
</tr>
<tr>
<td>Support in creating a professional development e-portfolio</td>
<td>13% 11</td>
</tr>
<tr>
<td>Time allocated to Digital Literacy CPD activities</td>
<td>46% 38</td>
</tr>
<tr>
<td>Other (please specify)</td>
<td>7% 6</td>
</tr>
</tbody>
</table>
Comments:
- Lunch time courses are not the solution. Staff need lunch hour, not for food but for rest and refreshment
- Money
- I don’t want to learn new computer skills for the sake of it. I just want to give given time and space to do some research and get help getting it published.

Question 24: Are you familiar with the National Forum for Teaching and Learning Document: The National Professional Development Framework?

While there was a fairly even spread amount the 82 Respondents across all three questions, there was some recognition among the remaining 63%, with 37 % not aware of the document, as illustrated in the chart below, figure 37.

![Figure 37: Familiarity with NPDF](image)

Question 25: Do you have, or are currently pursuing, a teaching and learning specific qualification. If not, do you intend to in the future?

Of the 82 respondents, a majority of 57 % have teaching qualification, of the remain 63 % just 10 % clearly state they do not intend to pursue one in the future, see figure 38.
Question 26: If you have any comments or suggestions as to how you feel your digital literacy or capacities could be better developed or supported within the college please comment below.

This final section is to capture any areas or topics that may have been missed, and to give an opportunity for respondents to contribute any further thoughts or feelings they may have on the subject.

RESPONSES

1. Proper lecturer room IT in place would help. There is not enough computers. New city centre campus needs a lecturer’s room with access to computers
2. More training offered by griffith, more accessible
3. for question 21, a new department - Staff Development
4. I think initiatives should be faculty wide so students get exposure across modules
5. I think initiatives should be faculty wide so students are continually exposed rather than with just one lecturer
6. None
7. Nothing to add to previous responses.
8. I think the most important thing is that Digital Learning is structured and resourced properly, with collaboration, design and development of programmes meaningfully incentivised for those involved.
9. More training and more time for academic staff of pursue greater training and use of online and digital learning
10. Time is the problem. I am interested but I just don’t have time.
CHAPTER 5: Discussion

5.1 Overview
This study set out with the aim of assessing the understanding of lecturers in Griffith College of digital literacy as it pertains to their teaching practice. It also examined their attitudes to, and engagement with, institutional supports for enhancing its use within their own professional practice. The series of variables within the survey were designed to identify different behaviours or attitudes among various groups, looking at length of service, method of teaching, and contract type. It was assumed that there would be some level of variance uncovered, however, overall there is a striking coloration across all variables with regard to personal use and attitude toward digital literacies and engagement with college supports.

When looking at a deeper level at the results, an overall picture emerges that suggests that while there are minor variations within responses, the response group of 26% can be taken as representative of the body of lecturers within the college, notwithstanding further taking into account the phenomenon of self-selection. As a way to counter its impact, Denscombe suggests that bias may be offset by an effective refusal to participate, by considering if the non-respondents differ in any relevant way from those that engaged (Denscombe, 2007 page).

The breakdown within the group of the 94 respondents is 68 full time, 26 part time, with those with blended teaching making up a third of the group. Taking this as largely
proportionate to the wider population, Denscombe further advises to evaluate responses in relation to comparable surveys, with a similar target group. In this case the National Survey on the Use of Technology in Education (NFETL, 2015a) is a valuable tool to map results where relevant.

5.2 Personal rating of level of skills
It was considered important to anchor the questionnaire by identifying how lecturers rate their own capabilities with digital technologies and tools. The average across all variables was rated at five, out of a maximum rating of seven, a confident ranking overall.

The follow up question asked respondents if they felt they needed to develop their digital skills. Even with the level of confidence shown in the previous question, a large majority of 81% indicated a strong interest in building on their skills. As discussed in the literature review, self-ranking of skills levels can be skewed at times. Individuals may have a stronger sense of confidence due to being at ease using technologies they have experience in, and rarely are in a position of discomfort in being immersed in a new technology. Contrary to this potential bias however, Griffith College respondents appear to appreciate that confidence does not negate a need for continuous development. This openness allows for future opportunities for encouraging involvement with digital literacy CPD opportunities.

The perception that respondents have of their student’s digital literacy skills correlates largely with the findings of the National Survey, where respondents overall agreed that their students had sufficient skills to interact successfully with college digital resources such as Moodle and Library systems. There was a difference of close to 15%, where the National survey rated at just over 85%, and Griffith at 71%. There was a similar difference where the National survey respondents were slightly more optimistic as to student abilities to use basic software packages such as MS Office at 85%, the Griffith cohort ranked this at 75% for their students.

There remains the question as to whether this is a reflection on lecture perceptions or student capabilities. However, given an overall alignment with the teaching staff aspect of the National Survey, it can be reasonably extrapolated that the student body experience is also largely similar.
There are many studies that point to lecturer use of technology influencing student use as discussed in the literature review (Kaarakainen, Kivinen and Vainio, 2018) On balance, the respondent’s openness to continuous learning, gives some indication of not feeding into the digital native narrative, and is a positive position to approach supporting professional development opportunities incorporating digital literacies to enhance the student experience.

5.3 Engagement with Digital Literacy supports
There are indications in the study that there is some inconsistency as to who lecturers should approach for training, and differing opinion as to what department should be the overall hub for provision of digital supports, as demonstrated in figure 32.

This mirrors the literature, where ad hoc service provision and institutional silos (Beetham, McGill and Littlejohn, 2009) can be a block to a coherent, accessible programme of support. The recent NFETL Guide to Developing Enabling Policies for Digital Teaching and Learning (Murphy, 2018) looks specifically at technology enabled assessment (TEA) in Irish HEI’s. Within this single area alone many stakeholders may be involved including lecturers, students, educational technologists. The report identifies that clarifying areas of responsibility is an essential enabling policy.

Having identified that there is not a clear route for lecturers to follow to identity where to access supports, it is necessary to examine how they receive information on services at present. Chapter 3 outlined official college avenues for marketing digital literacy supports. The results of the survey show that the most effective of these tools for engaging with the institutional training supports is *Via Email*, at 60%, which constitutes a reasonably robust engagement with official college promotions.

In addition to official routes however, often it is through informal ways that lecturers learn about services throughout the year. *Word of Mouth*, which may be through contact with fellow lecturers or in informal conversation with departmental staff, registers as an effective source at 46%. However, it should be noted that this informal avenue may not prove as reliable for those who have a shorter service as they may not have built up a strong relationship with colleagues or support departments. While in the survey this disparity is not
apparent, again self-selection may be an influence that cannot be discounted through this survey alone.

Cross tabulation between those teaching on blended learning programmes and classroom only also revealed no significant difference in how lecturers learn of supports. This is an interesting result, as it may have been presumed that those teaching on blended learning programmes have more direct contact with the Digital Learning department by necessity, and therefore have a more direct link to discovery of services. However, despite two thirds of respondents teaching within the classroom only, there was no statistical significance between the cohorts. This was the case also when part-time and full-time respondents were compared, and those with 5 years or less service against those with 15 plus years. It can therefore be taken that current tactics are reasonably inclusive as they stand, reaching all groups equally. Nevertheless, there is room for improvement in the area of official inductions in particular, with a low rate of 9% overall.

5.4 Learning Styles and Strategies
An essential part of this research is to identify how best to approach the provision of digital literacy supports within Griffith College.

Social learning is apparent in the results, as is an individual, self-led approach. Where respondents were asked how they usually learn new technologies, self-directed learning and social learning registered in the top three. Self-taught, Peers and friends and family, and Trial and error rated with an average of between four and five.

The three more formal approaches, Training sessions within the college, Online training supports through the college, or Training through course provided by outside institution rated in the bottom half of the results.

This finding of an emphasis on social learning is supported by the 46% result of learning of college supports by word of mouth.

This is a concern, and outreach must be a priority in reaching lecturers. It does show that there is willingness to engage, and an informal support is present. However, it is essential to the success of any digital literacy programme to be institutionally led.
5.5 Digital Skills framework
This theme of self-directed learning was carried through in the series of questions relating to the National Digital Skills Framework. The aim of this section was to present respondents with examples of digital literacy skills within a practical professional context, to ascertain what are the areas that lecturers perceive as important to them in their professional practice. The options presented were chosen from those that were gathered during the literature review of a variety of digital literacy skillsets, and which mapped to the headings under the relevant National Digital Literacy Skills Framework.

Overall, the number of respondents in this section ranged from 67 to 78. This drop off may indicate a level of “respondent fatigue”. However, considering the increase in engagement for question 17 immediately following this section goes back up to 86, reasonable conclusions may be drawn from the data.

The first section, Tools and Technologies, had the highest response rate of 83. This high response under this section indicates a level of openness to the need for an understanding of how to utilise digital technologies from a group-up level. The highest-ranking option at 74% was Camtasia: Creating video tutorials, creating interactive video. The relevance of this as an indication of genuine interest is supported by a corresponding high response under the Creation and Innovation heading of Question 11: Creating Online Lectures and video resources: Using video for the creation of engaging teaching resources, and to make feedback to students more dynamic. The level of interest expressed here has in fact increased to 85%. This finding links in to the findings within the literature review, which identifies a key motivation for teaching staff developing digital skills is student engagement, and a desire to underpin their pedagogic goals (Bennett, 2014).

A similar finding can be found by examining the response to Research Tools: Nvivo, SPSS, Online surveys (Survey monkey), Zotero, Endnote, Mendely. At 68% this shows a reasonable level of interest in the development of the use of these tools. Under the Find and Use heading in Question 13, similar digital tools are relevant under the choice of Online Research: Use digital tools to improve workflow - find relevant professional and academic sources, evaluate, manage, organise and share online. The level of interest under this heading is 85%, a joint highest across all choices alongside Creating Online Lectures. This further demonstrates that situating digital literacy skills within practice contextualises them and can increase their relevance to lecturers.
Another finding of note is that developing use of One Drive did not rate very highly, at 69%, despite this being cited with almost all the scoping interviews as an essential skill lacking among both academic and support staff within the college. This indicates that some thought must be put into engagement in this area to indicate relevancy to lecturing staff needs.

Teaching and Learning has the second highest level of respondents at 77. There is an expected high level of interest of in the college’s VLE option: Moodle: Use of evaluation surveys, quizzes, analytics to understand how well students are engaging with materials etc ranking third overall of all options, as this is an essential tool which all lecturers are expected to engage with.

*Find and Use* is the heading most associated with the Library as a support department and has consequently not been as well represented within formal institutional digital capacity building programmes.

As has been discussed, it is under this heading that the highest level of interest was shown in Online Research, indicating a strong relevancy in the attitude of lecturers. However, the other two options given rate in the lowest three overall, indicating that there is ground to be covered. Copyright and Intellectual Property Rights (IP) is identified as one of the five topics representing emergent topics within institutional digital policy areas (*Murphy, 2018*). Considering this alongside responsibilities in regard to GDPR compliance (*HEA Net, 2017*) demonstrates a need to consider how to pursue a programme of skills development that encourages engagement.

Overall *Identity and Wellbeing* has the least number of respondents at 67. Of these, Digital Learning and CPD was placed at the highest importance at 79%, with 59% of respondents expressing interest in Work-life balance and 55% would consider leaning more in the area of e-portfolios to support CPD activities.

This lack of engagement with this pillar is an area of concern considering the potential negative impact that technology can have on the workload on staff. Gregory and Lodge highlight the many risks to the well-being of academic staff (*Gregory and Lodge, 2015*). There is a growing expectation that lecturers engage with technology to enhance their teaching practice and map to the demands of institutional strategies. Professional identity is becoming more and more linked to the use of, and collaboration through, technology. It is the arguably
the responsibility of the institution to support their staff in this challenging and developing environment.

5.6 Development in understanding of DL
In order to gauge if considering digital literacy through the lens of the National Digital Skills Framework had an impact on their overall understanding, respondents were asked to consider if their understanding had improved. Of the 86 respondents, 36% responded that it had, this finding indicating that there is potential in using this framework to enhance lecturer understanding within Griffith College.

5.7 Usage of Tools
The question involving the usage of Digital tools will help to inform culturally significant programmes of support, acknowledging current usage. There is good engagement in Moodle and the video conferencing tool, Zoom. However, there are indications that there is ground to be covered in developing skills in the areas of use of Turnitin, Digital Security and Assistive technologies in particular.

Of the 75 responses for the use of digital tools to support CPD, there was a representative spread across all choices, showing potential for a range programmes that may be pursued. Technology-enabled Assessment (TEA) rated the highest at 52%, followed by Managing a Professional Digital identity: Linkedin, ORCID, Google Scholar ID, ResearchGate. Copyright and Intellectual Property Rights (IPR) was highlighted at 44% also.

Open-ended comments showed an array of further technologies referred to, Kahoot; Turning Point; Socrative; Adobe Connect and Office 365 forms. This demonstrates that there is active usage of digital technologies among lecturers, and that a survey of technology used may be of use in a further study. In the meantime, information may be more informally gathered through attendance in workshops and face to face meetings.

5.8 CPD Responsibility
There is no statistically relevant difference between respondents as to whether CPD should be lecturer or institutionally led. This reflects the literature, which calls for both a top-down and bottom up approach for the success of CPD programme.
5.9 Barriers

Overall the barriers cited by Griffith College staff correspond strongly with findings within the literature where studies have repeatedly identified that time is a major challenge for engagement (Gregory and Lodge, 2015), be that lack of time to attend training, or to engage in technology-enhanced learning. (O’Regan et al., 2016; Meace, 2017)

There is some indication that lack of time to attend training is more of a difficulty for Griffith College lecturers at 55%, rather than an average of 28% nationally (NFETL, 2015a). In the National Survey, 77 respondents were teaching in private colleges, and made up approximately 10% of the total population surveyed. However, of those 57% were full time, as opposed to just 28% within this survey. This disparity in demographics underlines the importance of this study as a representative of a private college environment.

It is evident that there is an issue to address with improving access to support. The mapping of an internal digital literacy project to that of the overall National Forum Professional Development Framework and support materials for the Digital Skills Framework could provide further opportunities for development and in doing enhance lecturer participation within the college.

Of the comments in this section, seven out of the eight cited time as being a primary concern for engagement. There was also an identification of investment in digital resources as being in a direct competition with lecturer pay, and another called for training to be in paid administrative time. This perception must be addressed, it is vital that lecturers perceive any programme of digital literacy as being one of support and not a further intrusion into an already loaded timetable.

Within the response rate there was some statistical relevance identified between the groups which are of note. Part time lecturers are more unsure as to which department to approach and find it more difficult to access online resources. Predictably, the blended group are in general more aware of both how to access, and the possibilities of, technologies. Perhaps somewhat unexpectedly, a higher number identified as having a lack of confidence in using technology. This is most likely due to the fact that by the nature of their teaching they are faced with the challenge on a more regular basis. Those teaching in the classroom may not be in the position of having to incorporate technology to the same extent and therefore over
estimate their ability, as has been identified as a phenomenon in the literature (Kaarakainen, Kivinen and Vainio, 2018).

24% of the entire groups were unsure of which department to approach, this links in with the finding from question 21. Respondents were asked for their opinions to which department, would be best placed to serve as a hub for the provision of a college-wide digital literacy CPD programme. Digital Learning and Teaching and Learning departments were almost at 32 and 33%, with the library rating at 29%. This ambiguity would need to be addressed for any successful programme implementation.

Another area slightly out of sync with the national average is that lecturers are not sure of the possibilities for technology-enabled learning, at 31% as against 18%. Other cited issues of lack of confidence at 12%, may be taken as an optimistic percentage given the possibility of respondent self-section bias. Regardless, this issue can be begun to be addressed by the provision of an organised and targeted programme of support. Similarly, the 13% that find it difficult to access the online resources available may be supported quickly through the same targeted approach.

5.10 Incentives
In order to gauge how best to incentivise participation in CPD opportunities supporting the development, respondents were asked to choose from a number of options.

As expected, Time allocated to Digital Literacy CPD activities rated highest, at 46%. However, there were a number of other options identified, showing evidence of some deeper engagement with the possibilities.

A mix of methods of support were called for, with Online CPD courses (43%) Individual, face-to-face support (41%). This points to the importance of recognising different learning preferences to promote initial engagement.

The qualitative comments section at the end of the survey explicitly call for meaningful incentivisation, time to engage, and faculty-wide collaborative opportunities.
5.11 Mapping to the National Forum
Griffith College lecturers map favourably (57%) to the National Survey (59%) results in regard to having or currently pursuing a Teaching and Learning Specific qualification. Of those respondents who do not have or intend to pursue one, 10 % of Griffith respondents do not, compared to 28% nationally.

A major strategic commitment of Griffith College is to engage with the National Forum of Professional Development Framework. The results from this survey found a recognition rate among respondents of 63% overall, who were either very aware or somewhat aware of it. This is a strong bedrock for building on. Any outreach programme for the development of digital literacy will need to map to the overall college promotion of the National Professional Development Framework document to underline its relevancy for staff development.

The next chapter will discuss how a relevant, localised programme for linking of a digital literacy development programme can be created that maps to the National Forum objectives for promoting CPD, and make further recommendations for research.

CHAPTER 6: Conclusions and Recommendations

6.1: Conclusions
This case study dissertation examined an area of research in digital literacy for teaching staff that has not been surveyed to date. As yet, the National Digital Literacy Framework has not been instigated as a strategic, institutional tool for supporting the building of digital literacy skills for lecturers a 3rd level institution.

This study has highlighted barriers faced by lecturers engaging in digital literacy support programmes, both in the support of their teaching practice and in the development of their personal professional identity.

Another finding is that, while Griffith College has many supports in building digital capacity in place successfully serving teaching staff, and which is provided by a number of departments, the library is less utilised. The literature shows that there are many areas that academic libraries play an active role in the provision digital literacy, which have been also been identified in Griffith Colleges strategic objectives. There is evidence in the responses from Griffith College lecturers that a significant number recognise this role also.
The lack of a clear central departmental point of contact also contributes to teaching staff being unsure as to how to go about developing their digital literacies in a proactive, self-directed manner.

Although the findings from this study reveal a mixed level of confidence in digital skills among lecturers, there is cause for optimism. Both those respondents that identified as confident, and those that did not, are willing to develop their skills further.

When asked to consider if their understanding of digital literacy improved after considering example of situated practice under the heading of the Digital Literacy Framework, a significant percentage agreed that it had.

The main barriers to the provision of a targeted support of digital literacy skills were identified as:

- A lack of time to engage was an overwhelming obstacle to the development of digital literacy. Lecturers feel that their current workload is difficult to manage as it stands and highlight a lack of access to a flexible suite of supports to encourage participation.
- There is not a clear line of support, lecturers are unsure of which department to approach when faced with technical issues or wish to improve their own use of digital technologies in their teaching practice.
- Lecturers are currently developing their digital skillsets in an ad hoc manner, outside of institutional supports.
- There is a lack of awareness as to the possibilities of how digital technologies may be incorporated, either for teaching practice or professional development.

In order to address these issues, it is necessary to approach the development of an institutionally relevant digital literacy programme in stages.

The recommendations that follow identify that a proactive approach must be take institutionally to promote lecturer participate, recommendations 1 to 3 look at building a programme of support, and a boutique, culturally relevant version of the Digital Skills Framework. They further consider methods of delivery that recognise the importance of an inclusive, bottom up approach as part of a successful digital literacy programme.

Recommendation 4 suggests areas of further research both internally and externally, to continue to contribute to the wider body of research.
6.2 Recommendations

Stage one: Establish a collaborative working group

A skills analysis of current departmental expertise should be undertaken. This would involve collaboration with the various departments that have been identified as providing support at present, Teaching and Learning and Lecturer Support, IT, the Library and Digital Learning. A working group comprising of these departments can be established, with invitations extended to other interested individuals following the initial consultation stage to participate as digital champions. Other departments that have relevant expertise to share are the Careers Office and the HR department.

The Teaching and Learning department should be the umbrella for any supports as it is charged with CPD developments for lecturers within the college and is their central point of support from orientation and throughout their time with Griffith College. There should be a strong recognition however that multiple departments offer their own areas of support.

Stage two: Create Boutique version of National Digital Skills Framework, map to CPD strategies

A central component of the design of a digital literacy development programme would be to officially adopt the National Digital Skills Framework. This can be used as the means to map relevant digital literacy supports to develop and enhance teaching practice and promote personal professional development. CPD opportunities should be mapped accordingly.

In response to the initial, informal scoping conversations with Griffith College departmental staff, it became clear that the conceptual map of the National Digital Skills Framework would need some adjustment for this institution. The consensus was that tools and technology should be viewed as a base from which to access the more abstract levels, therefore a boutique version may be devised to better promote conversation, as is shown in the draft version below in figure 39.
Stage three: Create suite of support, incentivise

Any programme should recognise and allow for the individuality of each lecturer. Learning should scaffold and map to the Professional Development Framework at all stages, and identify formal and informal learning opportunities.

Where possible, events should be calendared to allow for time off to attend to be booked in advance with faculty. In recognition of difficulties faced with part time lecturers attending workshops consideration must be taken with scheduling to maximise inclusion.

Awareness of digital literacy supports is essential, there are several methods that can be employed to improve the marketing of these.

The CPD pathway to digital literacy map can be included in a variety of points of access.

- In the annual lecturer handbook produced by Teaching and Learning
- Inclusion in the lecturer induction days.
- Through the library, in the physical space and on the library website support pages for lecturers
- On the Digital Learning support pages on Moodle
- Through the IT department online supports for lecturers

Email rated as a strong point of contact in the survey and should continue to be utilised.

The current method of individual departments making contact can continue but should link
to and reference the Digital Literacy Framework and link activities to the relevant points in the Professional Development Framework.

In meeting the various challenges that lecturers face with lack of time, and personal learning preferences, there are a number of ways that supports may be offered.

These can include:

- Internally run workshops
- Workshops hosted by invited, outside facilitators
- Online resource supports
- VLE digital literacy courses
- Individual, informal meetings to ascertain and suggest relevant digital literacy skills.

What is essential in the provision of supports, is the recognition that there is a range of experience, backgrounds, disciplines and preferences among the target group. There can be no one-size fits all approach. Workshops should not be passive, skills-based classes. They should begin with a form of skills analysis and a poll of personal goals at the outset to acknowledge the range of participants. The conclusion of workshops should review achievements and plan follow up.

Participation can be incentivised several ways:

- Scheduled opportunities to engage within working hours
- Showcase exemplars
- Fund research or conference attendance
- Peer mentoring
- Skills assessments
- Offer bespoke one-to-one meetings/mentoring
- Invite expert speakers
- Create and promote relevant digital badges
- Recognition through Presidents Award
- Embed into HR department processes – include digital literacy developments as recognised elements of PRP

Stage four: Engage with National Forum / Longitudinal study

A longitudinal study to map the programme should be carried out to test relevance of provisions, and to ensure that the programme can operate long term. Lecturers must be actively involved in the processes, to promote engagement and ownership, and recognise the benefit to them personally and their professional practice.
The programme should be extended to include all staff within the institution, as has been recommended by NFETL and others.

The programme should actively map to the NFETL policies and activities. An application for the creation of a digital badge through the National Forum resources should be pursued.

A CPD map can be created that signposts how to develop skills under each heading of the Digital Skills Framework, linking to relevant departmental supports. A visual representation of a path of support and discovery, mapping departmental supports and recommendations for CPD future opportunities can be devised to promote the range of services.

**Recommendations for External Research Opportunities:**

Results from the National survey for the Use of Technology in Education (NFETL, 2015a) raise questions as to whether it is representative of lecturers within private colleges, in that the proportion of full time versus part time respondents differed greatly within this study. It may be that when a study is carried out in-house this influences the participation of the participants, attracting a higher proportion of part-time lecturers. A future study carried out in a similar private college may reveal similar results or further support the notion that each HE institution is culturally unique.
Chapter 7: Personal Reflection

I have worked in Griffith College library for twelve years. During this time my work has developed from working on the library issue desk to taking an active role in providing research support to both academic staff and students and teaching digital literacy skills through all levels. I manage the library’s VLE presence and online databases, online learning materials and guides, and promote the visibility of the research output of Griffith College’s students and faculty on the colleges institutional repository.

I also lecture on the LLB degree programme for full-time and blended programmes teaching IT and research skills.

However, while I have received qualifications in Journalism and Media Communications and in Photography, till recently I have not pursued a professional librarian qualification.

It became clear to me that in order to progress in a career in Librarianship, it was necessary for me to undertake a professional qualification. I chose the MSc. In Library and Information Management as it was a clear fit to me with an emphasis on the use technology and had a strong teaching librarian element also.

My approach to learning prior to undertaking this course was in many ways similar to those of the respondents in this study. While I have developed my own technical skills through a
number of specialist courses that included developing skills in the use of various software, website design and coding, much of my learning has been through personal learning and on the job experience.

I would consider myself as falling into the category of an “early adopter”, I enjoy identifying relevant technologies to facilitate carrying out a task and am methodical in acquiring that knowledge through self-directed learning.

Choosing a Research Topic

At an early stage in the process, I considered a number of topics ranging from an in-house case study of an institutional repository to exploring engagement with open access publishing among academic staff.

However, I recognised the subject of digital capacity building as an ideal fit for me. Much of my day to day work involves the support of digital literacy, both to students and to a growing extent staff. It became clear to me that staff within the college were unaware of the range of support they could access in this area through the library and were most often introduced to it through informal routes.

Through my participation in the National Forum pilot projects, I could see the application of the Professional Development Framework first hand and found it to be highly relevant to me and my practice as a both a librarian and a lecturer.

As I explored the recently published National Forum documents, I identified a clear call for the development of the digital literacy of teaching staff. However, most of the research in this area in Ireland focussed on collaborative projects, whereas in the UK there was evidence of many institutional case studies. Further to this the National Forum explicitly acknowledges the value of individual institutions conducting in-house studies in recognition of the individuality of cultures, and has issued a call to HE institutions; in the sectors to add to the body of research available.

I had originally intended to approach the dissertation from the perspective of academic libraries supporting digital literacy capabilities of all teaching staff within Griffith College, as there is strong evidence in the literature that the expertise of academic libraries is underutilised. However, as my examination of the literature progressed, it became clear that
aspects of digital literacy were already being provided through other departments, though they are often not referred to as such. Also, in examining the range of digital literacy frameworks, and comparing these to findings in the literature review, the importance of anchoring a digital literacy programme within examples of situated practice became clearer.

The All Aboard *National Digital Skills Framework* has gained admirable traction in collaborative institutional studies, however, in the opinion of this researcher there is further scope for it to be applied using deeper examples within teaching practice. The resources available through the All Aboard website are highly useful in their own right, however they could be supported by deeper examples of practice, such as presented in the Beetham’s profiles (2017c).

By the completion of the research process, this multi-departmental collaboration became the focus of a more cohesive environment of support, and the *National Digital Skills Framework* the means to by which to approach mapping it to existing strategies.

The focus shifted from all teaching staff to all lecturing staff to facilitate an anonymised group. In future studies should include all staff, including non-academic, as is called for in the literature (Dore, Geraghty and O’Riordan, 2014, p. 10; JISC, 2017).

**Limitations**

There were a number of time pressures that influenced decisions in the design of the primary research gathering. It would have been preferable to conduct qualitative interviews with representatives of the population, and triangulated findings from this data with those of the quantitative data, and with datasets gathered from similar studies from the literature review.

However, my own workload this semester created a challenge with organising a realistic process of gathering research for this study. I work-full time in the library, in addition to which I teach on full time and online courses and conducted a number of weekend workshops. The pragmatic approach was to proceed with a quantitative instrument to gather primary data. Future studies building on this initial study would be best served by the inclusion of qualitative interviews.

Also, there was a limitation in regard to getting a more complete breakdown of demographic group. Future studies it would be better served with a clearer breakdown as
to the part time cohort of lecturers, as this group involves those who are guest tutors for short periods of time, and those who are taking modules in full.

The Learning Cycle

Kolb identified four learning styles based on four stages of learning, expressed within his experiential learning cycle, as shown in figure 32.

These learning styles of diverging, assimilating, converging and accommodating are situated within the following four stages:

- Concrete experience (feeling)
- Reflective observation (watching)
- Abstract conceptualisation (thinking)
- Active experimentation (doing)

In order to achieve effective learning, each of these steps must be experienced, e.g. have an experience, reflect on the process of that experience, develop a hypotheses, and test its validity.

![Figure 40: Kolbs experiential learning cycle](image)

Honey and Mumford based their work of learning styles on Kolb’s work, and identified four learning preferences of activist, theorist, pragmatist, reflector, as are illustrated in figure 36.
If I was to map my own learning style to Honey and Mumford’s model, I would consider myself a combination of both Activist and Pragmatist. My approach to learning tends consist of both these approaches, in that prior to undertaking this Masters programme, I learned by doing in my general approach to acquiring new skills. However, I also tend to approach learning from a perspective of identifying what is needed, and in so doing put learning into practice, experimenting to ascertain the best solution.

However, since undertaking this Masters, I place great value on the experience of developing a theoretical approach to learning. Though I have found a reflective approach to learning challenging, I have progressed greatly in my capacity for reflective learning over my time in this course and in my involvement in the National Forum pilot projects. I look forward to developing it further.

Therefore, the idea of a set, defined personal learning style is one that does not resonate with me. Neither do I think it is the correct approach for the provision of digital literacy supports such as is explored in the dissertation, as one of the central findings is that for deeper learning in this area it is important to step outside of one’s own established pattern of learning behaviour.
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Appendix

Appendix 1: Digital skills mapped to National Digital Skills Framework Pillars.

Content source and adapted from several sources:

- All Aboard Framework – Stations Topics, lessons, badges, and resources. Available at: http://www.allaboardhe.ie/stations/
  - Digital lens on the UK Professional Standards Framework (UKPSF) Available at: http://repository.jisc.ac.uk/6600/1/JO0161_DIGITAL_LENS_ON_UKPSF_MAR17_v2.pdf
  - JISC (no date) Digital capability checklist for curriculum developers. Available at: http://repository.jisc.ac.uk/6694/1/DigicapCurriculumDevChecklist.pdf
- University of York: Embedding Digital Literacy Capabilities. Available at: https://www.york.ac.uk/media/staffhome/learningandteaching/documents/propel/Digital%20Literacy%20Tools%20for%20Attention%20Design.pdf

<table>
<thead>
<tr>
<th>TOOLS AND TECHNOLOGIES</th>
<th>REPRESENTATION TOOLS</th>
<th>STORAGE AND ACCESSIBLE TECHNOLOGIES</th>
<th>MANAGING DATA, INFORMATION AND DIGITAL CONTENTS</th>
<th>ADMINISTRATIVE TOOLS</th>
<th>RESEARCH TOOLS</th>
<th>SECURITY AND ADMINISTRATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>PowerPoint, SlideShare, Prezi</td>
<td>Use of technology to improve and ensure the inclusivity of learning resources, assisting students with disabilities to access the curriculum, providing alternatives to printed text, and supporting student collaboration and sharing.</td>
<td>To organize, store and retrieve data, information and content in digital environments, online storage.</td>
<td>Getting the most from OneDrive, Creative cloud documents, Excel spreadsheet, Off campus access setting up office remotely, setting up remote access for your computer.</td>
<td>Microsoft Access, SPSS, Online surveying (Survey Monkey), Zotero, Endnote</td>
<td>Secure administration of personal and sensitive data in a digital environment, GDPR. Compliance and data protection, Feedback, Exam questions, Results, Mobile Attendance platform.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>COMMUNICATE AND COLLABORATE</th>
<th>SCHOLARLY IDENTIFICATION AND REPUTATION MAINTENANCE</th>
<th>USE OF SOCIAL PROFESSIONAL NETWORKS</th>
<th>DIGITAL CAPABILITIES</th>
<th>DIGITAL PARTICIPATION</th>
<th>DIGITAL PARTNERSHIP</th>
<th>KEEPING UP TO DATE USING RESOURCES FROM KEY ACADEMIC AND INDUSTRY SOURCES</th>
<th>WEBSITES AND VIDEOS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scholarly identity and reputation maintenance.</td>
<td>Use of regular use of social professional networks.</td>
<td>Managing research networks, using analytical tools to track citations and manage networks.</td>
<td>Digital collaboration (collaborate effectively in digital spaces e.g. building shared resources, online, wiki pages, digital writing and presentations.</td>
<td>Digital participation with peers Participates actively in academic blogs, lists, wiki platforms and communities. Help to build new communities, discussion lists and collaborative teams.</td>
<td>Digital participation with peers Part of a network of professional, academic or community interests.</td>
<td>Keeping up to date using resources from key subject-based databases, identifying RSS feeds, and up-to-date blogs and emerging research networks and developments in subject areas.</td>
<td>Videos and Virtual Conferencing Tools (e.g. Zoom, Skype and audio conferencing), Virtual Learning Environment (LMS) and Social Media.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CREATE AND INNOVATE</th>
<th>PRODUCE AND MANAGE MULTIMEDIA RESOURCES FOR A VARIETY OF PURPOSES</th>
<th>USING LIVE EDUCATIONAL RESOURCES</th>
<th>TECHNOLOGY-ENABLED ASSESSMENT</th>
<th>PRODUCE Digitally-CTE</th>
<th>TECHNOLOGY-ENABLED DIGITAL MATERIALS</th>
<th>WORKING WITH IMAGES</th>
<th>CREATING ONLINE LECTURES AND VIDEO RESOURCES USING VIDEOS FOR THE CREATION OF ENGAGING TEACHING RESOURCES, AND TO MAKE TEACHING TO STUDENTS MORE ENGAGING.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Open educational resources</td>
<td>Create and make research and teaching materials openly available.</td>
<td>Design and implement assessment tools. Ensure innovative, accessible and shareable resources.</td>
<td>Produce digital materials – create infographics, images, video, audio, digital presentations, podcasts and resources, blog and web posts – to communicate curriculum content.</td>
<td>Produce digital materials – create infographics, images, video, audio, digital presentations, podcasts and resources, blog and web posts – to communicate curriculum content.</td>
<td>Produce digital materials – create infographics, images, video, audio, digital presentations, podcasts and resources, blog and web posts – to communicate curriculum content.</td>
<td>Working with images: use software to enrich and edit photos, creating engaging, relevant images.</td>
<td>Creating Online Lectures and video resources: using videos for the creation of engaging teaching resources, and to make teaching to students more engaging. Use Blue/Green screen technique.</td>
</tr>
</tbody>
</table>
### Appendix 2 - Digital Literacy Questionnaire Introduction

**Digital Literacy Questionnaire**

*Exploring the use of Digital Literacy in the Support of Teaching Practice and CPD*

The aim of this research study is to gain an insight into how best to support lecturers in Griffith College in getting the most out of digital technologies.

Your perspective on this would be very much appreciated to gain an accurate view from as wide a range of respondents throughout the college, as possible.

All insights and experiences in using digital technology are equally valid, it is not necessary to have a strong usage of digital tools, or to have a prior understanding of the terminology of digital literacy. This questionnaire is completely anonymous, with no personal, identifying data gathered.

The closing date for the questionnaire is Friday 7th December 2018.

Completion time has been estimated at a maximum of 10 minutes.

Who bridges the Digital Gap? Supporting digital literacy capabilities of teaching staff in Griffith College.

This survey is being carried out as part of a research dissertation project for the MSc in Inform Library Management through Dublin Business School.
Appendix 3 – Introduction to the concept of Digital Skills Framework

The National Digital Skills Framework (2017) promotes six foundations which support the use of technology within teaching practice.

The framework looks at developing an underlying confidence in using digital tools and technology to promote a "digital literacy" that further supports the underpinning and development of an overall, confident professional identity.

Digital literacy looks beyond functional IT skills and can be described as those capabilities "which fit someone for living, learning and working in a digital society, with the knowledge that a digital society is ever evolving." (All Aboard, 2015).

The following questions will ask you to consider:
- your own usage of some examples of digital skills under each heading
- to consider which department may be best positioned to provide support for digital skills.
- what other digital tools you would be interested in learning more about

Appendix 4 – Digital Literacy Questionnaire

1. What is your employment status as a lecturer in Griffith College?
   - Full Time
   - Part Time

2. How long have you been teaching in Griffith College?
   - 5 years or less
   - 6 to 10 years
   - 11 to 15 years
   - More than 15 years

3. In which campus do you teach?
   - Cork
   - Dublin City Centre
   - Dublin South Circular Road
   - Limerick

4. What is your mode of delivery?
   Please select all that apply:
   - Classroom lectures
   - Blended learning programmes

5. Please select the faculty or faculties you teach in.
   Please select all that apply:
   - Business
   - Computing
   - Counselling & Psychotherapy
   - Design
   - Engineering
   - Graduate Business School
   - Griffith Institute of Language
   - Journalism & Media Communications
   - Law
   - Pharmaceutical Science
   - Professional Accounting
   - Professional Law
   - Short Courses
   - Sport
   - The Learning School of Music & Drama
   - Training and Education

   *If you have a Faculty not listed in the above list please add below*
6. Overall, on a scale of 1 to 7 how would you rate your current capabilities with technology and digital tools? (With 7 being Advanced and 1 being Basic)

<table>
<thead>
<tr>
<th>Not Confident (Basic)</th>
<th>Comfortable (Intermediate)</th>
<th>Very confident (Advanced)</th>
</tr>
</thead>
</table>

7. Do you feel that you need to develop your digital skills?
- Yes
- No
- I am not sure

8. To what extent do you agree with the following statements?

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Don't Know</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Most of my students have the skills to use college technology (e.g., Moodle, Library search systems, online databases)</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Most of my students have the skills to use basic software programs and applications (e.g., MS Office, Google Apps, etc.)</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>My students look to me for technology support</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>My students are more confident using technology than I am</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>My students welcome the use of technology to enhance their learning</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>
### 9. How would you usually learn how to use new technologies?

(Please rank in order where relevant with 1 being the most important, you may drag and drop to re-order positioning)

<table>
<thead>
<tr>
<th>Rank</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Self taught, Google, YouTube, Lynda.com or another online source</td>
</tr>
<tr>
<td>2</td>
<td>Peers, friends or family</td>
</tr>
<tr>
<td>3</td>
<td>Trial and error</td>
</tr>
<tr>
<td>4</td>
<td>Face to face training sessions run in the college</td>
</tr>
<tr>
<td>5</td>
<td>Online training supports through the college through Moodle</td>
</tr>
<tr>
<td>6</td>
<td>Training through course provided by outside institution</td>
</tr>
</tbody>
</table>

### 10. How do you usually learn about different technical support services provided by the college?

*Please select all that apply*

- From the college website
- Through Moodle
- Via email
- From the programme leader
- During induction
- Word of mouth
- Information packs
- Other (please specify)

[Box for other input]
11 Tools and Technologies
Please indicate if you would have any interest in developing your understanding of any of the topics below. Leave blank if you feel none of these tools have any relevance to you at present.

- One Drive: Making full use of One Drive to manage and keep data effectively, share data, organise calendar, create forms, backing up documents online. One Note etc.
- Camtasia: Creating video tutorials, creating interactive video.
- Research Tools: NVivo, SPSS, Online Surveys (Survey monkey), Zotero, Endnote, Mendeley.

12 Teaching and Learning
Please indicate if you would have any interest in developing your understanding of any of the topics below. Leave blank if you feel none of these tools have any relevance to you at present.

- Moodle: Use of evaluation surveys, quizzes, analytics to understand how well students are engaging with materials etc.
- Flipped Classroom: Use technology to create instructional content on Moodle, (video, audio, quizzes, interactive multimedia, polling tools, discussion tools)
- Assessing and giving feedback: Using digital tools to give feedback (e.g. via annotations, audio tracks). Use online systems such as Turnit

13 Find and Use
Please indicate if you would have any interest in developing your understanding of any of the topics below. Leave blank if you feel none of these tools have any relevance to you at present.

- Online Research: Use digital tools to improve workflow - find relevant professional and academic sources; evaluate, manage, organise and share online research (Academic databases, Zotero/Mendeley, Bookmarking tools)
- Working with Data: Collect, understand and use evaluation data (eg using online surveys, data capture tools, quantitative and qualitative data analysis tools)
- Copyright and Intellectual Property Rights: Know the rules of copyright and plagiarism, and creative commons licensing.

14 Communication and Collaboration
Please indicate if you would have any interest in developing your understanding of any of the topics below. Leave blank if you feel none of these tools have any relevance to you at present.

- Digital online identity: Depositing work in Griffith Institutional Repository, Develop profiles on ResearchGate, Academia.edu, LinkedIn, Google Scholar. Create and manage one or multiple digital identities to be able to protect one's own reputation.
- Webinar and Video Conferencing Tools: Zoom video and audio conferences, Skype for Business.
- Keeping up to date: Keep up to date with emerging research and developments in your subject area using alerting services from key bibliographic databases, RSS feeds, Twitter feeds etc.
Creation and Innovation
Please indicate if you would have any interest in developing your understanding of any of the topics below. Leave blank if you feel none of these tools have any relevance to you at present.

- Produce digital materials to communicate curriculum content: Create infographics, images, video, audio, digital presentations, podcasts and screen casts, forum, blog, and web posts.
- Creating Online Lectures and video resources: Using video for the creation of engaging teaching resources, and to make feedback to students more dynamic.

Identity and Well-being
Please indicate if you would have any interest in developing your understanding of any of the topics below. Leave blank if you feel none of these tools have any relevance to you at present.

- ePortfolios: Collect evidence of learning, creativity, and reflection to showcase work and ideas, storing evidence off, and reflecting on CPD activities.
- Digital Learning and CPD: Identify and take up opportunities for professional development in digital learning, teaching and assessment. Reflect on personal learning, teaching and assessment practices with technology, using digital tools to support reflection where appropriate.
- Work-Life Balance: Balance digital with real-world interactions appropriately to support learning and teaching relationships. Manage digital workload overload and distraction.

Prior to considering the areas listed under each of the previous six headings, were you familiar with the concepts of Digital Literacy, and/or has your understanding developed?

- No: I still do not have a clear understanding of the term after from considering the examples
- Somewhat: I was aware of it, but would still not consider myself familiar with the term and/or concept.
- Improved: On considering the examples under each heading, I have developed my understanding
- Already: I would consider myself familiar with the term and/or concept.

Have you used any of the following digital tools? Please select all that apply:

- Advanced Moodle (quizzes, polls and assessment)
- Assistive and accessible technologies
- Camtasia Screencasts
- Digital Security, in support of GDPR compliance and Data Protection
- Digital Security, for secure administration of personal and sensitive data in a digital environment
- ePortfolios
- Feedback (digital tools to give feedback e.g. annotations, audio tracks).
- Lynda.com
- Mindmaps Podcasts
- Social Media
- Turnitin (traffic light system plagiarism check)
- Wikis
- Zoom
- Other
15. Digital Learning and CPD. From the following list of digital literacy skills, are there any areas that would you like to learn more about?

Please select all that apply:

- Academic blogging
- Copyright and Intellectual Property Rights (IPR)
- Digital Scholarship & Open Access Publishing
- Managing a Professional Digital Identity: LinkedIn, ORCID, Google Scholar, ID, ResearchGate
- Measuring research impact: Citations, Bibliometrics, Analytics
- DBSs (Open educational resources)
- Other (please specify)

16. What barriers are there to your use of technology-enhanced learning and development? (Please tick all that you feel apply)

- Not sure of the possibilities
- Unsure of which department to approach
- Find it difficult to access the online resources available
- Lack of technical support
- Lack of time to attend training
- Lack of training
- Other (please specify)

17. Which department in your opinion would be best placed to serve as a hub for the provision of a college-wide digital literacy CPD programme?

- Digital Learning
- IT Services
- Library
- Teaching and Learning / QAIE
25. In your opinion, should the responsibility for identifying areas for Continuing Professional Development (CPD) lie first with the lecturer as an individual or should it be led by Griffith College?
   - [ ] Individual lecturer
   - [ ] Griffith College

29. What incentives could the college provide for you to pursue CPD opportunities supporting the development of your digital literacies?
   Please select all that apply:
   - [ ] Digital Badges
   - [ ] Central website to access digital literacy supports
   - [ ] Group Workshops
   - [ ] Inclusion of digital literacy development in official PRP targets / Review processes
   - [ ] Individual face-to-face support
   - [ ] Official CPD evaluation and recognition of achievements
   - [ ] Online CPD courses
   - [ ] Peer Mentoring
   - [ ] Support in creating a professional development e-portfolio
   - [ ] Time allocated to Digital Literacy CPD activities
   - [ ] Other (please specify):

34. Are you familiar with the National Forum for Teaching and Learning Document: The National Professional Development Framework?
   - [ ] Yes, I am familiar with the document
   - [ ] I am aware of it but would not consider myself familiar with it
   - [ ] No, I am not aware of it

35. Do you have, or are currently pursuing, a teaching and learning specific qualification. If not, do you intend to in the future?
   - [ ] Yes
   - [ ] No and am undecided as to whether I would pursue one in the future
   - [ ] No, but I would consider pursuing one in the future
   - [ ] No and I do not intend to pursue one in the future

36. If you have any comments or suggestions as to how you feel your digital literacy or capacities could be better developed or supported within the college please comment below: