

Good Personal Development Planning (PDP) and reflective practice can dramatically improve students' employment prospects after graduation, but few students gain the requisite soft skills during their degree programmes. Can a digital online notetaking tool improve these skills?

About the report

The HECSU-funded research explores gaps in soft skills provision for MA Media Production students studying at the University of Salford.

Ensuring that students are fully prepared for entering the graduate labour market in a digitally transformative era is a priority for universities. Providing opportunities for students to develop and experience a range of soft skills whilst studying on their degree programmes is vital. Although based on a relatively low sample of students, this report offers meaningful insights into how this can be achieved by offering each student the opportunity to access and design an individual online digital notebook.

The author, Christine Pyke (PGCE, M.Ed., FHEA), has been lecturing postgraduate students for 20 years and runs a media training consultancy for individuals and businesses in the creative industries.

The efficacy of using an online digital notebook for students to enhance soft skills to assist employability prospects in a digitally transformative world.

Christine Pyke PGCE M.Ed. FHEA

April 2019

For HECSU

An investigation into how an individual digital online notebook can offer a solution for students to gain valuable soft skills to heighten their employability prospects on graduation.

Background and context

As a part-time university lecturer for 20 years, of both under and post-graduate students and the owner of a busy media training company, I am acutely aware of employers' needs and the skills they are seeking from graduates; particularly in this era of rapid digital transformation which is changing how we work.

With predictions that robots will take over a third of British jobs by 2030 (Chakraverty, 2018), it is difficult to accurately predict how this will impact future workforces. However, artificial intelligence has not yet mastered critical thinking and leadership skills and most businesses will still need the 'human' touch for the foreseeable future (Ratcheva, V. & Leopold, T., 2018). Indeed, creativity, originality, initiative, persuasion and negotiation are all 'increasing in value' as the integration of digital technology continues to transform all areas of business. The shift in the division of labour between humans, machines and algorithms (World Economic Forum, 2019) will see between one-half and two-thirds of companies looking to external contractors and freelancers to address their skills gaps within the next ten years.

Large businesses will be able to absorb the costs of relatively unproductive trainee workers, (Newbigin, 2014) but it will be challenging for very small and micro-businesses that make up a large proportion of the creative sector, and often operate on very slim financial margins. The freelance market is notoriously volatile and unpredictable for even experienced staff, but inexperienced graduates without the requisite skills will find it increasingly difficult to gain work. This will inevitably put further pressure on graduates to gain some, if not all, of the 'growing' soft skills outlined in the World Economic Forum's 2018 report on the future of jobs (Table 1.), including being adaptable and flexible with the ability to learn fast. Rather than learning a fixed body of knowledge, Newbigin suggests students must be able to 'learn how to learn,' so they can continue learning throughout their lives.

Growing	Declining
1 Analytical thinking and innovation	1 Manual dexterity, endurance and precision
2 Active learning and learning strategies	2 Memory, verbal, auditory and spatial abilities
3 Creativity, originality and initiative	3 Management of financial, material resources
4 Technology design and programming	4 Technology installation and maintenance
5 Critical thinking and analysis	5 Reading, writing, math and active listening
6 Complex problem-solving	6 Management of personnel
7 Leadership and social influence	7 Quality control and safety awareness
8 Emotional intelligence	8 Coordination and time management
9 Reasoning, problem-solving and ideation	9 Visual, auditory and speech abilities
10 Systems analysis and evaluation	10 Technology use, monitoring and control

Table 1. World Economic Forum, 2019 (WEF)

The current challenge for universities then is **how** to ensure current and future students graduate with these skills when they are notoriously difficult to teach in lecture theatres and seminar groups because 'soft skills aren't skills' (Marchant, 2015); they are the ability to do something well (Oxford Dictionary) and a learned power of doing something competently (Merriam-Webster Dictionary). Context is key to 'skills learning' with radical intervention needed and a facilitation process by tutors to help students 'get it.' This includes setting up environments conducive to practicing these skills, rather than learning about them, with the motivation and discipline from students to 'want to' take them in (Hetemaj, 2017); and on-going

effort needed from them to understand their nuances and complexities. Soft skills cannot be picked up through one-off sessions but need to be integrated into everyday tasks, in bite-sized chunks allowing them to be developed over time and continually reinforced (Chakraverty, 2018). Personal Development Planning (PDP) is embedded into the postgraduate degree programmes taught within the Creative Media Directorate at the University of Salford and has been a core part of university policy since it was introduced into curriculum in 2013. Students are encouraged to recognise and reflect on their learning and achievements and to plan their personal educational and career development (Tompkins, 2014) with support from tutors.

If PDP is undertaken with commitment, with students actively setting goals and targets for later reflection, it should help them to create a comprehensive learning record and body of information on their personal, professional and academic skills, which they can draw upon to enhance their employability prospects. The success of PDP (Adenekan, 2010) relies on students being ‘engaged’ in the process, as well as it being creatively introduced into the curriculum and integrated into the overall degree programme. PDP also supports active learning, espoused by many educators, which encourages students to be pro-actively and experientially involved in tasks (Bonwell & Eison, 1991), engaging them in the higher-level thinking skills of analysis, synthesis, and evaluation (Blooms Taxonomy, 1956).

The newer version of the taxonomy (*Table 2,*) revised by Anderson and Krathwohl in 2001, offers a more useful and comprehensive addition of how it intersects and acts upon different types and levels of knowledge including factual, conceptual, procedural and metacognitive (Wilson, 2016). The three higher level categories of analysis, evaluation and creation are highly prized by employers in the creative industries and are analogous with the WEF skills outlined in Table 1.



Table 2. Blooms Taxonomy (revised), (Shabatura, 2018)

The author’s M.Ed. dissertation in 2017 explored how embedding student-centred learning (SCL) pedagogy into vocational degree courses could enhance employability skills. The study focussed on a cohort of undergraduate visual effects (VFX) students who ran SCL sessions (Inquiry, problem and project-based learning) under my supervision in the final year of their degree programme. The sessions drew on a variety of academic models including Blooms taxonomy and encouraged them to consider their transition from low-level thinking skills of remembering and understanding, to the high-level skills of synthesis and evaluation, which they did not realise they were applying when undertaking their complex VFX projects.

The principal aim of introducing SCL was to support them to carry out tasks independently, and in groups, and gain confidence to offer opinion, however a further aspiration was to help them understand the **context** in which they were learning, and they were introduced to academic theories and models including metacognition. The effect was incredibly positive with the students gaining an understanding of how self-awareness could enable them to reflect and analyse their own performance; equally they were interested in the academic theories themselves.

My impetus to support students to undertake self-reflection and critical analysis remains, however over the past few years there has been a noticeable decline in commitment and ability to embrace these in a meaningful way. The postgraduate students involved in this research study (P1 – P6) cited that they were *‘too busy to reflect on anything but their next assignment (P3), ‘not sure what the benefits of critical reflection are (P4)’* and *‘have to balance my job with uni work, so I do what I need to do (P2).’* The effect is critical reflection and analysis becoming ‘a bolt-on’ activity often at the end of a module (Adenekan, 2010) and according to Alan Maddocks, who developed PDP at the University of Loughborough, leads to very little student engagement in this area of learning as it is not seen as a priority. The comment from student (P2) about work commitments is apposite; eight out of ten students (77 %) undertake some form of job to fund their costs of living (Lovett, 2015) including accommodation, food and bills. This expansion of working whilst studying leaves some students with little time to carry out extra academic study or focus on their soft skills development, instead choosing to concentrate on immediate academic needs which is handing-in assignments on time.

Research Project

The emerging role of digital continues to impact on educational institutions (Knight, 2018) who need to integrate their approaches across the whole organisation and not treat digital as a ‘separate accessory to their core work.’ In the course of this research project the University of Salford introduced Microsoft’s Office 365, which is available free to all staff and students, including the digital notebook OneNote which can be accessed via personally-owned computers and mobile devices. The transition from an educational institution ‘being in control of the desktop computer’ through its virtual learning environment to more remote working is inevitable (Knight, 2018). Every student can now publish work instantly and independently with the means to populate their own digital space.

OneNote, marketed by Microsoft as the ‘perfect app for capturing everything,’ is a natural progression to note taking; (2019) it offers students the ability to collect and organise a wide range of content on their own digital devices which they can access anytime (Hole, 2017). In contrast to a paper notebook which is limited to text, drawings and glued-in pictures, OneNote allows students to clip content from websites, add audio notes and links to videos. Students at the University of Salford are being encouraged to use the app, to practically support their learning, as well as build their digital capability and encourage them to adopt pro-active learning. A recent survey of more than 37,000 students found only 41% of students feel prepared for the digital workplace (JISC, 2019) and yet more than 500,000 highly skilled workers will be needed to fill digital roles by 2022. Last year JISC teamed up with Microsoft to launch the *Digital capabilities for a cloud-first, mobile-first education (2018)* tool, based around Office 365, to arm students with the necessary technological skills and to accelerate their learning. Microsoft FE and HE Manager Clare Riley (2018) suggests the app can accommodate students’ individual learning styles and ‘turbo charge’ creative, collaborative and competitive abilities.

The opportunity to bid to HECSU for this research study coincided with the University of Salford adopting Microsoft Office 365. The overriding aim of this study was to discover if the online tool, OneNote, could be of **value** to students to collect and record information as they progressed through their degree programme with digital assets and material being available to them 'at the point of need.' The online tool being used as a form of 'digital time capsule' allowing students to open the capsule at any time to deposit material as well as retrieve information when needed.

A further aim was to explore how a digital time capsule could promote active learning by encouraging students to 'think hard' for themselves, rather than being passive recipients of knowledge (CambridgeAssessment, 2019) with the digital notebook giving students more authority over their own learning. Active learning focuses on *how* students learn, not just on *what* they learn, and this philosophy underpins all courses at digital institute Hyper Island - The Digital Harvard (psfk, 2011) who have been specialising in real-world industry teaching through digital technology for three decades. Hyper Island focuses on non-traditional methods of education and encourages participants to understand the **why** as much as the **how** and the **what**; preparing them to anticipate the 'changes of tomorrow' (2019). By embracing change, they suggest, learners can anticipate industry needs 'in a world where innovation drives disruption.' They encourage lifelong learning which should 'not be confined to a classroom or even a course' and introduce participants to new ways of thinking so they gain the ability to 'question, explore different approaches to solving challenges, and to reflect deeply.' Digital technology, thereby, can offer the potential for students to build on their reflective practice; a habit that students 'should be' developing (Hole, 2015) as part of their wider digital capabilities. Reflection though, as discussed above, is often overlooked by students when time is short but, if digital tools can quickly capture thoughts and ideas across a range of media they can offer 'huge benefits for learning and professional development.'

Effective reflection relies on students being able to think deeply and critically about a particular learning experience or set of experiences with the aftermath of the experience being especially important; if this is missed it will simply be storytelling (OxbridgeEssays, 2019). The digital time capsule has the potential to assist students to capture feelings immediately through audio recordings uploaded to their personal digital notebook anywhere and at any time. Recording speech is easier and faster than typing and its immediacy of recording should allow for the student to remember the event and their perception of it.

The third aim of the research study was to explore the potential for the digital time capsule to enhance a students' portfolio upon graduation by evidencing personal and professional skills gained during the degree programme relevant to their chosen career to show to prospective employers.

To recap: the three research areas in this study include:

- a) the value of an online digital tool (a digital time capsule) to assist students to build personal, professional and academic skills;
- b) how the digital time capsule can promote active learning;
- c) the potential for the digital time capsule to enhance a students' portfolio upon graduation.

Methodology

This study focussed on postgraduate students (P1 to P9) undertaking an MA in Media Production at the University of Salford. The degree programme has six streams including Wildlife documentary production, TV drama production, TV documentary production, Children's TV production, Postproduction and Animation. Research focussed on this particular postgraduate programme because of the students' varied range of skillsets, experience and backgrounds.

Career choices within the creative industries can be confusing and include production, technical and craft roles. It is a difficult industry to navigate given the technological speed of change and lack of published job opportunities. Other degree programmes have more traditional routes into employment, however a great deal of employment gained in the creative industries is through speculative approaches. Graduates need to understand how to approach companies with a tailor-made CV, portfolio and showreel with evidence of understanding the role applied for and the company's aims. This has a bearing on the range of relevant and appropriate personal and professional development skills they gain through their academic course.

Whilst the scale of this research study was relatively small, the findings are intended to be of use to other institutions. The main focus was to explore the efficacy of a digital online tool for students to use through their university career to build on skills relevant to 'their specific discipline.' The findings are of significance on a wider scale and relevant to staff, students and graduates in other institutions. The outcomes address the 2016 Higher Education White Paper: *Success as a knowledge economy*, that 'universities should be assessed according to their performance on graduate employment,' (Havergal & Grove, 2016); and JISC's 2018 reports *Digital capabilities for a cloud-first mobile-first education* and *Building digital capacity* which focus on what abilities digitally capable learners should have.

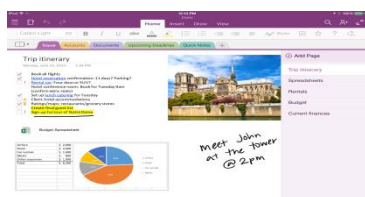
A range of qualitative data collection methods were used to answer the research questions with responses from participants designed to unearth opinions, thoughts and feelings (Tiley, 2009). Validity of the research was assured by adopting the triangulation method of data collection and included two online questionnaires, an individual semi-structured interview and a focus group allowing for information to be retrieved and analysed from different sources. The questionnaires were designed and produced through Bristol online surveys (JISC) and were presented to students on the MA Media Production course through their Blackboard site. The semi-structured interviews were conducted after the online questionnaires to gather perspective and responses on an individual basis and to build the relationship between the participant and study researcher. Open ended questions were used to gain deeper clarity of answers given in the questionnaires and to inform the research study questions. The focus group offered the opportunity for guided discussion and allowed the participants to share their views in a supportive environment. The group interaction element encouraged the participants to make connections to the concepts under discussion. The focus group was designed as the final method of data collection to encourage a range of ideas and thoughts from the participants. Ethics were strictly adhered to using the British Educational Research Association (BERA, 2018) as a guide with participants signing Participant Information Forms and being made aware of the confidential nature of the project through each aspect of data collection. Storage and use of personal data adhered to the General Data Protection Regulation (GDPR) and the participants' welfare was paramount through the design and execution of the study with them being offered the right to withdraw at any time.

The Digital Notebook

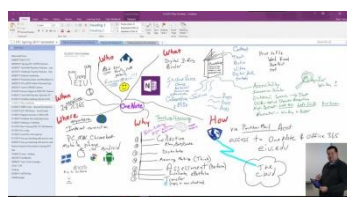
JISC joining forces with Microsoft in 2018, and two other institutions, to design a tool to improve staff and students' digital skills has influenced universities to adopt the Office 365 suite. It incorporates software familiar to students including Excel, Word and Powerpoint and an updated version of OneNote. There are a number of notetaking apps on the market, however, only two have the features and flexibility to strengthen notetaking needs: Evernote and OneNote (Gildred, 2018). Alternative apps including Bear or Apple Notes are limited to iOS and macOS. Simplenote and Google Keep are not specifically designed for note-taking. Criticisms of Ulysses and Quip are that although they are excellent apps for writers and teams, they are relatively overpriced (Guinness, 2017). OneNote has been around longer than Evernote, with its first release in 2003, but its rival has generated 200 million users, as of early 2018. Digital experts suggest the tide is turning with the newer version of OneNote offering more useful features for education and it is gaining some traction even from those rooted in the traditional pen and paper method of notetaking. Paper notes can be hard to search, fragile, and have no backup (Guinness, 2017). OneNote allows users to start with a blank canvas and click and write anywhere. Paper notebooks can become unwieldy if more than one is needed and are also prone to loss and damage. They are also a more expensive option than online notetaking. OneNote notebooks are stored in the cloud and automatically saved and synchronised and can be accessed on any web-enabled device. This allows for students to read and edit notes 'on the go.' A trusted note taking app also needs to be searchable, sortable, and taggable; OneNote uses a structure of notebooks, sections and notes, creating a tool that has the potential to work for each individual student. A further feature is its ability to offer audio recordings with any notes typed by the user automatically synced to a specific place on that audio track. Participants were *'...interested in the potential for audio notetaking...'* (P3) and *'...the benefits of immediate audio uploading along with ... being able to type notes to refer back to these as and when needed...'* (P5).

The participants in this study use double-entry journals after each teaching session, describing personal thoughts on their session on the left page of their journal and key issues from class discussions or readings on the right page. They then consider the link between their personal experiences and the session content (Sloan, 2019). This offers students a detailed compilation of personal data and a summary of course content in preparation for critical reflection essays. As note taking is a lifelong process, according to Guinness (2017), users are likely to choose an app that is developed and supported by a large company, such as Microsoft or Apple, to prevent them having to change to another app in the future. Participants were interested in *'...keeping the app in use beyond graduation to show to employers...'* (P2) and *'...because I don't want to lose the amount of useful information, I will collect which will be of great benefit after I graduate...'* (P6).

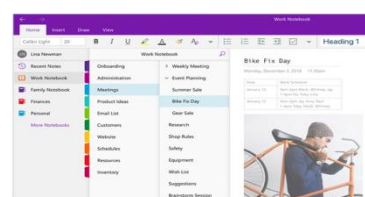
OneNote



Microsoft Docs, 2019



Microsoft Education, 2019



Microsoft Office, 2019

Findings

The focus of the research was to elicit responses from the participants involved on the **value** of using a digital notebook to enhance personal, professional and academic skills. 50 students on the MA Media Production programme at the University of Salford were invited to complete the Employability Skills Research Project Questionnaire 1 (ESRP1) via the university's Blackboard VLE in week 1 of the course starting.

Questions within ESRP1 were designed to gain an understanding of participants' backgrounds and the personal, professional and academic skills they wanted to enhance during their postgraduate degree. Nine students responded and completed the questionnaire. Following this, the researcher met with each participant to outline the research aims in detail (Appendix A). They were sent Employability Skills Research Progress Questionnaire (ESRP2) towards the end of their first semester. Information was collated and helped inform the questions for individual semi-structured interviews held at the beginning of semester 2. The focus group was undertaken four weeks after the interviews at the end of semester 2.

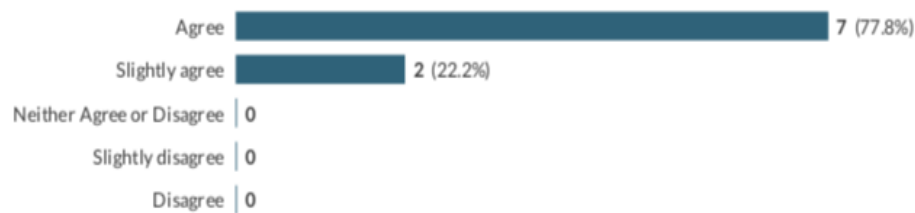
Participant information:

- Gender: 5 males; 4 females
- Age range: 4 aged 21 – 24; 4 aged 25 – 29; 1 aged over-40
- Ethnicity 8 White British; 1 Mixed Other
- Education 9 undertaken an undergraduate degree
- MA Stream 3 Postproduction; 4 Wildlife Documentary; 2 Drama Production
- Work 5 wanted fulltime work; 1 freelance; 1 part-time; 2 any

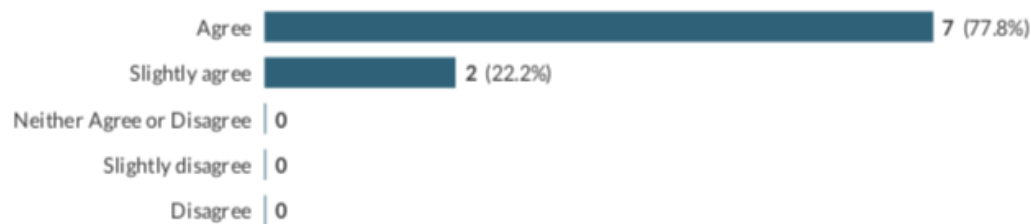
Participants	Area of media interest	Previous experience	Career interested in
P1	Postproduction	Live briefs	Editing and special effects
P2	Filming and scripting	Short course in photography	Wildlife filmmaker
P3	Directing, producing, presenting	Photography – not media	Wildlife presenter
P4	TV Broadcast	Yes	Wildlife camera/director
P5	Film	No	TV Producer
P6	Production	Internships	Wildlife filmmaker (freelance)
P7	Online, TV, Film	Runner experiences	TV Producer
P8	Postproduction	Some – not a lot	Video editor
P9	Postproduction education	Yes	Postproduction colourist

Employability Skills Research Project (ESRP 1) Questionnaire responses:

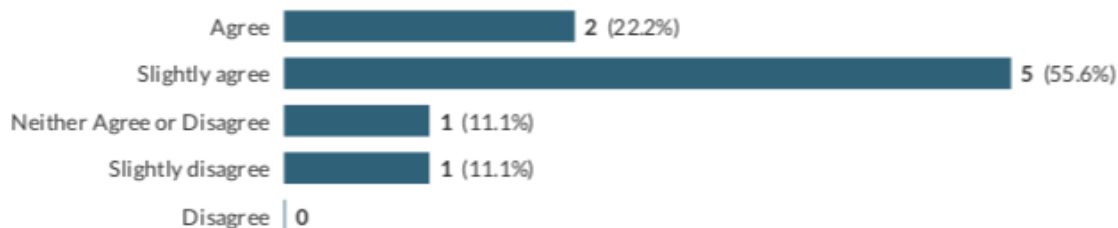
1. I understand what my skills and strengths are:



2. I am clear about what my career goals are:



3. I know what jobs would suit my skills and strengths:



All nine participants *'agreed that they understood their skills and strengths'* and were *'clear about their career goals'*; however, they were *'less certain about knowing what jobs would suit their skills and strengths.'* This concurs with Creative & Cultural Skills who point to the rising trend of self-employment made up of a *'myriad of freelancers and portfolio workers (44%) who rely on their networks to gain work,'* (Tambling, 2015). Many of these jobs are not openly advertised, with employers relying on speculative approaches, with applicants needing to research deeply into a company and tailoring their application directly to it (University of Bristol, 2017).

The UK screen industries itself is vast, comprising eight sectors including: animation, film, games, children's TV & high-end TV drama, visual effects and immersive technology (ScreenSkills, 2019). Production companies offering work in these sectors are spread across the UK, generally in creative hubs close to broadcasters and major centres of production including Glasgow, Belfast, Cardiff, London, Bristol and Manchester. Freelancers, apart from offering innovative and entrepreneurial skills, and juggling a string of different contracts are also expected to travel across the UK to find this work (Easton & Cauldwell-French, 2017).

4. What **additional** skills would you benefit from whilst undertaking your degree programme?

Personal Skills:

a) Assertiveness



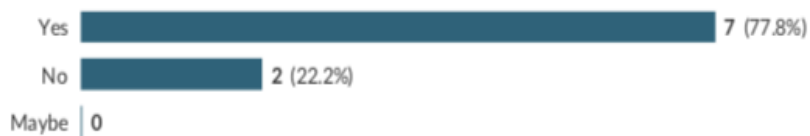
b) Goal-setting & time management



c) Teamwork & collaborative working

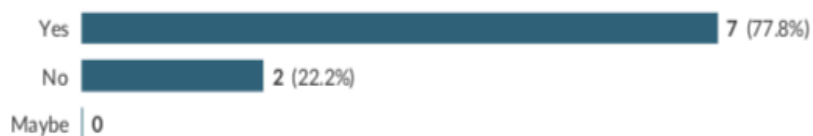


d) Emotional resilience & self-awareness

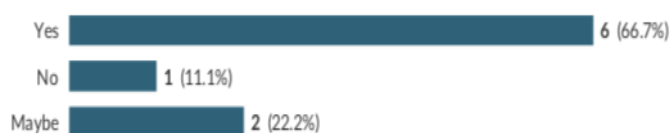


Professional Skills:

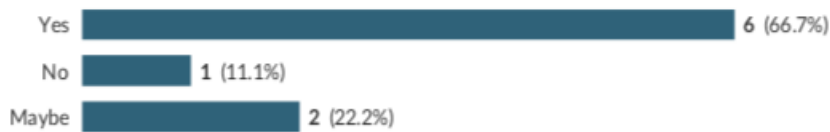
e) Being self-employed/freelance



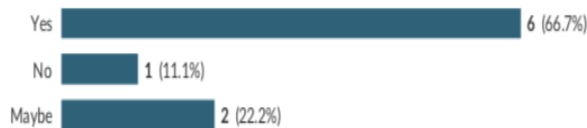
f) Interview skills



g) CV & portfolio building

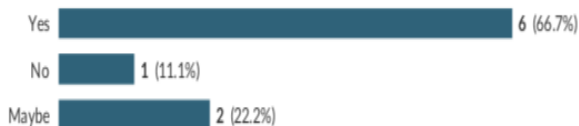


h) Understanding personality preferences



Academic Skills:

i) Critical reflection



Personal Skills:

Seven of the participants were interested in developing assertiveness skills, building on their goal setting & time management and their teamwork & collaborative working skills and additional assistance in learning more about emotional resilience & self-awareness; one participant did not want any additional help with these skills; a further participant was unsure.

Professional Skills:

Seven participants were interested in self-employment and freelance skills; two were not interested. Six were interested in interview skills, CV and portfolio building and understanding personality preferences i.e. the Myers Briggs Type Indicator; one participant was not interested in assistance with any of the professional skills and one was unsure.

Academic Skills:

Six were interested in gaining skills in critical reflection; one was not interested, and one was unsure.

Three-quarters of the participants indicated they were keen to access skills development across all three areas outlined above. This information was disseminated to assist in formulating questions for the individual semi-structured interviews. Participants were asked to consider the following areas whilst completing the Employability Skills Research Project Progress Questionnaire (ESRP2):

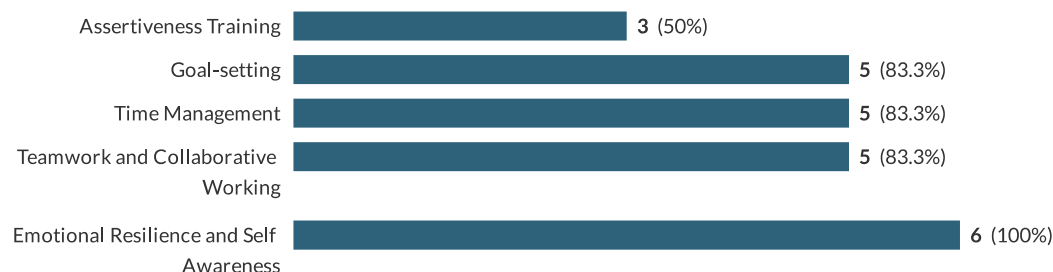
- Challenges and weaknesses faced within this period of study;
- Career/employability/soft skills information which would enhance learning;

- How a digital notebook might be of value as a ‘time capsule.’
- How you would like to access information.

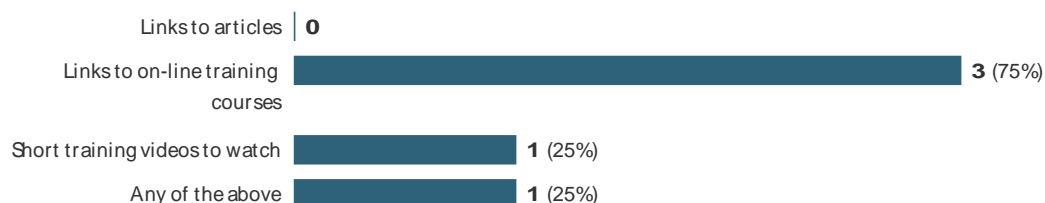
Employability Skills Research Project Progress Questionnaire 2 (ESRP2)

*Six participants continued with the study – three did not return ESRP2.

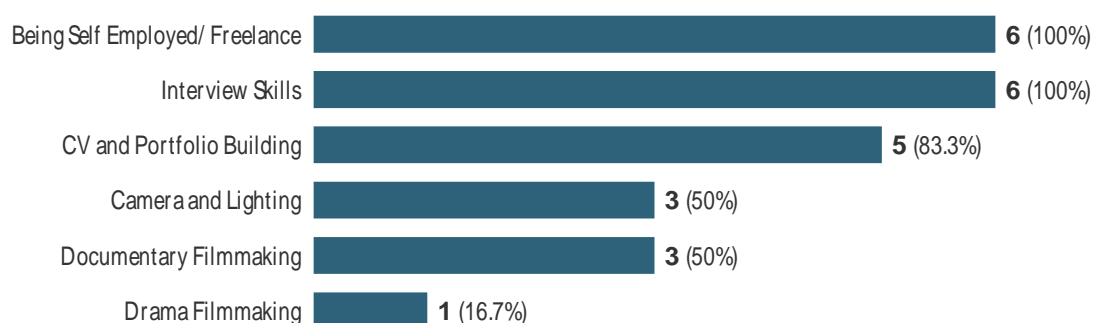
1. What PERSONAL development would you have benefitted from since starting your MA?



2. What is your preference to access PERSONAL development material online?



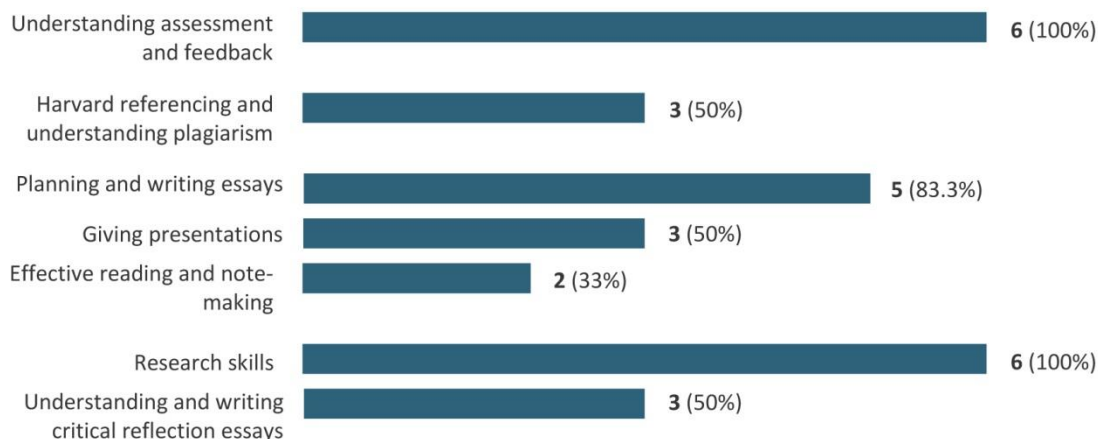
3. Which PROFESSIONAL development would you have benefitted from since starting your MA?



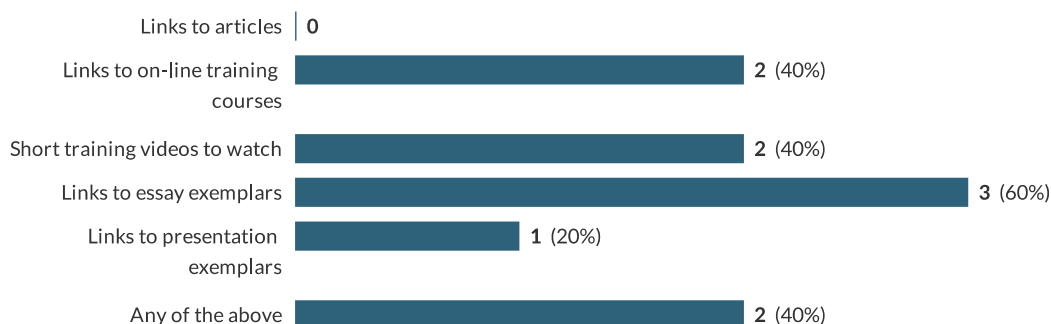
4. What is your preference to access PROFESSIONAL development material online?



5. Which ACADEMIC material would you have benefitted from since starting your MA?



6. What is your preference to access ACADEMIC material online?



7. Thinking about Semester 2 and 3 what skills training (personal, professional or academic) would you benefit from to support your study as you progress through your degree?

Personal

- *Time management.*

Professional

- *Industry knowledge.*
- *How to market yourself as a freelancer.*
- *Collaborative working.*
- *How to make an effective showreel.*
- *Employability skills directly related to the industry I am interested in.*
- *Networking skills.*
- *Starting your own business.*

Academic

- *Making our university work directly relevant to what we want to do after we graduate.*
- *Learning how to theorize.*

Responses from the participants in ESRP2 (questions 1 - 6) included details of extra material they would have benefitted from in semester 1 across personal, professional and academic areas and their preference to how they would access the material online. The majority of participants preferred online training courses to support personal and professional skills development; watching videos and tutorials was less favourable and none of the participants saw the value in links to articles. Within academic learning all the participants wanted assistance with writing critical reflection essays and research skills and exemplars online as the preferred method of learning. A further question asked on skills needs in semester 2 and 3, offered a range of responses with 'professional skills' being the most sought after.

Individual Semi-structured interviews

Six semi-structured interviews were conducted a month after completion of ESRP2 and prior to the start of semester 2. The choice of method was to allow the participants the freedom to express their views in their own terms (Cohen, 2006). Participants strayed from the topics at times, however this led to interesting observations about how a digital tool could be of benefit to their learning and skills development with a response that the *'...very notion of knowing fellow students would be benefitting from such a useful resource was a motivator to embrace digital learning...'* (P6).

Participants were asked three main questions, firstly, how they felt about getting a job after graduation: *"... I am not as confident on my skills to gain a job as I was at the beginning of my degree as I am having to concentrate on my academic work leaving me no time to develop other skills..."* (P3) *"... I am feeling even more under pressure to get a job now in semester 2 but no idea where to look..."* (P6) *"... I am overwhelmed with the amount of work I have and feeling anxious about what I am learning related to getting a job..."* (P1) *"... I have a complete fear about not getting work after uni, given the amount of money I have spent..."* (P5).

Secondly, they were asked about the **value** of a digital notebook to help with their studies: *"...I don't really know anybody – our streams feel like silos and it would be really good to use OneNote as a shared resource with biogs and details other students and what they do. ..."* (P1) *"... I feel like I am always behind as I am not engaged in the language of media, my background is scientific, the shared notebook could help me understand terms when I need them..."* (P2) *"...exemplars of essays and link to tutorials which spell out CLEARLY what reflection is..."* (P3) *"...OneNote could link to careers tutorials, relevant to us, as we aren't around when careers workshops are going on, we are in lessons..."* (P5). *"...the notebook could be used to signpost us to information we need, I spend ages looking for material..."* (P4).

Thirdly, participants were asked specifically how they would use the digital notebook if they had one. This question was designed to gain specific examples from each participant to assist future research: (P3) thought it would be *"...great to have links to what job opportunities are available, as I don't know where to start but don't want to leave it too late..."* Others wanted relevant materials including *"... Case studies and up-to-date-reports on the creative industries to help understand the industry..."* (P5). Relevant academic materials so they are *"...not bombarded with information on Blackboard which is not helpful or useful..."* (P2) and *"...teaching sessions filmed and uploaded directly to OneNote..."* (P1). Really clear sections *"...as I am not great at organisation and clearly labelled sections would help me find material when I need it..."* (P4).

Focus Group

Six participants joined the focus group with details outlined by the researcher of what was expected of them. Information disseminated from the individual interviews informed the focus group topics. Key responses from participants included support for a type of 'digital time capsule' where information could be uploaded and retrieved at any time and discrete areas set up within the notebook for ease of access and navigation.

Participant responses on the digital time capsule included:

'OneNote being a bit 'clunky' and not as easy to use as I had hoped' and suggesting 'training would be useful on OneNote in the first week of uni in freshers week then regular top-ups throughout the degree' and in relation to using the digital notebook, 'don't tell us what and why OneNote is useful but how it works, so I can hit the ground running'. The focus group felt the digital tool could help with time management as they could 'access it anywhere and at any time and they weren't fixed to Blackboard which isn't that user friendly.' They felt it could encourage sharing with it leading to 'OneNote sessions held lunchtime or evening, sharing what we have learned.' It could also enhance collaborative working by 'accessing biogs of other students on the degree programme, so we know what they do and what skills they have. This would help the collaborative module where we have to work with people we don't know.'

Responses on skills development included:

Participants not being sure that OneNote could help with critical reflection as they were *'always too busy to find time to reflect on events'* and they weren't sure that audio notetaking would work as *'it feels like a bit of a faff to record it then upload it'* but the group agreed that an area on OneNote with a range of essay exemplars would be useful *'as I could access this information when I needed it.'* The group discussed how they acquired material and information and felt they spent *'too much time searching for material that could easily be given to us via links saving us time researching when this can be uploaded.'* They were positive about how online quizzes *could 'encourage me to test my skills on a regular basis to see how I was developing.'*

Responses on practical elements of a digital notebook:

The group agreed the notebook would be *'good to help keep up with industry trends and will encourage me to research these further,'* they also felt when job hunting that *'having permanent access to relevant CV and portfolios would cut down on the time spent looking for the right sites.'* This, they agreed, could lead to the development of a skills repository with examples of alumni CV's and portfolios *'so we can see how they should be laid out related to my particular job and help me understand what employers want to see in my portfolio and showreel.'*

Responses on the digital notebook assisting with active learning:

The group felt OneNote could be populated with material to *'help us understand why we learn what we do and give us more context particularly related to academic theory.'* They could see the benefit of lecture notes and sessions being uploaded by the tutors straight after lessons *'so we have these to look back on helping us to really focus on what we need at the time.'* The group were split on the benefits of relying wholly on digital notetaking with half keen to continue using traditional methods of notetaking as well as using OneNote as *'I learn better when taking and reading my own notes'* and *'I like doodling and colour coding my notes and don't think OneNote will be the same.'*

The Digital Time Capsule

Dissemination of responses from all data collection methods suggested participants could see the value of a time capsule, with three discrete areas within the OneNote notebook containing:

- a **personal memory bank** to record personal challenges and successes for later recollection;
- a **careers and employability repository** with up-to-date material (articles, journals, reports) offering careers guidance and advice to develop professional skills;
- an **academic library** with exemplars of assignments, recordings from alumni and academic theories and models to support and expand knowledge.

A PERSONAL MEMORY BANK (PMB) for students to deposit personal information, challenges and successes (via audio recordings, written notes, images, doodles and drawings) for later recollection and undertake short exercises at periods throughout their university study to gain a deeper understanding of how to reflect on events and experiences to support assessment and learning.

Example – an online exercise uploaded onto the personal memory bank to assist reflective practice:

Once you've successfully emptied the contents of your memory, you can start reflecting. Here are some reflection questions to help you think deeper about the impact and lasting effects of your experience.

- *What have you learned about yourself as a result of the experience?*
- *Have you developed because of it? How?*
- *Did it have any positive or negative bearing on your life?*
- *Looking back, what would you have done differently?*
- *Why do you think you made the particular choices that you did? Do you think these were the right choices?*
- *What are your thoughts on the experience in general? Was it a useful learning experience? What specific skills or perspectives did you acquire as a result?*

These signpost questions should help kick-start the reflective process. Remember, asking yourself lots of questions is key to ensuring that you think deeply and critically about your experiences – a skill that is at the heart of writing a great reflective essay (Oxbridge Essays, 2018).

*Good reflective writing draws on a range of sources to demonstrate understanding of your experience from a **theoretical** perspective. It shows a level of analysis if you can corroborate your work against other perspectives that you find in the course of your research. Sources can include newspapers, surveys, books and journal articles. Analysing a wide range of sources shows that you have read widely on the subject area and that you have considered the broader implications of the literature.*

The Personal Memory Bank can be shared or remain private depending on the material the student wishes to add into it as they progress through their course. The aim of the PMB section is primarily for it to be an ongoing resource for students to capture thoughts and experiences as they occur encouraging them to see reflection as lifelong learning, rather than an afterthought. By having access to the PMB from the beginning of a degree programme the student does not have to wait for seminars or lectures on critical reflection or analysis and can be pro-active in the process. Finally, the process of continued reflection could highlight particular challenges a student is facing allowing them seek help and advice at the point of need.

A CAREERS AND EMPLOYABILITY REPOSITORY (CER) where students can deposit and retrieve information relevant to their career choices as and when they need it. A professional development area offering individual skills tests and YouTube courses and quizzes, online tutorials, simulations and open lectures. A shared employability resource area linked to contemporary reports, articles and journals with information on careers and exemplars of CV's, portfolios and showreels.

The digital time capsule could link to students' existing social media accounts including Linked In, Vimeo, Instagram and Twitter to strengthen personal branding. Using and engaging with OneNote strategically would support a students' ability to embrace digital learning in a supportive environment and offer the ability to share material with other students (and tutors). This would be helpful for group work and collaborative projects, thereby actively enhancing their 'digital capabilities' through digital learning resources.

Example: access to current industry reports and events which are relevant to career and job choice, uploaded into their CER for them to access at any point.



BFI, (2017)



BBC, (2019)



Ones to Watch (2019)

Example: links to relevant online tutorials and information on CV, interview and portfolio development relevant to the students' individual career choices.



Eventbrite, (2019)



Learning English Essentials (2019)



BECTU, (2019)

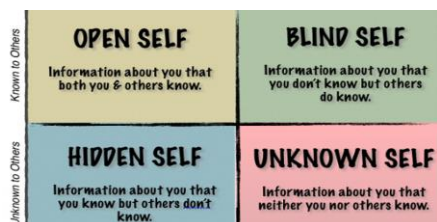
The CER could be used to flag up students personal and professional skills gaps linked to workshop provision offered by Careers & Employability services at the University of Salford and technical workshops (postproduction, camera skills, studio production, audio skills etc) delivered at the MediaCity campus.

A further benefit, which all participants in the study agreed would be beneficial, is the opportunity to gain a comprehensive skills portfolio, prior to graduation, which evidences online activity, workshop attendance and development which can be shown to prospective employers.

AN ACADEMIC LIBRARY (AL) with shared lecture notes (written, audio or filmed) and relevant material (handouts/weblinks) uploaded at key points in the degree programme for maximum assistance to students. A resource for students to share their own notes to other students in their degree programme to offer alternative views on session content. The AL could introduce students to academic literature and engage them further in pedagogy helping them to understand such concepts and theories as metacognition, Johari's Window and reflective practice.



Spencer, (2018)



Successful Culture, (2019)



Open University, (2019)

Young people are the most intensive users of moving image; every nine days as much moving image is uploaded to YouTube as the BBC has broadcast in its entire history (BFI, 2019). They have a clear vision of where screen-based communication, knowledge and learning will fit into their lives, with self-distribution providing a fertile ground for the future of education. Within the creative industries rapid technological changes though are contributing to serious skills challenges. A recent analysis of HE by BAFTA found a mismatch between skills needed by employers and the skills provided within education. The time capsule is designed to support students to develop a digital skillset which according to JISC (2019) is now 'more important than ever' and using a digital notebook can support students to become digitally literate. In-depth training at the beginning of semesters on digital technology should be the first step for all students allowing them to reflect critically on their own knowledge and practice and support them to work towards gaining a range of digital capabilities outlined in JISC's model of digital literacy (*Table 3*).

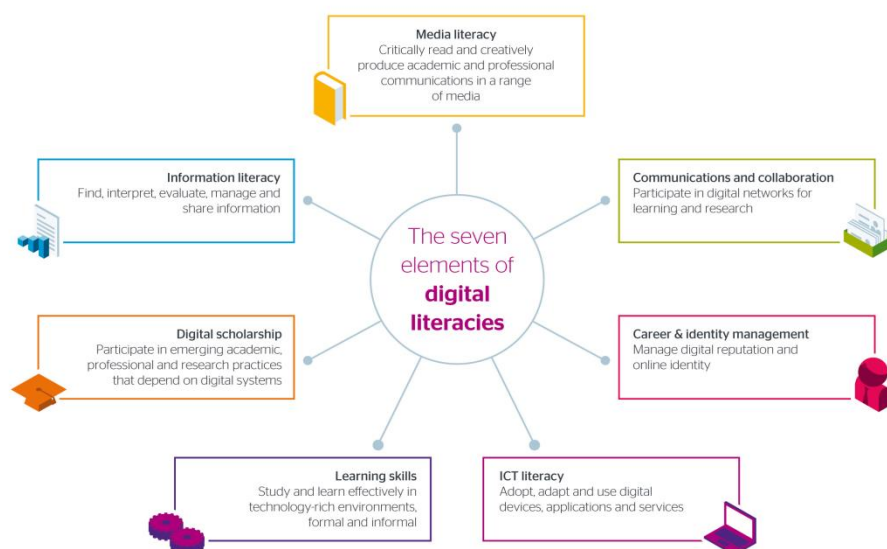


Table 3. JISC model of digital literacy (2015)

The University of Worcester undertook an investigation in 2018 using Microsoft OneNote within dance modules to support development of student digital literacy. Students developed their own notebook based on course materials and peer-reviewed elements of their work within the OneNote environment. Both lecturers and students reported 'significant benefits to using the tool, especially around organisation, feedback and ease-of-use,' (Golz, 2018) and identified it as good practice for others considering using similar tools for assessment and learning.

Conclusion

Three research questions were posed within this study, the first included investigating the **value** of an online tool (a digital time capsule) to assist students to build personal, professional and academic skills. The participants were not asked to actively engage with OneNote in this study but to consider whether a digital notebook could be of benefit to them during their degree. The findings gained from the questionnaires, interviews and focus group demonstrated a deep interest in the development of the digital notebook. The participants offered intelligent and pro-active responses as to what the digital notebook should contain and how they would engage with it.

Their responses pointed to having three discrete areas offering information for their personal, professional and academic skills, making it easy to navigate and find relevant material as and when they need it. They were interested in the 'immediacy' of the online tool and how they could access it anywhere at any time. Partaking in this research study itself assisted the participants in filling in some gaps in knowledge of the creative industries which they did not know. Their initial desire to gain full time work outlined within the first questionnaire was re-evaluated as they continued through the study with the reality that jobs in the future are more likely to be freelance or short-term contracts.

Secondly, how the digital time capsule could promote active learning. Participants were interested in how OneNote could involve them more in actively being engaged in their own learning, rather than passively listening. They were interested in learning more about academic methods and theories including how learning should have meaningful context (CambridgeAssessment, 2019) and it would be helpful if they can 'see' the usefulness of what is being learned. They agreed that they would explore content within the Academic Library on their personal digital notebook if it would enhance their high-level skills and give them a deeper understanding of metacognition leading to lifelong learning.

Thirdly, the potential for the digital time capsule to enhance a students' career portfolio upon graduation. The participants could see the opportunity for them to showcase skills learned and developed through their degree programme with tangible evidence of independent and pro-active learning via online tutorials, quizzes etc leading to a skills badge or certificate to show potential employers. Non-personal information could be shared to form a repository for future students benefitting from pre-populated OneNote notebooks.

Recommendations

A detailed study into the actual application of OneNote should be undertaken with participants actively using the app over a period of time to allow for a detailed investigation on how it can practically benefit them and whether the outcomes from this study are feasible.

Research concentrated on postgraduate students undertaking a degree in media production at the University of Salford. It would be beneficial to explore whether the three discrete sites which emerged from participant responses (personal memory bank, employability and careers repository and an academic library) would be relevant to other disciplines.

Further research should consider the ongoing debate on the 'negative effects of digital devices in the classroom' (Gonzalez, 2018) with the argument that students who take notes by hand learn more than those who take notes on a laptop. However, prohibiting laptop use 'robs students of the opportunity to develop metacognitive awareness of their own levels of distraction and make the appropriate adjustments' (Holland, 2017).

Finally, it is important to recognise the value being placed on all students to become digitally capable learners in order to compete in competitive job markets. As digital capabilities are critical to success (JISC, 2018) students should be offered the opportunity to engage with technology i.e. OneNote within the first week of their university course. Digital technologies are developing fast and often disruptively, and students should be encouraged to experiment and decide which tools they need to prepare them for the digital workplace.

Acknowledgement

Thank you to Dr Fiona Christie, Career development, work and employability specialist, educator, and researcher at The Manchester Metropolitan University for her academic and personal support on this HECSU-supported research study. Also, to the University of Salford Arts and Media department for access to the MA Media Production students and finally the participants themselves who offered intelligent and thoughtful responses throughout this study.

Bibliography

- Battersby, J. (2015). *OneNote 2016 for Mac review: Intuitive and versatile, but still not up to par with Windows version*. Retrieved from: <https://www.macworld.com/article/2952510/onenote-2016-for-mac-review-intuitive-and-versatile-but-still-not-up-to-par-with-windows-version.html>. April 20th, 2019.
- BERA, (2019). *Ethical guidelines for educational research*. Retrieved from: https://www.bera.ac.uk/wp-content/uploads/2018/06/BERA-Ethical-Guidelines-for-Educational-Research_4thEdn_2018.pdf?noredirect=1. April 20th, 2019.
- BFI, (2019). *Future learning and skills*. British Film Institute. Retrieved from: https://www.bfi.org.uk/2022/future_learning_and_skills.html. April 20th, 2019.
- Bonwell, C. & Eison, J. (1991). *Active Learning: creating excitement in the classroom* AEHE-ERIC Higher Education Report No. 1. Washington, D.C.: Jossey-Bass.
- CambridgeAssessment, (2019). *Getting started with active learning*. Retrieved from: <https://www.cambridge-community.org.uk/professional-development/gswal/index.html>
- Chakraverty, J. (2018). *Why your company should prioritise soft skills*. Retrieved from: <https://www.forbes.com/sites/voicesfromeurope/2018/09/24/scaling-soft-skills-to-submit/#6fc7a3381466>. April 22nd, 2019.
- Cohen, D. (2006) *Qualitative research guidelines*. Retrieved from: <http://www.qualres.org/HomeSemi-3629.htm>. April 26th, 2019.
- Easton, E & Cauldwell-French, E. (2017). *Creative freelancers*. Retrieved from: <https://www.creativeindustriesfederation.com/sites/default/files/2017-07/Creative%20Freelancers%201.0.pdf>. April 21st, 2019.
- Film Research, (2018). *DCMS and BFI management agreement 2017-2022*. Retrieved from: <https://filmresearch.org/resources/dcms-bfi-management-agreement-2017-2022>. April 15th, 2019.
- Golz, P. (2018). *Using Microsoft OneNote as a portfolio tool for a higher education dance curriculum*. Retrieved from: https://www.researchgate.net/publication/328492452_Using_Microsoft_OneNote_as_a_portfolio_tool_for_a_Higher_Education_dance_curriculum. April 19th, 2019.
- Gildred, J. (2018). *Evernote vs OneNote: note-taking to the extreme*. Retrieved from: <https://www.cloudwards.net/evernote-vs-onenote/> April 21st, 2019.
- Guinness H. (2017). *8 Best note-taking apps: Evernote, OneNote & alternatives*. Retrieved from: <https://business.tutsplus.com/articles/best-note-taking-apps--cms-30054>. April 10th, 2019.

- Havergal, C. & Grove, J. (2016). *Higher education white paper: key points at a glance*. Retrieved from: <https://www.timeshighereducation.com/news/higher-education-white-paper-key-points-glance>. May 24th, 2017.
- Hetemaj, F. (2017). *Can soft skills be taught*. Avaintec. Retrieved from: <https://medium.com/avaintec-blogchain/can-soft-skills-be-taught-fb6f774e43ad>. April 10th, 2019.
- Hole, A. (2015). *Reflective practice goes digital*. Retrieved from: <http://blogs.sussex.ac.uk/tel/2015/09/01/reflective-practice-goes-digital/> April 10th, 2019.
- Hole, A. (2017). *5 Great reasons for students to use OneNote*. Retrieved from: <http://blogs.sussex.ac.uk/tel/2017/10/31/5-great-reasons-students-use-onenote/>. April 10th, 2019.
- Holland, B. (2017). *Note taking editorials – groundhog day all over again*. Retrieved from: <http://brholland.com/note-taking-editorials-groundhog-day-all-over-again/> April 29th, 2019.
- Hyper Island. (2017). *About Hyper Island*. Retrieved from: <https://hyperisland.com/about>. May 24th, 2017.
- JISC, (2018). *Learner profile*. <http://repository.jisc.ac.uk/7279/1/BDCP-LearnerProfile-110319.pdf>. April 30th 2019.
- JISC, (2018). *JISC and two education providers team up with Microsoft to boost digital skills*. <https://www.jisc.ac.uk/news/jisc-and-two-education-providers-team-up-with-microsoft-24-sep-2018>
- JISC, (2018). *Delivering digital change: strategy, practice and process*. Retrieved from: http://repository.jisc.ac.uk/6800/1/Jisc_Digcap_Senior_leaders.PDF. April 28th, 2019.
- Knight, S. (2018). *Delivering digital change*. Retrieved from: <https://www.jisc.ac.uk/news/delivering-digital-change-06-mar-2018>
- Lovett, S. (2015). *Rise in number of university students in paid work*. The Telegraph. Retrieved from: <https://www.telegraph.co.uk/education/educationnews/11794199/Rise-in-number-of-university-students-in-paid-work.html>. April 13th, 2019.
- Marchant, J. (2015). *Why you can't teach soft skills*. Retrieved from: <http://www.emotionalintelligenceatwork.com/resources/cant-teach-soft-skills/> April 12th, 2019.
- Microsoft, (2019). *Digital capabilities for a cloud-first, mobile-first education*. Retrieved from: https://onedrive.live.com/view.aspx?resid=1AE3C1C91A62E0B3!213&ithint=file%2cpptx&app=PowerPoint&authkey=!AI5AjBJxTueolrU&wt.mc_id=AID739091_QSG_275630. April 20th, 2019.
- Morangi, L. (2017). *Learning skills for a connected world*. China Daily.com.cn. Retrieved from: http://usa.chinadaily.com.cn/china/2017-05/20/content_29424101.htm. May 25th, 2017.

- Morris, D. (2017). *PDP planning. An educational critique*. Retrieved from: <http://edcritic.blogspot.co.uk/2007/02/personal-development-planning.html>. May 25th, 2017.
- Newbigin, J. (2014). *New skills for a new economy*. British Council. Retrieved from: <https://creativeconomy.britishcouncil.org/guide/new-skills-new-economy/> April 14th, 2019.
- OxbridgeEssays. (2019). *A complete guide to writing a reflective essay*. Retrieved from: <https://www.oxbridgeessays.com/blog/complete-guide-to-writing-a-reflective-essay/>. April 10th, 2019.
- Pappas, P. (2010). *The reflective student: a taxonomy of reflection (Part 2)*. Copy/Paste. Retrieved from: <https://peterpappas.com/2010/01/reflective-student-taxonomy-reflection-.html>. April 10th, 2019.
- Promethean, (2019). *Digital literacy in the classroom. How important is it?* Retrieved from: <https://resourced.prometheanworld.com/digital-literacy-classroom-important/> April 20th, 2019.
- PSFK, (2019). *The digital harvard: stats behind Hyper Island's success*. Retrieved from: <https://www.psfk.com/2011/04/the-digital-harvard-stats-behind-hyper-islands-success-video.html>. April 24th, 2019.
- Ratcheva, V. & Leopold, T. (2018). *5 things to know about the future of jobs*. Retrieved from: <https://www.weforum.org/agenda/2018/09/future-of-jobs-2018-things-to-know/>. April 10th, 2019.
- Screenskills, (2019). *Investing in skills driving the success of film, TV, VFX, animation and games*. Retrieved from: <https://www.screenskills.com>. April 23rd, 2019.
- Shabatu, J. (2018). *Using bloom's taxonomy to write effective learning objectives*. Teaching Innovation and Pedagogical Support. Retrieved from: <https://tips.uark.edu/using-blooms-taxonomy/>. April 13th, 2019.
- Skillsyouneed.com. (2017). *The benefits of emotional intelligence*. Retrieved from: <https://www.skillsyouneed.com/general/emotional-intelligence.html> Emotional Intelligence. May 25th, 2017.
- Sparkes, P. (2016) *Inclusive digital teaching practice*. University of Sussex. Retrieved from: <http://blogs.sussex.ac.uk/tel/2016/03/01/inclusive-digital-teaching-practice/>. April 13th, 2019.
- Sloan, D. (2019). *What are some strategies for reflection activities?* UMSL. Retrieved from: <http://www.umsl.edu/services/ctl/faculty/instructionalsupport/reflection-strat.html>. April 14th, 2019.
- Tambling, P. (2015). *9 trends in creative employment*. Creative & Cultural Skills. Retrieved from: <https://ccskills.org.uk/whats-new/blog/9-trends-in-creative-employment> April 22nd, 2019.
- Tiley, C. (2017). *Qualitative research: what is it and why should we use it?* Retrieved from: <https://www.onepoll.com/qualitative-research-what-is-it-and-why-should-you-use-it/> April 14th, 2019.

Tompkins, L. (2014). *Personal Development Planning*. Retrieved from:
http://www.salford.ac.uk/__data/assets/pdf_file/0011/756326/PersonalDevelopmentPlanning.pdf. April 12th, 2019.

Tysiac, K. (2018) *New skills essential for thriving amid digital disruption*.
<https://www.journalofaccountancy.com/news/2018/may/essential-new-skills-for-cpas-201818986.html>. April 10th, 2019.

APPENDIX A

What question(s) are you seeking to answer?

The project has one main consideration and a further supplementary question:

- Can an online tool (Time Capsule) enhance students' 'soft skills' (communication, teamwork, decision-making, emotional intelligence, resilience and critical reflection) to assist them to become industry-ready upon graduation?
- What are the implications of findings (conducted via a short pilot scheme) to the above question for fellow universities and current student and graduates?

Describe ambitions for the project and the benefits of answering your research question(s).

Ambition: The main ambition of this project is to develop an online, accessible digital tool for postgraduate students to use to collect and record information as they progress through their university journey to help them identify personal training and development needs which can be met through employability workshops and mentoring. The digital time capsule will contain: an area for students to record challenges and successes for later recollection; an area for them to undertake short bespoke skills exercises relevant to their personal academic journey and a further section with up-to-date material (articles, journals, reports) offering careers advice and guidance. The online tool is designed to add value to a students' portfolio evidencing personal and professional skills gained and workshops attended. The intention for the time capsule is not for it to be onerous but a rich resource assisting students to identify and develop valuable employability skills in their chosen career area. On a practical level it is designed to assist them with CV writing and interview techniques, Personal Development Planning (including goal setting and targets) and career portfolio building and design.

Potential benefits of the project: The benefit of the project is the development of a credible and accessible individual online tool to support students' Personal Development Planning (PDP) which can be beneficial for universities to give consistency and branding at institutional level in supporting employability skills across all degree programmes. The findings from this pilot study can assist employability and career guidance departments to support current and future students. The benefits for students and graduates of a successful outcome to this project is they gain an online tool to develop a detailed skills portfolio which evidences their workshop attendance and personal, professional and academic development including critical reflection which they can show prospective employers.