



## CASE STUDY

### **Inclusion and engagement by design: Creating a digital literacy course to inspire diverse learners in an Australian university enabling program**

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A growing demand for digital literacies provides opportunities for new courses which employ innovative pedagogy and value students' "funds of knowledge" (Gonzalez, Moll, & Amanti, 2005). This case study outlines the design and delivery of a digital literacy course that feeds into both Diploma and Enabling pathways programs at an Australian university. The course was designed using inclusive pedagogies, including key concepts from Universal Design for Learning (CAST, 2011) and critical pedagogy (Freire, 2004; Burke, 2012; Burke, Crozier, & Misiaszek, 2017). Student evaluations of the course convey enjoyment, resilience and positive attitude to challenging tasks, indicating that an inclusive approach, which draws on strong support from teaching staff, is an effective way to engage students from diverse backgrounds with both the foundations of university learning and more advanced discipline-specific concepts and skills. The data suggest that embedding technology and choice in curriculum is empowering for students. As students become familiar with complex ideas and language from diverse fields, they build confidence as digital content *producers* who can share their work in a professional context. The students develop professional projects, which can serve to inform career directions and development beyond course outcomes.

*Keywords:* Universal Design for Learning; enabling pedagogy; digital literacy; critical media literacy; enabling programs; Australia; transition pedagogy

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#### **Introduction**

In one recent projection, by 2018 approximately 60% of the Australian population needs to operate as "digital workers" who can "configure and use systems" and "digital makers" who "can build digital technology" (Foundation for Young Australians, 2015, p. 30). This growing need for digital literacy compels educators to employ inclusive pedagogy and new technologies to connect underrepresented student groups with university. Through a focus on digital literacy, we can better prepare diverse students for full participation in a knowledge society. Digital literacies are "the individual and social skills needed to effectively interpret, manage, share and create meaning in the growing range of digital technologies" (Dudeney, Hockly, & Pegrum, 2013, p. 2). These skills include design, composition, production, critical and ethical practice, and also embody other new literacies, such as information literacy and critical literacy. As an educator who came to enabling education with a background in media, I observed a gap in creative, digital courses that could engage students with the possibilities of university education,

while preparing them with adaptable skills for professional employment in the digital age. The students who take bridging pathways to university have often experienced interrupted educational journeys and negative prior experiences that affect their confidence as learners (Hodges et al., 2013). Yet, in the pathways to degree course *Digital Literacy: Screen, Web and New Media* offered through UniSA College, students are excited about their learning and create advanced projects including apps, games, websites, augmented reality (AR) and virtual reality (VR) content. The discussion below outlines the development and delivery of this digital literacy course, which commenced in 2015. According to student evaluation of the course, it has supported students to build confidence, knowledge, and skills, and deliver a host of digital products. Over three years of delivery, the course has gained outstanding student satisfaction rates, and has been a source of genuine pride for the students and academics involved. Learning experiences have accelerated student creativity and led to the development of innovative projects and co-construction of knowledge by academics and students.<sup>1</sup> Student comments are used throughout this paper to illustrate the impact of the course's design.

*Digital Literacy: Screen, Web and New Media* has been designed using inclusive strategies to engage students from underrepresented backgrounds with tertiary education. This approach is good teaching practice and particularly beneficial for students from equity groups as inclusive approaches use diversity as an asset; as Hockings (2010) notes:

Underpinning the concept of inclusive learning and teaching are values of equity and fairness. This means taking into account of and valuing students' differences within mainstream curriculum, pedagogy and assessment. This is also one of the key principles behind the concept of "Universal Design". (p. 3)

By valuing students' prior experience, and the "funds of knowledge" (Gonzalez, Moll, & Amanti, 2005) they bring to the university, inclusive approaches help connect new students to study; coursework becomes more relatable and meaningful, while the students also feel valued, leading to positive learning experiences. The course content is aimed at preparing students for the challenges of learning, employment and participation in the digital age, and has been acknowledged by the institution as an example of best practice. High student satisfaction, retention and the development of innovative projects led to the teaching team receiving a 2017 *UniSA Citation for Outstanding Contribution to Student Learning (Digital Learning)* "for leadership in digital learning through innovative course design which empowers students as digital citizens and producers".<sup>2</sup> This suggests that student projects have impact beyond the classroom, providing opportunities for students to present their projects and for the course providers to share insights from course design. In this case, the student and academic participants did this through developing an annual showcase, being interviewed for news stories, and via presentation of papers and workshops at national and international fora. The recognition of student work has led to national speaking invitations where the team has disseminated advice on curriculum development and engagement in similar programs.

The majority of the students undertaking courses at UniSA College are 18 to 25 years old and have accessed digital technology since childhood. However, it is important that educators do not assume that students are digitally literate. When I started lecturing in enabling programs in 2009, student demand for basic computing skills was high; yet this shifted over the next five years as millennial students reached adulthood and came to the institution. While some students still

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<sup>1</sup> To view examples of student work, please see <https://www.youtube.com/watch?v=FZ7gBmEQXRQ>

<sup>2</sup> Rebecca Godwin and Cameron McTernan were co-recipients of this citation and have been key contributors to the course's development.

benefit from introductory computing skills, many clearly desire the opportunity to expand their digital skills in a university context. As Prensky (2012) argues, it is timely to move beyond the concept of “digital natives” to one of “digital wisdom” wherein educators strive to encourage critical engagement through digital learning. This presents an opportunity for educators to employ digital technologies and inclusive, constructivist approaches to teach complex concepts through familiar tools. As Funk, Kellner, and Share (2016) argue “actively creating media as opposed to merely reading and discussing it, is better constructivist pedagogy...by engaging with media as producers, students not only learn essential digital literacies, but they also gain a sense of agency and empowerment to foster social justice” (p. 13). Through becoming informed and active digital producers, students are able to better participate as active global citizens. To better understand and participate in the contemporary digital environment, today’s students benefit from developing and extending key competencies such as creative and critical thinking, practical skills including framing and idea generation, and knowledge of theoretical approaches such as narratology and semiotics. With these factors in mind, the course was designed to provide engaging and inclusive curricula and to build student confidence and capability, culminating in the production of a digital media artefact according to industry and university criteria, which would demonstrate students’ developing digital competency.

Engaging course design can inspire students to bring their best to their studies and create complex content in tight timeframes. This paper will show how this has been achieved through inclusive design and setting high standards with teacher support, as advocated by Tinto (2012). In this case, the teaching team shares a commitment to student engagement and excellent learning outcomes. The team models supportive production practice, working together to achieve significant outcomes. Students are empowered to make projects that test the limits of their creativity and generate sophisticated works in line with their intended undergraduate studies and future careers. Examples include: a student interested in Occupational Therapy who designed a VR YouTube channel to allow virtual excursions for bedridden patients, an AR treasure hunt game created by a student interested in Information Technology, a student interested in Social Work who designed an app to support wellbeing, and a VR murder mystery recorded by a student who plans to become a playwright. This paper will outline how a design-based approach and collaborative teamwork are employed to provide an engaging, digitally-enriched curriculum which prepares students for university study, careers, and participation in an increasingly digital society.

### **Supporting diverse students: Widening participation through enabling programs at Australian universities**

Enabling programs offer space for innovation, building on a history of social justice approaches to education, such as transition pedagogy (Kift, Nelson, & Clarke, 2010) and inclusive approaches at undergraduate level (Hockings, 2010). Australian higher education policy is focused on widening university participation in order to provide greater access for underrepresented demographic groups and support the development of the nation as a knowledge economy. In 2008, the Review of Australian Higher Education identified targets, which continue under the current Federal Government, namely that by 2020 “40 per cent of 25- to 34-year-olds will have attained at least a bachelor-level qualification” and “20 per cent of undergraduate enrolments in higher education should be students from low socio-economic backgrounds” (Bradley, Noonan, Nugent, & Scales, 2008, p. xiv). In order to reach these targets, many Australian universities now offer enabling programs:

...bridging or foundational programs that provide opportunities to undertake higher education for those who lack the usual or traditional prerequisites for university entry

and which enable them, not just by providing access but by actively preparing them for success in their future undergraduate studies. (Murray & Klinger, 2010, p. 118)

Enabling programs are designed to provide supported transition, particularly for students from Government-defined equity groups that have traditionally been underrepresented in Australian universities, including students from low socio-economic status backgrounds (low-SES), students with a disability, and students from non-English speaking backgrounds (NESB). Enabling program content varies around Australia as tertiary institutions respond to local demographic ne Misiaszek within the Federal policy framework.

UniSA College opened in 2011 as a school within the University of South Australia, specifically designed to provide equity pathways and enabling programs. Over 1500 students now study at the College and all equity groups are well represented. For example, on average 16% of enrolments in undergraduate degrees at Australian universities are by students from low-SES backgrounds (Lomax-Smith, Watson, & Webster, 2011, p. 117); however, 25% of the Australian population is classified as low-SES. Students from this demographic group constitute half of the College student population (UniSA, 2013), demonstrating that this is an attractive pathway for this underrepresented group. Similarly, NESB students comprise around 4% of Australian undergraduate enrolments, whereas these students comprise a fifth of the College enrolments emphasising the appeal of this supported transition (Stokes, 2014). The majority of College students undertake a Commonwealth-supported Foundation Studies program, which provides access with reduced financial risk. The Foundation Studies program has minimal entrance requirements and students work to earn a grade point average over the year for competitive application to undergraduate degrees. Students who have completed secondary school with a mid-range Australian Tertiary Admission Rank (ATAR) may select Diploma programs in Arts, Health Sciences, Science and Technology, or Business. The Diplomas are two year programs paid via a deferred student loan (HECS-HELP), which offer a guaranteed pathway to the second year of a wide range of undergraduate degrees, provided the student passes all of the required Diploma courses. As student numbers have grown, the opportunity for electives has become available. The course discussed here is offered in the first half of each year and studied by around 130 students each time.

Enabling program students have specific learning needs in comparison to those who enter university directly from secondary school. The supported transition to university provided by an enabling program prepares students with academic literacies, institutional awareness and prerequisite knowledge for undergraduate degrees. The student cohort entering university via enabling programs display “extreme heterogeneity” (Hodges et al., 2013, p. 31), including a high proportion of students from equity groups and those who are first-in-family at university, with limited experience or knowledge of higher education. A number of students have also experienced interrupted or negative educational careers, which shapes their approach to learning: “these students tend to be characterised by a lack of confidence in their capacity to cope with demands of a formal educational environment along with a wide range of differing levels of study skills and a range of life skills” (Hodges et al., 2013, p. 32). Discussing a Western Australian enabling program, McNaught (2012) observed that this issue is particularly acute in mathematics courses, where “some students are reluctant to engage with mathematics, or phobic, or anxious” resulting in “reduced confidence...impact on self-esteem, inhibit[ed] functioning” (p. 3). Prior educational experiences may create issues of misrecognition, accelerating student fear of educational institutions (Burke, Bennett, Burgess, Gray, & Southgate, 2016), where “fear, shame and anxiety create feelings of lack of capability and not belonging for many students” (p. 7). Drawing on Fraser’s (2003) work, Burke et al. (2016) note that this “misrecognition is about

the institutional values and judgements that are imposed on the misrecognised person in ways that exclude her/him from parity of participation” (p. 17). As students reconnect with education through enabling programs, educators can play a role in shifting these perceptions, through engaging and motivating students by supporting development of student capabilities and creating “an inclusive pedagogical environment in which trust is established and belonging is fostered” (Burke et al., 2016, p. 7). These approaches can have a significant positive impact for students, as highlighted through research with university students who discussed “processes of recognition in which a teacher’s belief in their capability created a sense of capability” (Burke et al., 2016, p. 51). Therefore, it is important to use inclusive approaches, which make knowledge accessible, show belief in student capabilities, and encourage familiarity with the university. Enabling program alumni undertake a wide range of degrees, so enabling program curricula must support a diverse range of skill sets and provide transferable skills and knowledge. Through awareness of these issues and outcomes, enabling educators can design effective content, which addresses student needs and supports engagement and transition to university. Language, techniques and practices learnt in a supportive digital literacy course can assist students in building confidence as learners, and act to introduce theories and concepts to be explored in greater detail in specialist courses at undergraduate level.

### **New learning practices: Designing a digital literacy course to engage new students**

In order to engage and support students, the digital literacy course was designed using inclusive pedagogies. Course design particularly drew upon Universal Design for Learning (UDL), which “is a framework to improve and optimise teaching and learning for all people” (CAST, 2011). UDL was used as a fundamental design principle to ensure that course experiences are accessible and provide students with opportunities to utilise their strengths, as this approach focuses on inclusive design in three areas: “multiple means of representation”, “multiple means of action and expression”, and “multiple means of engagement” (CAST, 2011). Embedding these principles from the start ensures that course content caters for diverse student needs and interests, allowing high levels of student choice, which enables students to work to their preferences and strengths in learning and assessments. For example, students select between virtual lecturates and on-campus lectures to work through course material. Weekly activities and production guides are accessible through the course site at all times, including examples of previous student work aimed at inspiring new students. Students valued these approaches and this is reflected through student satisfaction in the top quartile of the university and positive student feedback.

The course was designed in an inclusive and constructivist manner, valuing student “funds of knowledge” (Gonzalez, Moll, & Amanti, 2005) to forge connections between students’ existing knowledge and academic concepts. For example, as part of the course the popular comedy *Mean Girls* is deconstructed to practice critical literacy. Students analyse the mise-en-scène to critically assess how the image is used to convey the story, and how narrative and semiotics are used to reinforce or challenge dominant ideologies. Student familiarity with the text made this an accessible and enjoyable way to explore more advanced filmic concepts. Student evaluations noted appreciation for “the relevance of the topics to today’s society which made the content relatable” (UniSA, 2015) and the way the course “introduced new concepts that I was able to apply in other day to day activities” (UniSA, 2015). Rather than discouraging the use of digital devices, students are actively encouraged to Bring Your Own Device (BYOD) to engage in interactive processes during lectures and tutorials. This means that students are familiar with the tools and can use their preferred system to access new programs, lowering the threshold of complexity when engaging with new activities: as one student stated “I enjoyed the fact that we had a lot of freedom to learn our way and to use our own devices that we were comfortable with” (UniSA, 2015). Course lectures are longer than standard elsewhere in the program; however,

they use blended approaches to engage students; this was seen as a positive by a number of students, with one observing “even though the lecture for this course was 2 hours long I actually found it to be the most enjoyable lecture of all. I really liked the interactivity” (UniSA, 2017).

Critical pedagogy underpins the teaching approach in this course, wherein students are supported in critiquing the texts around them encouraging “learning to read the word through a reading of the world” (Freire, 2004, p. 29), and further empowered through active contribution as critical digital content producers. The teaching team have a wide range of complementary expertise including film, multimedia, audio design, communication, music, education, and screen theory. However, the team found that teaching avid technology users in this context requires a paradigm shift because the teacher and student are often learning about emerging technologies together. The rapid nature of technological developments create some challenges as constant learning is required for all course participants, including academics. While it is time-consuming to stay abreast of these technological developments, this presents opportunities to model life-long learning, and the new material is highly engaging for students. In 2017, students undertook projects using 360 degree cameras, Unity 3D Engine, Adobe XD and other cutting-edge multimedia tools, which required students and educators to learn in partnership.

In contrast to many of the students’ previous educational experiences, digital literacy staff undertake a dialogic approach, which engages learners with the rewards of tackling challenging material in a supportive environment. When surveyed on what they found useful in the course, one student noted “grasping new theories and understanding them. The tutors and lecturer made learning these new concepts enjoyable since they were interested in the content” (UniSA, 2015); another student noted the benefits of staff using a dialogic approach, observing “[She] also made the lectures interesting and always talked in a way that wasn’t like a teacher talking to students, she talked more as if she was a friend relaying information they had learnt which I found really good and a better way of going about lectures” (UniSA, 2015).

The academic staff teaching this course work to build trust and rapport with students in order to assist their development as confident adult learners: students appreciated this approach, as one noted “they were always there for every student when they needed help. Every lesson was very helpful and fun” (UniSA, 2015). Attention to supporting the individual learner is a critical value of the teaching team; as Jones, Olds and Liscandro (2016, p. 19) argue, “engaging and understanding the learner as an active partner in the learning experience”, including supporting students, finding connections, and the development of a learning community are good practice in university course design and key elements of enabling pedagogy. To extend student confidence in their ability to succeed as learners, one week of the course is devoted to neuroplasticity, which provides strategies for continued neural improvement and encourages students to adopt a growth mindset (Dweck, 2006). This topic aims to reframe student understandings of intelligence as an ongoing ability developed through a commitment to learning, while also providing practical lifelong learning strategies. This approach was strategic, designed to counter potential misrecognition (Burke et al., 2016) through providing students with confidence in their growing capabilities and understanding that intelligence is a developmental process rather than a fixed status, as they may have been led to believe in the past. These examples illustrate the ways that informed course design, which focuses on inclusive and innovative approaches, results in an engaging and accessible course.

### **Building knowledge and skills through scaffolded, industry-relevant content**

Many transition courses connect the student to the university, whereas *Digital Literacy: Screen, Web and New Media* aims to develop the students as industry professionals in the context of

preparing for their graduate careers. Through providing opportunities for students to develop a professional project, the course supports alternate pathways at the end of the program for those who continue on to employment. As disparity of employment outcomes is a significant issue for students from equity groups (Andrewartha & Harvey, 2017), it would be useful for future research to explore how students can use professional opportunities at an enabling level to access employment and connect with industry. For example, a 2017 student created his work so that it could be used online to provide information for a community health group and this wider audience framed his approach throughout the project, arguably creating a more meaningful experience than work which was just created for internal assessment. By undertaking personalised projects, students learn about institutional practices with a broader focus on their goals at the end of their degree. Weekly topics are scaffolded to support the development of the students as independent adult learners with awareness of creative industries' practices. For example, the first week focuses on connecting the student to a modern online institution, whereas later weeks encourage student familiarity with independent learning tools and strategies to continue their development as digital content producers.

Focusing on design and creativity provides students with specific strategies to inform their own work in a broad range of media. Students explore design approaches and formulas including the golden rule, negative space, rule of thirds, balance and composition, and are encouraged to apply these in their own work. Web basics and information literacy topics include practical sessions in the construction of websites using HTML and CSS, which assist students in understanding search formulae, coding, and the algorithms behind search engines. Emphasising industry standard legal requirements, such as requiring talent releases and adherence to copyright law, means that students produce original work, which can later be used in a professional capacity as part of their portfolio. The exploration of new media approaches, such as crowdsourcing and Creative Commons licensing, also provides relevant resources for students to utilise in future projects, which highlights the broader applicability of course content. A focus on critical analysis and ethics means that students are able to assess the appropriateness of their peers' work through peer review, which provides experience in applying assessment criteria to a text and increases awareness of the importance of ethical content production.

Importantly, this scaffolded approach is suitable for students from a range of backgrounds, providing familiarity with introductory university concepts and language, while extending those with more advanced abilities. Hodges et al. (2013) note that this is a particular challenge for those teaching in open access enabling programs who must be flexible enough "to be able to engage and challenge the more advanced students while at the same time reiterating content and building confidence to engage the less advanced students" (p. 32). When students were asked to reflect on the most challenging aspect of the course in final evaluations, their responses indicate a wide range of capabilities and needs. For instance, some students were challenged by academic literacies and university tasks. As one noted, "The challenging thing was understanding all the new concepts. But applying these concepts in work and assessments made it easy to understand" (UniSA, 2015). Whereas others indicated that challenges were present in more advanced activities. For one this was coding: "I found this a little tricky but the programming used and being able to seek assistance from [the lecturer] and other students made this still challenging, but a positive experience when learning this new skill" (UniSA, 2015). Another noted the positive challenges presented by the final project: "my project has been quite an ambitious endeavour and so keeping that under control has been challenging" (UniSA, 2015). Many of the evaluative responses from students convey resilience and a positive attitude to challenging tasks, which suggests that a scaffolded and inclusive approach, which draws on strong support from a learning community of staff and peers, is an effective way to engage new students with both the

foundations of university learning and more advanced concepts.

### **Innovating through inclusive assessment design**

In my experience, it is rare to design course assessments that students describe as “fun” and a highlight of the course; yet, this can be encouraged through careful design of inclusive assessments, which offer personal choice and connection to student interests. Digital literacy provides opportunities to connect through a shared language and assists students to develop meaningful content for this environment, while also demonstrating their attainment of threshold concepts. Utilising UDL principles (CAST, 2011) ensures assessment activities are accessible and provides opportunities for students to tailor learning through individual choice. This element of choice encourages students to draw on their individual strengths and preferred medium, which inspires passion and leads to deep learning outcomes (Biggs & Tang, 2007). Student feedback indicates the learning outcomes, as demonstrated by a student who expressed appreciation for the “fun assessments that challenged my mind to apply new concepts I have learnt” (UniSA, 2015) and another who clearly saw the course’s relevance: “the course offers many lifelong skills that are not only important to learn but also for employment...I believe the course should be mandatory at University and possible high school levels as well” (UniSA, 2017). It is a significant pedagogical outcome of the course that enabling students find the assessments engaging and that this deep engagement, in turn, assists them to persevere through the challenges of mastering complex tasks. The assessments are outlined in detail below to illustrate the scaffolding approach, how UDL has been embedded, and how constructive alignment and careful design can lead to outstanding student outcomes.

In *Digital Literacy: Screen, Web and New Media* fundamental concepts are tested in the first assessment using a quiz and image analysis. The quiz allows students to demonstrate their knowledge of concepts covered in the first section of the course, including design, HTML and web, semiotics, narrative and mise-en-scène. Students are able to select their own image from stills from a range of popular films, including *The Lego Movie*, *La Land*, *Inside Out*, *Suicide Squad*, *Zootopia* and *Mean Girls*. Through deconstructing the mise-en-scène of their chosen image, students demonstrate knowledge of industry terminology and theoretical concepts including composition, framing, costume, direction and lighting. Students then provide an individual analysis of narrative and meaning as indicated by these elements. The ability to select their own image from a range of recent texts encourages student interest, while also emphasising the relevance of theoretical concepts to contemporary media practice. Providing students with opportunities to practice critical interpretation is intended to inform their later work as critical producers and digital citizens: “critical media literacy provides a theoretical framework and transformative pedagogy to empower students to question media, challenge hegemony, and participate in society as justice-oriented citizens” (Funk, Kellner, & Share, 2016, p. 23). Through their analysis, students better understand how digital texts work to shape audiences, which helps empower them to resist this coercion and create alternative content better aligned with their own political and social interests.

The second assessment is based on the industry practice of pitching a concept to a client. Students devise their own original concept in alignment with assignment three options, which they present via a pitch to the class. Students choose to design an app, website, short film, infographic, photographic essay, or a critical digital media review. The implementation of UDL approaches (CAST, 2011) is fundamental in providing students with individual choice. While many students indicate a fear of public speaking, this is minimised by the industry relevance of the task. Students understand the benefits of learning how to pitch at university, prior to being required to deliver a pitch in a workplace context, and are keen to showcase their ideas to

supportive peers. Student pitches are delivered as a five-minute PowerPoint presentation, focusing on the concept, legalities, and logistics of delivering the production within the required timeframe with available resources. Presentations are assessed by the tutor and through peer review by classmates. Teaching staff observe other classes' pitches for moderation purposes and projects are only approved if they are manageable, original and meet industry standards. Teaching staff also share supportive advice based on their own specialties, thereby modelling the production industry practice of teamwork and encouraging the development of a collegial learning community. The public nature of the presentations encourages students to engage with their peers' projects and also provides a visible benchmark for quality. Students demonstrate their digital competencies through the design of both the pitch and the proposed project, while also exercising other skills sets such as creativity, project management and performance. While some note this was a challenging undertaking, they appreciate its purpose: (*What was most challenging?*) "Oral presentation, the pitch. It was positive in helping my confidence talking in front of classes" (UniSA, 2015).

The final assignment is the delivery of their original digital media artefact with a supporting exegesis and required legal documentation, such as release forms. The range of work produced shows genuine innovation and the standard is raised with each iteration of the course as new technology becomes available and the course continues to strengthen. In 2015, student designs included wireframe navigation for both a skating and fishing app, while one student coded a functional choose-your-own-adventure story app within the four-week production timeframe. A student who had recently migrated to Australia created a short film on YouTube in his first language while also subtitling it for accessibility, and another student who wanted to support those transitioning to university created a documentary of students providing advice. Another student was inspired to challenge the isolation of university by creating a photojournalistic piece inspired by the "Humans of New York" project, which introduced a number of College students to the wider community through photos and supporting text. Other students designed websites for professional and hobby purposes. A student interested in information technology took the opportunity to code a gaming advice website, while another created an online portfolio and shopfront for a tattoo artist. A student interested in screen theory created a magazine layout for a critical media review of Spike Jonze's *Her*, whereas another constructed a blog review comparing *Sims 3* and *Sims 4*. A student interested in education developed a children's Claymation, while another student created a music video of a local band for YouTube. These projects were all made with readily available tools owned by the students, or the use of university iPads and computers with free software.

Additional production support is now provided through purchases made with two institutional grants. Students can now access production kits supporting video, audio and 360 degree filming, as well as industry-standard Adobe Creative Cloud software. This has led to a wider range of production formats, all of which evidence student abilities to create engaging digital content for a specified audience. Outstanding 2017 work included a video infographic to raise awareness of transgender issues, a YouTube channel to allow virtual excursions for bedridden patients, and a range of games. As these projects evidence, the students bring their awareness and experiences to the academy and connect these with digital tools to present innovative projects that hold the potential to actively contribute toward broader societal needs. The development of an AR "treasure hunt" game was one of a number of games developed using Unity 3D and highlights the innovation and degree preparation undertaken by students when given the space and support to develop their own digital creations. The range of expertise and interest students bring to these tasks also highlights the creativity of enabling program students. While enabling students may face some challenges with traditional literacies and broader academic capital during transition,

the introduction of creative courses presents space to connect with students over shared media, learn together, and co-construct knowledge. This offers an additional avenue wherein academics can value the diverse capital students bring to the institution and assist in the further development of creative and problem-solving skills, which are valued for graduate employment in the context of increasing automation.

Given the range of projects and student abilities, the exegesis offers necessary insight into the student learning undertaken, including design processes, problem-solving and skill development. As the diversity of the projects demonstrates, the element of choice means that students conceptualise a project of personal relevance, which inspires greater engagement with the task. The exegesis also supports students to undertake bold project ideas with the support of teaching staff. This ethos is modelled on creative industries where innovative ideas are valued. In the words of Ed Catmull (2014), co-founder and President of *Pixar Animation*:

While experimentation is scary to many, I would argue that we should be far more terrified of the opposite approach. Being too risk averse causes many companies to stop innovating and to reject new ideas, which is the first step on the path to irrelevance...To be a truly creative company, you must start things that might fail. (p. 118)

These approaches are arguably more important for current students, as they search for ways to manage the demands of contemporary employment, such as the need to stand out in the gig-economy.

To engage new students in an inclusive manner, academics teaching *Digital Literacy: Screen, Web and New Media* work to build trust with students in a safe, respectful learning environment, and encourage them to trial new projects. Student evaluations recognise the supportive environment, with one noting that “teachers were very friendly and talked to their students and actually listened to problems, whilst giving suggestions and helping to strengthen their weaknesses” (UniSA, 2017), and another discussing how each academic “absolutely cares about each student's potential” (UniSA, 2017), with a third noting that teaching staff “wants you to succeed in what you're doing and helps with whatever is needed for that to happen” (UniSA, 2017). These quotes demonstrate that the approaches help to create a strong sense of belonging for individuals, with one student stating “I always felt respected, and the ideas that flowed in this course was incredible” (UniSA, 2016) and another discussing how this created hope: “great course that really motivated me and made me look forward to my future” (UniSA, 2016). In this learning environment, students have the safety to try, but if they “fail” the exegesis acts as a “safety net” which allows them to document learning outcomes. If students have trialled new approaches, not quite met their initial aspirations, yet, have learnt significantly from the process, then they are still able to gain a high grade through documenting the experience. Over three years, “failure” has been the exception rather than the norm with most students reaching the goals they have set with the guidance of the teaching team; thereby supporting Tinto's (2012) assertion that “student classroom performance is driven, in part, by the expectations that academic staff have for their students and that students have for themselves” (p. 4).

Course evaluations indicate that students were challenged and inspired to deliver high quality work. For example, “I enjoyed the assessment tasks, they were very well thought out and kept our attention. Also the aspect of choice when it came to assessments was really motivating, knowing that everyone was doing something different meant that I would have something different to bring to the table” (UniSA, 2015). Students also use the project as an opportunity to

develop their own industry-relevant skills and spaces: this was particularly appreciated by some, with one stating “The fact that we could chose the format of our project (within reason) was really great! I have wanted to create a website to display my art for quite some time but didn't really know how to. This course helped me to begin my involvement in the art industry” (UniSA, 2016). Of particular note are the number of evaluations that indicate that the assessments were “fun” (UniSA, 2015), demonstrating that the empowering aspect of project choice helps facilitate individual engagement and an enjoyable educational experience.

The development of digital products also provides opportunities for students to share their accomplishments and feel genuine pride in their work. For example, 2016 students were invited to showcase work at the Australasian Society for Computers in Learning in Tertiary Education (ASCILITE) conference, with many visitors commenting that the high quality work was on par with undergraduate level. The showcase was shared on the University of South Australia's social media channels garnering over 100 likes, many positive comments, and shares. For students, the in-class practice presenting their product pitch meant they were confident to speak with other tertiary educators about their project goals and demonstrate what they had created. This was a proud moment where the students had clearly transformed into digital content creators, sharing their work in a professional capacity. Two university news stories on the course highlight the innovative approach taken and the ways in which enabling programs offer opportunities to deliver best-practice transition pedagogy and transformative educational opportunities, through embedding inclusive approaches and supporting students to create their best work (Galvin, 2015; Toole, 2016).

### **A successful approach? Evaluating the course outcomes**

The range of positive student outcomes expressed in the student feedback presented in this discussion indicates that inclusive design and innovative pedagogy engage students from diverse backgrounds with university content. While retention is a challenge in enabling programs due to the complex needs of the heterogeneous, underrepresented student cohort (Hodges et al., 2013), UniSA data show that the inclusive and engaging approach embedded within this digital literacy course results in above average retention and pass rates when compared to other enabling courses. Students demonstrate strong engagement with course content through high levels of participation and this is documented through positive student evaluations. Annual course evaluations indicate that the course was largely perceived as a challenging and positive learning experience. The course consistently attains student satisfaction levels in the top quartile of the university (UniSA, 2015; UniSA, 2016; UniSA, 2017). Students embrace the assessment choices available and produce a wide range of content highlighting their growing digital literacy. As one noted “I enjoyed the socialisation and HTML [topics]...also the freedom of choice with assignments” (UniSA, 2015). The scaffolding supports different styles of learning and levels of knowledge. The course also encourages greater awareness of the skills needed for active participation in digital fora and the broader role of digital literacy: as a student observed, “I understand how important the concept of digital literacy is in almost all aspects of life” (UniSA, 2015). Students can see the relevance of course content to other disciplines and undertaking this course raises student awareness of the role of digital literacy in a knowledge society. At the conclusion of the 2015 course, 88% of students considered digital literacy as “important” or “very important” for success at university and 82% identified it as “important” or “very important” for success as a graduate (UniSA, 2015). Course design draws on a wide range of discipline knowledge, combining skill sets from design to project management, to provide students with greater knowledge of digital forms, greater understanding of their own minds, and greater knowledge of the increasingly digital world around them, which students value. As one stated, “really interesting and relevant to the way that digital technologies impact our world

today. The assignments were really interesting and will be useful for further studies at uni” (UniSA, 2016). The course is enjoyed by students, building confidence in their ability as learners based on a positive educational experience, while providing greater preparedness for undergraduate degrees, as a student declared “I feel as if my knowledge of digital literacy has expanded greatly and I will be able to put it into practice in my other courses throughout university and in the work force on completion of university” (UniSA, 2015). Student comments highlight the benefits of the learning experience, as conveyed in this student comment, “this course was brilliant in every way. As a hopeful eventual teacher, this course opened my eyes to how advanced everything has become...It was both inspirational and educational for me and I loved it” (UniSA, 2016).

## **Conclusion**

This paper provides a case study of the transformative outcomes achieved through careful course design. On an individual level, it is challenging and exciting to work with students on new ideas that they are passionate about. More broadly, student evaluation data demonstrate that enabling programs bring students with diverse creative and digital capital to the academy. Developing an inclusive course using UDL principles (CAST, 2011) assists students to access and engage with concepts from a broad range of disciplines including visual arts, digital media, marketing, and neuroscience. Using a constructivist approach to connect with students’ existing “funds of knowledge” (Gonzalez, Moll, & Amanti, 2005) through popular culture texts and digital tools supports transition into the university environment. Students are motivated to extend their digital knowledge with support from academic staff. By developing knowledge and skills in digital literacy, students increase their confidence in their own capabilities. The varied student interests and broad application of digital skill sets highlights the potential for design approaches to open possibilities and generate outstanding outcomes for underrepresented students. As students become familiar with complex ideas and language from diverse fields of knowledge, they build the confidence to create industry-standard digital content. Students develop into digital content producers, who take pride in their work and can share it with others in a professional context. As this case demonstrates, such courses can support a wide range of student needs and serve as exemplars of transition pedagogy. Carefully designed courses can serve to build student confidence, create new knowledges and products, and generate collaborative learning outcomes for full participation in the digital era.

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