A multidisciplinary focus on 21st century digital learning environments: new program at CSU

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As a result of an extensive curriculum review of a master's programme for teachers in the School of Information Studies, a multi-disciplinary degree programme in education and information studies was developed to uniquely facilitate educators' capacity to be responsive to the demands of a digitally connected world. Charles Sturt University's new Master of Education (Knowledge Networks and Digital Innovation) aims to develop agile leaders in new cultures of digital formal and informal learning. By examining key features and influences of global connectedness, information organisation, communication and participatory cultures of learning, students are provided with the opportunity to reflect on their professional practice in a networked learning community, and to improve learning and teaching in digital environments. This paper presents a case study of the implementation of the new programme, reviews the first session experiences of the students, and presents findings from student evaluation of the levels of success achieved.

Keywords: participatory, online learning, information, knowledge networks, pedagogy, information ecology, information environment

Meeting the needs of education practitioners

Knowledge building, literacy and communication in action now take many forms. When Skype was first released in 2003, the global face-to-face contact began to transform communication and collaboration in 'real time'. Now Apple's Face-Time, Skype in the Classroom, and Google Hangouts (to name just a few tools) guarantee synchronous engagement, alongside collaborative text platforms such as Google docs. In other words, the mechanisms for engaging with information and processes of learning in the acquisition of new knowledge has become a deeper process of individual and collaborative learning activities, problem solving and artefact development, through an integration of face-to-face and online interactions within a community, involving absorption, integration and systemisation of the information received by the receiver in their own pre-existing cognitive structure, which are the result of personal experience, and earlier knowledge transactions (Trentin, 2011).

This digital information environment demands a new knowledge flow between content and digital connections. While the bibliographic paradigm created textbook learning, the digital information environment of today indicates the need for educators to understand information seeking and engagement within connected multi-media contexts. Computer and mobile device technology environments, social media, and ready forms of online communication drive our newly emerging knowledge ecosystems. Thomas and Brown (2011), who explored what they described as a new 'culture of learning', explained how much the Internet has changed the way we think about both technology and information. In this new culture of learning, information technology has become a participatory medium, giving rise to an environment that is constantly being changed and reshaped by the participation within information spaces. They argue that traditional approaches to learning are no longer capable of coping with this constantly changing world. The information environment is a technology environment, which demands adaptation. Information is also a networked resource, as "information absorption is a cultural and social process of engaging with the constantly changing world around us" (Thomas & Brown, 2011, p.47).

In other words, our digital *information ecology* is a remix of different forms of technology, devices, data repositories, information retrieval, information sharing, networks and communication. New technological tools are expanding and continually altering the ways school students, or educators can interact with the world. The implications for education that stem from new means for accessing information, communicating with others, and participating in a community needs a new brand of professional competences to thrive within the changing environment. Haste (2009) recognised the co-construction of knowledge through interpersonal discourse and the tension within pedagogy between a focus on knowledge-based instruction and outcomes, and on praxis-based instruction. "While most pedagogy, of course, recognises the interaction of both in good practice, there is nevertheless an underlying epistemological gap; knowledge-based models are implicitly more 'top down' and praxis-based more 'bottom up'. 'Knowledge' implies that the route to understanding is in the structured

transmission of information. 'Praxis' implies a *necessary* interaction with materials, actions or other persons as a route to understanding" (Haste, 2009 p.213).

Information ecology at the heart of knowledge

While technology is changing the information environment (including information places and spaces), the transactional nature of information interactions and knowledge flow underpins learning. Information can comprise both physical and virtual parts for operation and interaction. A major challenge for education is to enable and facilitate the generation of new knowledge via an appropriate information environment, to facilitate integration of new concepts within each person's existing knowledge structure. This is described as an 'information ecology'.

"Information ecology examines the contexts of information behaviour by analogy with ecological habitats and niches, identifying behaviours in biological terms such as 'foraging'" (Bawden & Robinson, 2012. p.199). In this context of adaptive and responsive co-construction of knowledge, we can facilitate a viable praxis in digital environments, influenced by concepts of *rhizomatic learning.* "Seen as a model for the construction of knowledge, rhizomatic processes hint at the interconnectedness of ideas as well as boundless exploration across many fronts from many different starting points" (Sharples, et al. 2012 p.33). By creating curriculum and subject delivery which can be reshaped and reconstructed in a dynamic manner in response to changing environmental conditions or the personal professional needs of students, a digital information ecology provides the opportunity to work with information in the construction of knowledge in more dynamic ways, connecting learning experiences across the contexts of location, time, devices and platforms.

This information ecology also involves the creation of assessments and environments for knowledge building to enhance collaborative efforts to create and continually improve ideas. This approach to knowledge building "exploits the potential of collaborative knowledge work by situating ideas in a communal workspace where others can criticize or contribute to their improvement" (Scardamalia, Bransford, Kozma, & Quellmalz, 2012, p.238). In this information ecology we also understand that "the development of critical thinking is a key learning objective in education – particularly higher education – [and that] it entails the ability to make reasoned evaluative judgements when making sense of information sources that contain different (potentially conflicting) findings, perspectives and interpretations of a given topic of phenomenon (Ford, 2008 p. 59). The use of critical thinking has become particularly important as relatively quick access to a wide range of information means that the user needs the ability to critically evaluate the validity and value of information accessed.

The evidence is that technologies and social media platforms are driving an unprecedented reorganisation of the learning environment in and beyond schools and tertiary environments. These disruptive shifts are already reshaping the workforce landscape and the skills required (Davies, Fidler & Gorbis, 2011), establishing *lifelong* and *life-wide* learning as the central paradigm for the future (Redecker et al, 2011). Our work as educators has to centre on helping to meet future learning needs in courses/programs by fostering a culture of enquiry within a sustainable learning ecology that is shaped by the ubiquity of information, globally responsive pedagogical practices, and driven by collaboration and informal learning in multiple access points and through multiple mediums

Evidence from a Master's programme/course review

During 2012-2013 a comprehensive Course Review of the Master of Education (Teacher Librarianship) was undertaken, as part of the 5-year cyclic renewal process for an authorized Australian University (under the Tertiary Education Quality and Standards Agency [TEQSA] Act) to self-accredit each programme of study that leads to a higher education award that the provider confers.

As part of the face-to-face and virtual industry-wide focus-group consultation processes with key stakeholders across Australia and New Zealand (principals, teacher librarians, librarians, system leaders, teachers, education consultants) a key finding in focus group results emphasised a need for a new multi-disciplinary degree programme in education and information studies, to provide advanced learning options for education practitioners who are seeking a *substantial post-graduate foundation in connecting information knowledge networks and digital innovation in the P-12 and tertiary education environments*, where the information discipline aspect is foundational to improved education pedagogical practices in digital environments. This approach provided a unique opportunity to utilise information science expertise to influence the post-graduate formation of practitioners interested in knowledge networks, e-learning, and digital innovation. This was

confirmed by results of an online survey "Building the School Library Profession: Postgraduate Academic Program needs in Distance Education" which provided comprehensive supporting information regarding the perceived priorities and future needs in professional development and further academic study related to the digital environments and priorities of school librarianship.

A total of three hundred and forty (340) survey responses were received. In six questions about future postgraduate study and/or professional development in distance education mode (Figure 1) two questions were rated as being of the highest priority:

1. Graduate Diploma in areas/topics related to contemporary and emerging needs in digital environments and school libraries (46.9%); and
2. Master of Education in areas/topics related to contemporary and emerging needs in digital environments and school libraries (45.9%) ahead of the other options.

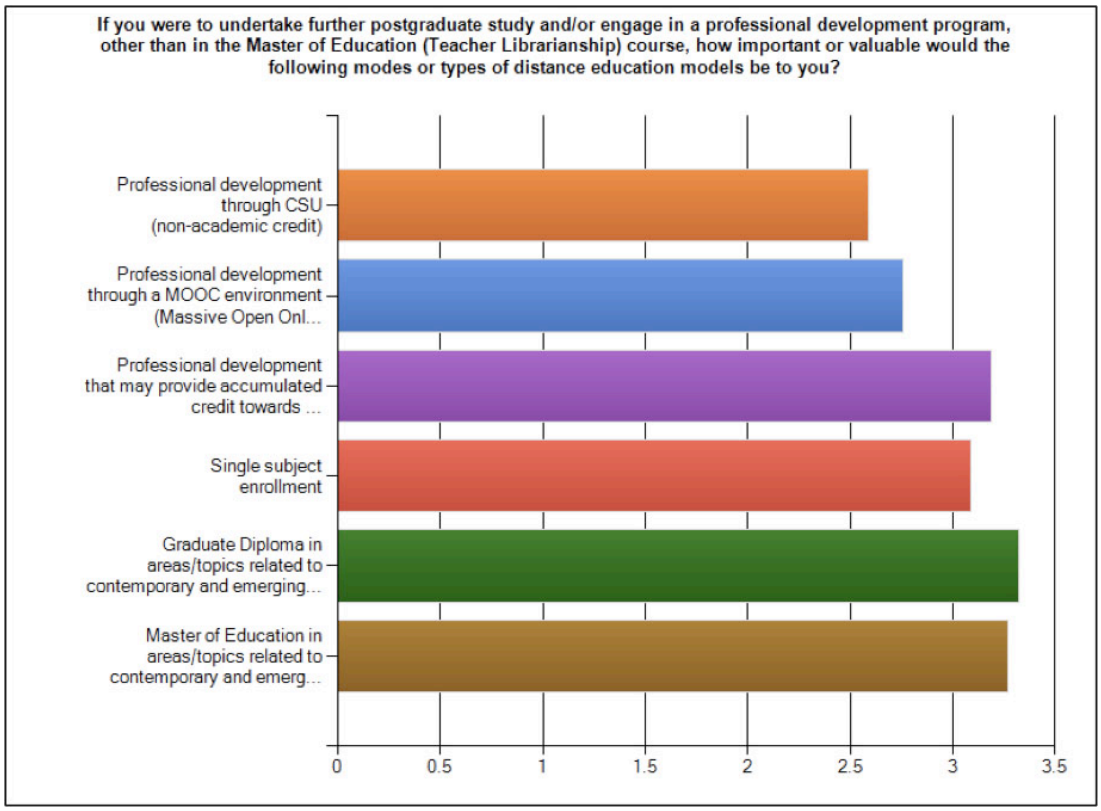

Figure 1: Postgraduate study and/or professional development

Methodology

A case study was undertaken to examine the open-ended question – "What has been the keystone subject experience of students in the programme", in order examine the course design and participatory learning and assessment components of the Master of Education (Knowledge Networks and Digital Innovation) [Med (KN&DigInnov)]. As the keystone subject establishes the programme intention, information ecology and participatory experiences for students, a study of the student experiences of the first cohort in the foundation subject provides evidence of the levels of success achieved. This study took place in the real-world context of online learning and the data collection involved four aspects.

- Documents (reflective journals, twitter).
- SEQ online survey (student experience survey, including open ended responses).
- Survey comparisons of the student subject responses to the School mean.
- Organisation of open-ended survey responses into themes of interest.

Knowledge networks and digital innovation programme

The Med (KN&DigInnov) commenced in 2014, and requires completion of sixty-four points comprising two core subjects and six elective subjects worth eight points each, to meet the Australian Qualifications Framework standards for a Masters degree by Coursework (Council, 2013). It is being delivered fully in an online distance education mode. The Masters is led by the Courses (Programme) Director and education discipline team in the School of Information Studies, drawing on specialist adjunct staff associated with the School.

The programme is designed (Charles Sturt University, 2012) to respond to the following:

- literature and literacy experiences in digital environments, including childrens' and young adult literature, e-book systems, management and development;
- information organisation in digital environments, information retrieval, content curation with the aid of mobile devices, online platforms and cloud based storage services;
- concepts and practices for curriculum integration of social media tools, services and platforms;
- information practices, with an emphasis on information fluency, critical inquiry and design thinking;
- digital citizenship essentials, including legal and ethical behaviour and open learning approaches;
- ICT integration and innovation, demonstrating a technology infusion with mobile learning, tablets and devices for information rich learning experiences;
- Big Data and information flow, including Web 3.0 and the concepts of the semantic web; and
- creative and intellectual leadership in a global environment.

The programme is grounded in cross-disciplinary studies in information science and education, allowing students to gain an advanced and integrated understanding of an important body of knowledge in the information science discipline, and the online knowledge networks, processes and interactions for innovative education practice. It aims to encapsulate a participatory information ecology that is a co-construction of knowledge through interpersonal discourse and the tension within pedagogy between a focus on knowledge-based instruction and outcomes, and on praxis-based instruction, which is both creative and dialogic. The learning processes depend more on the coordination among all the interactions and activities that take place in different spaces of the learners' lives, like school, home, and workplace, than only on interactions and activities developed in the spaces of formal learning.

The academic programme has also been designed to enhance personal professional networks and personal learning conversations, understanding that learning is social within Communities of Practice where learning happens through experience and practice as part of a community (Leiberman & Mace, 2009). Each subject is treated as an intensive professional development programme, facilitated by social interaction through forums, Twitter, Adobe Connect, and Google Hangouts, helping to facilitate greater insight into generic issues (Rienties & Kinchin, 2014) through the various participatory learning experiences.

The first cohort of 42 students has been drawn from Australian and international educators, who are currently in leadership positions in schools; classroom teachers and teacher librarians; e-learning leaders in schools and higher education; educational designers in higher education; programme leaders in education organisations; and technology integrators in schools and higher education. The range of admissions demonstrated well the potential impact of this multi-disciplinary programme approach.

Table 1: First intake for MEd(KN&DigInnov)

Role	**Number**
Classroom teacher	14
Teacher librarian	18
School leadership	3
School e-learning integrators	2
Faculty education/instructional designers	4
Academic librarian	1
Total	**42**

The degree programme is delivered through a purposed-designed participatory digital portal http://digital.csu.edu.au that connects to the university learning management system. It also makes use of online tools within and beyond the programme, including branded channels leveraged for authentic practice, as part of the participatory learning experiences for knowledge networking and digital innovation. (*see* digital portal)

In addition, the programme has embedded within each subject a reflective and reflexive journaling process undertaken at the newly established CSU Thinkspace http://thinkspace.csu.edu.au. A reflective journal is an opportunity for students to demonstrate functioning knowledge in the context of the intended learning outcomes for the subject or programme.

"In professional programmes in particular, it is useful if students keep a reflective journal, in which they record any incidents or thoughts that help them reflect on the content of the course or programme. Such reflection is basic to proper professional functioning. The reflective journal is especially useful for assessing ILOs (intended learning outcomes) in relating to the application of content knowledge, professional judgment and reflection on past decisions and problem solving with a view to improving them." (Biggs & Tang, 2011, p.261). Students are regularly required to reflect upon their practices, link their reflections to theories and communicate in writing an understanding of the connection between the reflection and theory. This encourages each student to become a proactive learner and reflective educator who is "committed to continuous improvement in practice; assumes responsibility for his or her own learning; demonstrates awareness of self, others, and the surrounding context; develops the thinking skills for effective inquiry; and takes action that aligns with new understandings" (York-Barr, Sommers, Ghere, & Montie, 2006, p. 10).

Reflective thinking helps students develop a questioning attitude and new perspectives, identify areas for change and improvement, respond effectively to new challenges, and generalise and apply what they have learned from one situation to other situations (Turner, Reid, & Shahabudin, 2011). This experiential engagement is employed to foster creativity and initiative for new situations in connected environments for professional practice, and a capacity for confident personal autonomy and accountability in knowledge networking.

Approaches to assessment focus on participatory and digital experiences, in the context of programme requirements, and include extensive use of formative 0% marks activities, as part of knowledge flow and peer-to-peer learning/engagement. Social media channels are a vital part of this approach.

Concepts and practices in a digital age

The learning framework for the programme is established in the keystone subject INF530 *Concepts and Practices in a Digital Age*, where a body of knowledge is introduced that includes a review of recent developments which are influencing learning and teaching in an increasingly digitally connected world. By examining key features and influences of global connectedness, information organisation, communication and participatory cultures of learning, students are provided with the opportunity to reflect on their professional practice in a networked learning community, and engage in dialogue to develop an authentic understanding of concepts and practices for learning and teaching in a digital environments. Through this questioning, review and reconstruction of understanding, the subject frames the challenges of learning in digital environments and sets the context for innovation and change in professional practice. The subject is designed to provide: professional learning through authentic tasks and activities; opportunities for collaboration with peers; readings that are thought-provoking; study suggestions which encourage inquiry, reflection and analysis; and engagement with a curriculum unit/strategy to demonstrate application of new knowledge and understanding for learning and teaching practice. This foundation subject establishes connected learning within new information environments created by the social and technological changes of the digital age. The purposeful pedagogical praxis allows interaction(s):

- with a diversity of content materials;
- within the cohort to improve learning and understanding in the formation of knowledge;
- through use of new media communication channels; and
- embedded in a multi-disciplinary information ecology.

By focusing on connectivity, communication, collaboration and convergence, the subject addresses the challenges, opportunities and emerging possibilities for learning and teaching in information-rich participatory environments. Trends in knowledge construction, participation and social networks are explored, including information futures and digital convergence. The subject introduces *education informatics* and the scholarship of digital teaching, and models connected learning through group discourse and collaborative inquiry in digital

environments, including the reflective and participatory experiences employed throughout the course.

A comprehensive examination of ideas about digital literacy is undertaken, providing a strong examination of the interconnections between various terms that are in vogue. Drawing from the information science discipline, Bawden (2008, p. 20) provides the key facets of digital literacy upon which the programme is built.

- "Knowledge assembly," building a "reliable information hoard" from diverse sources.
- Retrieval skills, plus "critical thinking" for making informed judgements about retrieved information, with wariness about the validity and completeness of internet sources.
- Reading and understanding non-sequential and dynamic material.
- Awareness of the value of traditional tools in conjunction with networked media.
- Awareness of "people networks" as sources of advice and help.
- Using filters and agents to manage incoming information.
- Being comfortable with publishing and communicating information as well as accessing it.

Bawden and Robinson (2012) is also used to introduce the factors involved in information behaviour, and how they relate to one another, to depict the stages and processes of information seeking and use, and sometimes to illustrate a person's thought processes and changing cognitive state as they deal with information. Information behaviour cannot be considered in isolation; we need to explicitly understand the wider context. Within the context of connected learning, students also engage with the critical fields of research that can inform the work of educators. Connected learning encompasses information behaviour and processes with technology and digital environments; is explained and facilitated through a range of theories and/or models; includes evolving taxonomies of learning outcomes; and is fired by critical and computational thinking.

The complexities of knowledge networks in digital environments have highlighted the importance of the emerging sub-discipline of education - *education informatics* - the application of technology to discovering and communicating education information (Collins & Weiner, 2010). Information technology is key to knowledge diffusion, but understanding and developing human interaction, human behaviour, and information use and exchange are also essential. Definitions of informatics usually encompass the crossing of disciplines, thus education informatics is basically a combination of the disciplines of education, technology, and information science. Just how these domains intersect and interrelate is still cause of much debate across the disciplines; however the work of Nigel Ford (2008) underpins the focus throughout the degree programme.

The design of assessments emphasises this focus, and digital flexibility, as demonstrated by the first graded assessment – the Scholarly Book Review. Many critically and/or popularly acclaimed books are published and address topics related to digital information environments and knowledge networks; creative cultures and use of technology; and futurist perspectives on learning in a digital world. However, regardless of popularity or publicity, educators need to be able to evaluate these publications from a scholarly point of view. Students were provided with book choices (which also attracted wider readership via Twitter), being able to match their personal professional needs for their assessment (Collection: INF530 Concept & Practices in a Digital Age - List http://www.amazon.com/registry/wishlist/37FSRQBVI5C5W/ref=cm_sw_r_tw_ws_). While providing evidence of knowledge of principles and practices in the context of current and emerging trends in information and knowledge environments, students were also excited to be able to differentiate between trends, facts, opinion, and research. This ability to evaluate the validity and value of information accessed is essential for scholarly 21st learning.

Many students keep an open and public record of their learning, for example, http://thinkspace.csu.edu.au/becspink/. By doing this they are providing an easy (and open) way to see the range of digital learning/assessment experiences alongside a record of their participatory experiences and online interactions; this is in keeping with the global participatory nature of the programme.

Results

The collaborative nature of the subject was highlighted by the public sharing via Twitter hashtag #INF530, and the bottom-up praxis was emphasised by a willingness of students to post a link to their assessments, via their reflective blog or relevant platform - even before the assessment was marked! After the assessments were marked, regardless of the grade level achieved, even more students willingly shared their work. A highlight for students was when an assessment went 'viral', being picked up by some knowledgeable people and organisations. (http://thinkspace.csu.edu.au/hbailie/2014/06/04/going-viral/)

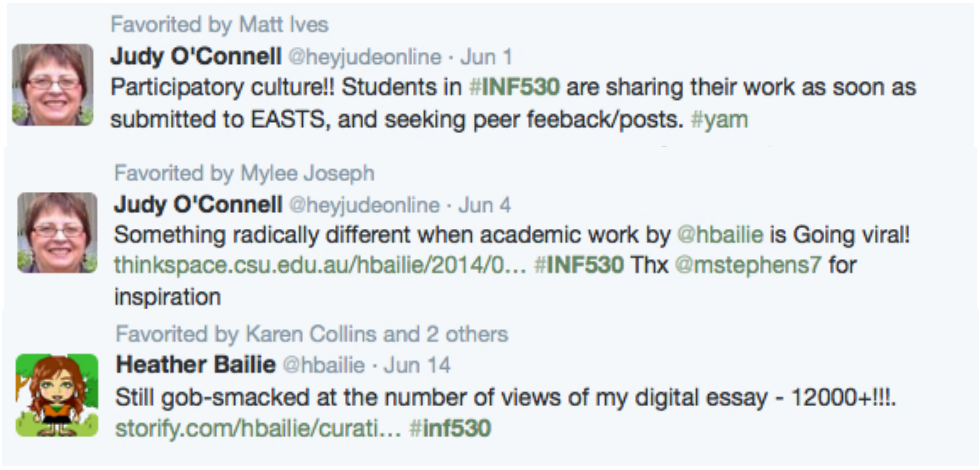

Figure 2: Twitter tells the story of academic work

Students regularly collected favourites (e.g. https://flipboard.com/section/21st-century-learning-bz8KVQ). They also utilised participatory and collaborative tools and approaches throughout the subject, with many learning for the first time how to engage at this level. An excerpt from final blog reflections highlights the transformation.

> Phew. What a ride. Compared to where I was at the start of this adventure I now have a much greater understanding of the concepts and technological trends that are inevitably shaping our lives from the semantic web to the internet of things. Over the course of the last few months we've covered a wide range of concepts and practices. This has allowed me to focus on topics that are of particular interest to me.
>
> My progression through INF530 has been a brilliant start to my journey along the Masters of Education (Knowledge Networks and Digital Innovation) path. The subject content has provided me strong foundations to build upon, and has been highly relevant to my workplace.
>
> INF530 has convinced me even more of the need for all teachers to become digitally literate, connected educators
>
> #INF530: Concepts and Practices for the Digital Age has left me continually thinking, questioning, reflecting on current practices causing the continual shift of opinions regarding technology and education. And this is only the tip of the iceberg.
>
> #INF530 has been invigorating, exciting, lots of hard work, overwhelming at times, but above all fun. I have loved connecting with the cohort, it's been amazing. People have said to me "isn't online study very impersonal and isolating" but I couldn't disagree more. I feel infinitely more connected with my classmates than I ever did while studying in the traditional way.

The comparative quality of the learning experience in the keystone subject for the course was also demonstrated by the responses to the Charles Sturt University Student Experience Questionaire (SEQ) (30 responses). This was administered at the conclusion of the subject *INF530 Concepts and Practices in a Digital Age*. The quality of the learning experience in this course was demonstrated, particularly when compared to subject survey responses completed overall for the same session for all subjects in the School of Information Studies (877 responses). The percentile ranking provides a benchmark against other subjects in the school based on the mean score for that item.

A guide to Interpreting Subject Experience survey Reports provided by CSU states that any mean rating of 4 or more indicates that, on average, students believe the learning experience in the subject has addressed the point(s) in question either "to a large extent" or "often". This is a very positive result. Any mean rating of 4.5 or more is an outstanding result.

Table 2: Student Experience Survey Core Items, Session 1, 2014.

Questions	Subject mean	School mean	Percentile rank
Q1. The learning outcomes of this subject were made clear to me.	4.4	4.2	73
Q2. The learning activities in this subject (assessment tasked, forum discussion, group work) helped me learn effectively.	4.5	3.8	95
Q3. The learning activities in this subject (assessment tasks, forum discussion, group work) create opportunities for me to learn from my peers.	4.6	3.5	98
Q4. This subject incorporated study of current content.	4.9	4.1	93
Q5. The goals of the assessment tasks in this subject were made clear to me.	4.5	4.1	64
Q6. The learning activities in this subject (lectures, assessment tasks, forum discussions, group work) prepared me to complete my assessment tasks.	4.4	3.7	90
Q7. The assessment tasks in this subject helped me to learn effectively.	4.5	3.8	92
Q8. I received timely feedback on my assessment tasks in this subject.	4.7	4.3	64
Q9. Feedback I received throughout this subject helped me to learn effectively.	4.2	3.8	70
Q10.The learning activities in this subject (lectures, assessment tasks, forum discussions, group work) extended my knowledge.	4.8	4.0	96

Students on average valued the learning activities and assessments, and highly valued the currency of content, and learning activities included. The open-ended responses provided further valuable information on the impact of the subject experience and evidenced details of the global digital information ecology in action.

Students were asked: *What about this subject did you find most helpful in your learning?* (Response Rate 90%). Responses are organized into three predominant themes: Content, Information ecology and Participatory culture.

Content

- Direct connections between past models, present trends and future directions.
- I found the access to high quality articles and artifacts online enabled me to learn about topics I may not have identified as being useful.
- The different media that was used to present the information - YouTube, Slideshare, images, websites, articles. Up to date and future focused subject content made it relevant and meaningful for me.
- As a new leader, in a new position, I have found this subject to be incredibly beneficial and so pertinent to teachers and students in today's changing educational landscape.
- The amount of relevant content put together was astounding. There are so many new things to explore.
- A quite wide opportunity for following your own interests (in the assessments)
- What a fabulous beginning, I'm very excited about what is to come.

Information ecology

- I found the blogging aspect really helpful to make connections and illustrate my learning to myself and others.
- The experiences, practicalities, learning with my peers, excitement, latest online technologies.
- The way everything was set out in the digital site plus interactions with other students through forums and twitter.
- HAVING to create a professional blog - helpful for me to clarify and reflect on my learning throughout this subject; and great to be able to share my classmates learning via their blogs too.
- The digital format of the materials was engaging, up to date and allowed for a flexible approach to study.
- Adobe Connect sessions that helped to build that sense of learning as a community.

Participatory culture

- While accessing the subject knowledge networks, I have experienced the participatory culture that is at the foundation of 21st century learning. My views and understandings of an educational professional in digital environments have been matured by these studies and the social interactions that have taken place around this learning journey.
- Collaborative and participatory nature of subject especially via forums - participants having a voice and influence on each other's learning.
- The ability to collaborate with peers. Getting responses to questions through Twitter. This was very cool.
- Learning the importance of the Learning Network.
- I have been involved in distance education for many years and this subject/course is one that has been the most relevant, most engaging and most current I have experienced. The quality and 'connectedness' of the subject coordinators are amazing - well done to CSU for offering this M Ed. I look forward to next semester.
- The lecturer's very quick response to any queries or concerns we had via twitter OR forum
- The quality of the course leader was excellent. The students as a cohort were active participants in the online aspects, encouraged on by a positive and knowledgeable course leader.

Discussion

The creation of a multi-disciplinary programme, built on a digital information ecology and student-focussed praxis, has created both a curriculum and learning approach that has facilitated understanding and knowledge construction in more dynamic ways, connecting experiences, reflective practices and online participatory experiences that epitomize a 'new culture of learning'. Qualitative and quantitative evidence from the SEQ at the conclusion of the keystone subject has confirmed a high rating for the quality of the keystone subject, including currency of content, learning experience, and the value of learning activities and assessments. Students valued what they learned, and the extent of this value was further evidenced by the qualitative responses at the conclusion of the first session keystone subject. The collaborative nature of the course/programme has been highlighted, including a significant shift to public and open sharing of formal and informal assessments. While the work is considered innovative, hard, and demanding, the focus and quality of the subject interactions with students and the lecturer was regularly emphasised. This multi-disciplinary learning programme encompasses information behaviour and processes; a range of media, networks, connections and collaborations, with a focus on technology and digital environments. This has resulted in a dynamic and responsive learning design and participatory learning culture, capable of meeting the needs of educators from a wide range of professional education sectors and positions.

Conclusion

Learning in a digital age requires practitioners who understand education imperatives in local and global settings, and who can demonstrate an agile response to novel technologies that may catalyze learning. Both technical and pedagogical innovation should be hallmarks of the best learning environments we can create, and which incorporate a wide variety of pedagogical approaches, learning tools, methods and practices to support students' diverse learning modes. The information profession provides insight and unique opportunities through education informatics to provide post-graduate professional learners the opportunities they need for curriculum knowledge and development within a global, digital information ecology. The participants in this new degree programme have a rich opportunity to work, network and learn together, in order to learn from leaders in the field, and become thought leaders in the professional practices of learning and teaching in visible and connected ways.

Visit the degree profile at: http://www.csu.edu.au/digital

Keep up-to-date with news and developments at the Facebook page:
https://www.facebook.com/KnowledgeNetworksDigitalInnovation

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