

Creating engagement and cultivating information literacy skills via Scoop.it

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The appropriation of digital content by higher education students reflects a significant change in learning paradigms. The traditional classroom model in which instructors were the sole source of information and knowledge is being replaced by a model that allows learners to collect, share and co-create knowledge. By integrating Scoop.it into the curriculum, this paper explores the potential of Scoop.it for both creating engaging learning experiences and cultivating digital information literacy skills. It will be shown that while Scoop.it facilitates engagement, it was less successful as a tool for improving students' digital information literacy skills.

Keywords: digital curation, digital information literacy, student engagement, higher education

Background

With the fast-paced churn of new technologies and platforms, is tertiary education keeping up? Are we realising our dreams of connected, innovative and interactive learning experiences and environments or do they remain a mirage?

Web 2.0 technologies are rapidly changing the ways in which human beings locate and access information. The paradigms for learning have evolved beyond the traditional classroom—in which the instructor was the source of all knowledge and the students the passive recipients of information—to a new model of interactive and collaborative learning. 21st century students want to take advantage of digital technologies for seeking and sharing information and be as digitally competent in their learning lives as they are in their personal lives. Universities therefore have a responsibility to develop digitally literate graduates in order to meet both student expectations and the demands of employers.

This study emerged in response to, firstly, student complaints about the outdated nature of essays. The students reported that, as ICT students, they were not motivated by an academic writing task that did not allow them to engage with technology, as is their chosen field and, secondly, in light of a need to cultivate digital information literacy skills among higher education students. As such, this study assessed the potential of digital curation tools for engaging and motivating students and explored whether or not today's students possess the digital information literacy skills required to live and work in an increasingly digital society. That is, can students determine the value of information they find online that is not peer-reviewed or published in an academic journal (blog posts, wikis and content on social media platforms for example)? This paper reports on the findings of a five-month study in which a cohort of 258 first year, first semester ICT students, across three demographically diverse campuses, were given the task of curating their own Scoop.it page. While the institution mandates that this *Communications for ICT* course continue to have a writing component, the digital curation platform, Scoop.it, was integrated into the curriculum to make the experience more interactive for the

learner.

The results of this study indicate that the students enjoyed the addition of the Scoop.it task and were more motivated to complete the assignment than they would have been if it had entailed the submission of an essay alone. However, while Scoop.it was an effective engagement tool, the students in this study reported frustration at being unable to use the digital content they had curated in their essays, due to institutional mandates for the exclusive use of peer-reviewed sources. The curation task was also successful, although less so, as a mechanism for cultivating digital information literacy skills among this cohort of students. Although most students exhibited the signs of analysis and criticality that constitutes digital information literacy, a number of students noted their inability to determine the value of web-based content; that is, online information that is not peer-reviewed or published in an academic journal, such as blogs, wikis and social media content.

Digital Curation

Although definitions of curation have been proposed (Scime, 2009; Wheeler, 2011), they do not take into account the meta-cognitive processes—synthesising, analysing, and prioritising—that are at work in the curation of digital content. The following definition, which encompasses the digital competencies that are required to effectively use digital curation tools, will thus be used for this study. Digital curation is:

Curation is an active process whereby content/artefacts are purposely selected to be preserved for future access. In the digital environment, additional elements can be leveraged, such as the inclusion of social media to disseminate collected content, the ability for other users to suggest content or leave comments and the critical evaluation and selection of the aggregated content. This latter part especially is important in defining this as an active process (Antonio, Martin & Stagg, 2012).

In response to the over-abundance of information now readily available on the internet, a suite of digital curation tools have emerged and are aligned with the need to locate, select and synthesise web content. Scoop.it is one such tool that allows the user to select, preserve, maintain, collect and archive digital assets in one place. In this study, Scoop.it was incorporated into the curriculum to provide a more interactive and engaging learning experience that was more closely aligned with the expectations of this particular cohort of ICT students. The assessment task was also designed to assess the students' digital information literacy skills. By enabling the students to curate digital content on their Scoop.it pages, and justify their inclusion of this content, we were able to observe how the students determined whether or not a particular piece of content was credible and, by extension, if they exhibited digital information literacy skills. The researchers selected Scoop.it for this task as it adheres most closely to the aforementioned definition of curation.

Student Engagement

Student engagement is a broad term implying a wide range of activities. Generally speaking though, engagement is often discussed in terms of involvement with class-mates, lecturers and the university community, both in a content-centered and social sense. The degree of involvement is recognised as a factor contributing to student success (Kuh, 2002). A student's involvement in university life has been shown to produce a more determined approach to their studies which in turn leads to a greater sense of satisfaction. (Astin, 1993; Pascarella & Terenzini, 2005). A positive feedback loop is created that leads to a student's eventual success.

In more specific terms, Chapman (2003) defines engagement as a "students' cognitive investment in, active participation in and emotional commitment to their learning." In this project, student engagement was created by giving students an assessment task aimed at cultivating a sense of ownership and responsibility over their own learning journey. It was surmised, in lieu of Chapman's definition, that the public-facing nature of the digital curation platform would motivate students to invest greater effort into the task as the final product was accessible to both peers and the wider community. Previous research (Laird and Kuh, 2005; Coates et al, 2008) has found that students who engaged in forms of learning involving higher cognition, such as analysing, synthesising, and evaluating, tended to be more engaged. Hockings et al (2008) likewise suggested that students who reflect, question, conjecture, evaluate and make connections between ideas are more deeply engaged. In order to complete the Scoop.it task, the students were required to reflect on and critically analyse whether or not an item of digital content was credible. The students could then use the content they had curated to inform their written essay.

Digital Information Literacy

Digital literacies have been defined as the capabilities that individuals require to live, learn and work in a digital society (JISC, 2013). A recent JISC report highlighted the value that employers place on graduates who can communicate effectively via digital media and who can critically judge the validity and reliability of online information. However, higher education institutions continue to mandate the exclusive use of peer-reviewed materials in course assessments to the detriment of web-based content, such as information found in blogs, wikis and via social media platforms. As such, students are not developing the skills they require to be able to determine the credibility of this digital information. One of the aims of this study was to shed light on the claim that undergraduate students indiscriminately use web-based resources with little respect for or understanding of conventional study practices. For the purpose of this research, digital information literacy refers to the set of 21st century skills outlined by the Laboratory for Innovative Technology in Education at the University of Houston (2013). Digital information literacy includes the ability to effectively analyse and evaluate evidence; to analyse and evaluate alternate points of view; to synthesise and make connections between information and arguments; and to reflect critically, interpret and draw conclusions based on analysis. Several universities (California State University, 2006; University of Central Florida, 2006) have begun initiatives to improve students' information literacy skills. However, without effective assessment, it is difficult to know if these programs are paying off. This problem was similarly encountered in this research. In order to measure whether or not the Scoop.it task had a positive effect on students' digit information literacy skills, the students would need to complete an information literacy skills test, such as the Educational Testing Service's iSkills assessment, both before and after the completion of the Scoop.it task. The research method did, however, serve as an indicator to determine the extent to which this cohort of students perceive that they have the combination of technical and cognitive skills needed to operate in an increasingly digital world and it enabled us to assess whether the students exhibited signs of digital information literacy skills.

In this study, digital information literacy was assessed by asking the students to submit an annotated bibliography in which they justified the web-based content that they collected for their Scoop.it pages. The "appropriation of texts external to the university has significant implications for the changing status of knowledge and what counts as authoritative and legitimate" (Lea & Jones, 2011). Universities continue to advocate the use of peer-reviewed content but what they are failing to understand is that in an ever-changing discipline, such as ICT, this is no longer the most current information and students need to be able to draw on digital content in order to be privy to the most up-to-date information in their field. Building on this premise, and to ensure that a degree of quality is maintained, there is a need to understand how today's higher education students interpret the reliability and authority of web-based content that is not peer-reviewed.

Method

Conduct

258 students enrolled in a first year, first semester *Communications for ICT* course constituted the participants of this study; 90% of which were Bachelor of IT students. The first assessment item for this course was divided into two parts. Part A of the assignment, due at the end of week 4, required the students to create a Scoop.it page about an area of ICT that they were interested in pursuing in their career. The students were presented with a list of 28 possible topics which included a range of new and emerging technologies, such as 3D printing and Google Glasses. The students were able to choose one of the topics on the list or, alternatively, they were able to select a topic of their own accord. Over a four-week period, the students were required to collect a minimum of five pieces of digital content for inclusion on their Scoop.it page. As part of the Scoop.it task, the students were also able to post comments, suggest content to other users and reuse content (re-scoop) from other Scoop.it pages. At the end of week 4, students submitted their Scoop.it URL to the course lecturer. Part B of the assignment, due at the end of week 6, was a 1000 word essay, which constituted a more formal continuation of the Scoop.it task (Part A). The students had a choice of two topics for their essay:

- Topic 1: Based on current trends in the IT industry, what might be the five most important technologies in the next 5 to 10 years?
- Topic 2: Based on your chosen field, research what developments are likely in that field in the next 5 to 10 years?

Topic 1 was intended for students who needed help clarifying their career aspirations, while Topic 2 was aimed at students who had a clearer idea of their future direction. In order to complete the essay, the students were required to source peer-reviewed materials. Although the students could use the content they had curated on Scoop.it to inform their search, university requirements insist that students use peer-reviewed sources exclusively for their essays. In addition to the formal essay, the students were asked to justify the inclusion of

five pieces of digital content that were published on their Scoop.it pages, which constituted a web-based annotated bibliography. Part A of the assignment, the Scoop.it pages, was worth 10% and Part B, the essay and digital annotated bibliography, was worth 20%.

Data Collection Methods

To maximise the usefulness of the results, three different data collection methods were used for this research:

- Documentary evidence: Students submitted their completed Scoop.it pages which were then graded out of ten, based on the overall quality of the presentation and the satisfaction of the minimum criteria for items of content required. Content analysis of the annotated bibliography was also undertaken.
- Survey questionnaire: Following the completion of the assessment task, an online survey that consisted of 21 questions was distributed to the participants. Three of these questions were open-ended and allowed the students to comment generally on the Scoop.it assessment task.
- Focus group: To supplement the survey data, a focus group was conducted two weeks later with a group of six students who participated voluntarily.

Results

Documentary evidence

258 Scoop, it pages were submitted and given a grade out of 10. The average mark across the sample was 7.35. For each student, the Scoop, it topic, the number of scoops (pieces of content they had collected), the number of re-scoops (pieces of content they had collected from another Scoop.it page), and the total number of items they had collected were calculated. Only 22 students scooped the minimum five pieces of content, whereas 236 students scooped more than six pieces of digital content. Expressed as a percentage, 91.5% of students collected more than the five pieces of content that were required for the assessment task. 206 re-scooped content from another Scoop.it page and 52 did not. In percentage terms, 79% of students utilised the re-scooping functionality of Scoop.it, while 21% did not. 48 students (18.6%) selected a topic that was not included on the list provided. In order to assess digital information literacy skills, the students' perceived ability to determine the value of web-based content was explored and content analysis of the annotated bibliographies was undertaken. The researchers looked for traits that are indicative of digital information literacy skills, according to the Houston definition aforementioned, including the ability to analyse, synthesise, and interpret the value of information that is found online, which is not peer-reviewed or published in academic journals. One of the students observed that a piece of content was retrieved from an "official product website thus making the information reliable [and] also fairly recent..." Another student noted with regards to an article that "although... [it] has some older content on it, I found that it still explains what we should expect when it comes to future web browsing and how we're starting to use our actual computers less now that we can do the exact same things on our simple tablets and mobile devices. Great read and quite relevant."

Survey Questionnaire

89 students, out of 258 active enrolments, took-part in the voluntary online survey, yielding a participation rate of 34.5%. In response to the question, 'Which statement best describes how frequently you engaged with Scoop.it?, 44% of respondents indicated that they checked their Scoop.it accounts at least once a week, while 40% of respondents checked their accounts at least three times a week. 2% of participants checked their Scoop.it accounts every day and 14% indicated that none of these responses was applicable. This latter group was asked to specify how frequently they engaged with Scoop.it. The most common response was that participants checked their Scoop.it accounts once in the four week period and collected the five pieces of content required for the assessment task during this single use of Scoop.it.

Question	Strongly Disagree	Disagree	Neither Agree nor	Agree	Strongly Agree	Total Responses	Mean
			Disagree				



Figure 1: How frequently students engaged with their Scoop.it accounts expressed as a percentage

The students were asked 'what were the primary benefits of using Scoop.it? (Check all that apply) Survey respondents were presented with five possible responses:

- Learning how to assess the value of web-based content
- Learning how to use a new digital tool
- Engaging with my topic
- Using digital content in my essay
- Networking with other students

69% of respondents indicated that the primary benefit of using Scoop.it was 'Engaging with my topic', while 62% suggested that 'Learning how to use a new digital tool' was an advantage. 53% of students said that the main benefit of Scoop.it was 'Learning how to assess the value of web-based content'.

For Likert-scale items, student responses for Strongly Agree and Agree were collapsed and the same was done for Strongly Disagree and Disagree. The students were asked to indicate 'To what extent do you agree or disagree with the following statements.' Table 1 shows the students' responses to these statements.

 Table 1: Student responses to the question: To what extent do you agree or disagree with the following statements

The use of Scoop.it helped me develop my critical thinking skills.	8	17	22	29	8	84	3.14
As a result of using Scoop.it, I feel I can make judgments about the value of digital content.	4	15	29	32	4	84	3.20
As a result of using Scoop.it, I feel I can synthesise and organise ideas and information.	4	8	23	40	9	84	3.50
As a result of using Scoop.it. I feel I can make judgments about the currency of information.	5	13	30	31	5	84	3.21
As a result of using Scoop.it, I feel I can analyse content in-depth.	5	13	35	29	2	84	3.12
As a result of using Scoop.it, I feel able to cite web-based content.	4	16	23	32	9	84	3.31
As a result of using Scoop.it, I feel confident in my ability to use web- based content in my assignments.	3	11	26	32	12	84	3.46
As a result of using Scoop.it, I feel I can distinguish between good and bad web-based content.	7	14	31	22	10	84	3.17

These statements were designed to assess whether or not the Scoop.it assessment task could be used to cultivate digital information literacy skills among higher education students. A total of 84 responses were received and, of this figure, 49 students indicated that as a result of using Scoop.it they feel able to synthesise and organise ideas and information, compared to 12 who did not. 44 students said that as a result of using Scoop.it, they feel confident in their ability to use web-based content in their assignments, while a further 41 students suggested that as a result of using Scoop.it, they are able to cite web-based content. In contrast, 14 students remained uncertain about how to use web-based content in their assignments and 20 were not confident citing digital materials. 37 respondents agreed that Scoop.it helped them to develop their critical thinking skills, while 25 disagreed and 36 students felt confident in their ability to make both judgements about the value of digital content and the currency of information. 19 students disagreed that the Scoop.it assessment task had enabled them to make value judgements about digital content or to assess the currency of information.

In order to assess whether or not the students were motivated to use Scoop.it and if the digital curation platform helped to clarify their career aspirations, the students were asked to indicate the extent to which they agreed or disagreed with the following statements. Table 2 shows the students' responses to these statements. Of the 84 responses received, 63 students said that they enjoyed using Scoop.it for the assessment task compared to 9 who did not and 12 who neither agreed nor disagreed. 55 students agreed that they were motivated to use Scoop.it to complete the assessment task, compared to 11 who disagreed and 18 who were undecided. 48 survey respondents indicated that Scoop.it helped them to determine area of ICT they were previously unaware of as a result of using Scoop.it, compared to 18 who did not and 45 students agreed they learnt more from using Scoop.it than they would have from an essay alone, while 17 disagreed. 38 students agreed that the Scoop.it tasked helped them to clarify their career goals, compared to 26 who disagreed and 20 who were undecided.

Question	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree	Total Responses	Mean
The use of Scoop.it has helped me clarify my career goals.	9	17	20	30	8	84	3.13
The use of Scoop.it has helped me determine the areas of ICT I am interested in.	9	7	20	39	9	84	3.38
As a result of using Scoop.it, I have discovered areas of ICT that I was previously unaware of.	9	9	19	32	15	84	3.42
I learned more from using Scoop.it than I would have from writing an essay alone.	10	7	22	27	18	84	3.43
I was motivated to use Scoop.it to complete the assessment task.	4	7	18	37	18	84	3.69
I enjoyed using Scoop.it for the assessment task.	5	4	12	45	18	84	3.80

Table 2: Student responses to the question: To what extent do you agree or disagree with the following statements

The students were then asked a series of questions that were designed to assess whether or not they would use Scoop.it again if given the opportunity. Table 3 shows the students' responses to these statements. 58 students suggested that they would take another course with a Scoop.it component, 9 would not, while 53 would use Scoop.it in another situation, compared to 16 who would not. 50 survey respondents agreed that the use of Scoop.it enhanced their learning experience, compared to 13 who did not and 22 who were undecided. When asked whether or not they would continue to use their Scoop.it accounts after the assessment task had been completed, 35 respondents indicated a desire to continue using their account, while 20 students said that they would desist with the platform and 28 were undecided.

Table 3: Student responses to the question: To what extent do you agree or disagree with the following statements

Question	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree	Total Responses	Mean
The use of Scoop.it enhanced my learning experience.	7	5	22	42	8	84	3.46
I would take another course with a Scoop.it component.	5	4	17	40	18	84	3.74
I would use Scoop.it in another situation.	7	9	15	39	14	84	3.52

I will be able to use Scoop.it in my future studies.	5	8	19	40	12	84	3.55
Scoop.it is a valuable research tool.	7	6	16	45	10	84	3.54
I will continue to use my Scoop.it account after the assessment task is completed.	9	11	28	28	8	84	3.18

The students' responses to the three open-ended survey questions were analysed and key themes were identified. Two themes emerged: motivation and information literacy. In terms of motivation, the students acknowledged their enjoyment of the assessment task, particularly as an alternative to the standard essay. In the words of one respondent, "I found using Scoop.it to create a bibliography much more appealing than doing so by more common methods—making it enjoyable rather than just plain boring." Another student said "Thanks for providing us with a more entertaining assessment task. I am the kind of student who doesn't like writing tasks and this made it a lot more enjoyable and I feel like I got a lot more information out of using Scoop.it than I would a text-only task." The students also expressed their desire to continue using Scoop.it and to put additional effort into the task than was actually required for the assessment itself: "While I was looking for sources via Scoop.it, I found I was genuinely interested in the sources that were recommended." Another of the respondents said "I really enjoyed using Scoop.it in my assessment task. I found myself reading an article that was suggested and then going off on a tangent looking at related topics. That is what I love about Scoop.it; it made it easy to find interesting information that I was able to use in my assessment..."

With regards to digital information literacy, the survey responses suggested that one of the issues with Scoop.it was that a large percentage of the content that was generated was not peer-reviewed: "The content [Scoop.it] suggested for review was not very academic so I used the Scoop.it add-on to add the journals and such." One of the students acknowledged that, although Scoop.it "gave me greater knowledge of the topics that I was discussing", he/she was still forced to look elsewhere for sources to complete the essay as the Scoop.it content was not peer-reviewed: "It did give me great exposure to the major players (researchers and companies) that were on the cutting edge of my topic. It was those names that I then used to find sources of better quality (corporate research material, peer-reviewed journals)." Another student similarly acknowledged the lack of peer-reviewed materials: "None of the sources were peer-reviewed on Scoop.it yet we were apparently meant to only use peer-reviewed sources for the essay." In terms of using Scoop.it to cultivate information literacy skills, one of the students said that "while I answered neutral for some questions regarding the development of some skills, it is only because I have year of tertiary experience. I certainly believe that the use of Scoop.it would have helped me in my earlier years of study. I also believe it...will be helpful for students who are just starting tertiary studies and not just IT-related degrees but all degrees/courses that have essay writing aspects." Another of the students reflected that they needed to "wed through a lot of irrelevant information and many of the popular stories were not of a high quality."

Focus group

Six students volunteered to take part in the focus group, which elicited specific responses to questions of interest. The students' responses to a range of semi-structured interview questions were transcribed and content analysis was then undertaken in order to identify key themes. Motivation to engage with the Scoop.it assessment task was apparent in the student responses: "I want to play with it more and I've been thinking about doing other stuff with it...I wanted to play with the interface and make it more presentable and stuff. I enjoyed it." Another student said "I would come to uni and then go home to [Scoop.it] and see what other people had scooped..." In terms of information literacy, one of the survey respondents said that "I think [Scoop.it] for education is a great technology, especially if it were able to access peer-reviewed materials", while another student noted the currency of information Scoop.it provided: "Scoop.it gave me good ideas about where to look for information and what was new and emerging in the field."

Discussion

Documentary evidence

We analysed each of the 258 Scoop.it pages in order to assess whether or not the students were motivated to complete the assessment task and if they exhibited digital information literacy skills in their web-based annotated bibliographies. To complete the task, the students were required to curate a minimum of five pieces of content. 22 of the 258 students collected the minimum five pieces of content, whereas 236 students curated more items than was required, which suggests that they were motivated to put additional effort into the assessment task. In addition, 206 out of 258 students re-scooped content from other users, which was not a requirement of the assessment task. In order to do this, the user has to actively search for other Scoop.it pages on a similar topic area from which they can draw on and reuse (re-scoop) content for their own pages. Given that 79% of students re-scooped content, despite not having to do so, suggests that students were engaged with the platform and motivated to share content with others who had similar interests. This supports previous research which found that social software tools give learners a greater sense of agency by allowing them to engage in a global community where knowledge is exchanged and students assume an active role in the learning experience (McLoughlin & Lee, 2010). The results of this study suggest that the opportunity to showcase one's work to the community compelled students to invest greater effort in the learning task and to take ownership of their Scoop.it pages, which were accessible to the wider public.

Universities have a degree of responsibility to develop digitally literate graduates in accordance with student expectations and the demands of employers. We analysed the students' annotated bibliographies in order to identify whether or not they exhibited digital information literacy skills. While some students merely paraphrased what was in the articles they curated, other students attached value-judgments to the content, which were indicative of information literacy skills. One of the students noted that the information they had retrieved was from an "official product website thus making the information reliable [and] also fairly recent..." This suggests that the student was able to assess the value of content based on both the reliability and currency of information; two key indicators of digital information literacy. Another student observed that although one of his/her sources "has some older content on it ... [It was a] great read and quite relevant." This student was similarly able to determine whether or not this digital item was credible based on the currency of the source and the relevance to his/her topic. In accordance with the digital information literacy skills outlined by the Laboratory for Innovative Technology in Education-the ability to effectively analyse and evaluate evidence; to analyse and evaluate alternate points of view; to synthesise and make connections between information and arguments; and to reflect critically, interpret and draw conclusions based on analysis-the majority of students demonstrated their ability to access and utilise quality sources, based on the relevance, currency and credibility of the information.

Survey Questionnaire

The quantitative and qualitative results of the non-compulsory survey (n=84) suggest that the integration of the digital curation tool Scoop.it into the curriculum was successful at engaging this cohort of students. 84% of survey respondents checked their Scoop.it accounts between one and three times per week over the four week period. The students were only required to publish five pieces of content, which they could have done in a single instance of logging into their account. As such, given that 84% continued to log in to their accounts for the duration of the assessment task suggests that they enjoyed using the platform and were motivated to use it even after they had achieved the minimum criteria outlined in the assignment. 63 students, or 75%, enjoyed using Scoop.it and 55 students (65.5%) said that they were motivated to use Scoop.it for the assessment task. The survey respondents who expressed a desire to use Scoop.it in another situation further support the conclusion that the students were motivated by the digital curation activity. 58 students (69%) said that they would take another course with a Scoop.it component and 53 students (63%) would use Scoop.it in another situation. In contrast, only 9 and 16 students respectively said that they would not use Scoop.it in alternative situation. This was supported by the open-ended survey responses with students reporting that Scoop.it made the assessment task "enjoyable rather than just plain boring" and that it compelled them to go "off on a tangent looking at related topics." The efficacy of Scoop.it was found to be high with 59.5% of students saying that it enhanced their learning experience and 69% indicating that the primary benefit of Scoop.it was engaging with his/her topic. The assessment task was also successful, although less so, at helping students clarify their career goals. 57% of students indicated that Scoop.it helped them to discover and determine the area of ICT they were interested in pursuing in their careers.

Scoop.it was a valuable addition to the learning experience, which motivated the students to engage with their essay topic and invest greater effort in the assessment task. The results also suggest that Scoop.it could potentially be used to cultivate digital information literacy skills among higher education students. 53% of survey respondents said that the primary benefit of using Scoop.it was learning how to assess the value of webbased content. In addition, 49 students (58%) agreed that as a result of using Scoop.it they feel able to organise ideas and information, whereas only 12 students disagreed and 23 were undecided. Moreover, 44 students (52%) were confident in their ability to use web-based content in their assignments and 41 students (48%) felt able to cite this content in their essays. One of the students noted that while Scoop.it did not help him/her to determine the credibility of content, as he/she had had years of tertiary experience, "I certainly believe that the use of Scoop.it would have helped me in my earlier years of study. I also believe it...will be helpful for students who are just starting tertiary studies and not just IT-related degrees but all degrees/courses that have essay writing aspects." However, 14 (16.5%) and 20 students (24%) respectively remained unsure of how to utilise digital content for writing tasks and how to reference these materials. This suggests that while Scoop.it may have enabled some students (43%) to make judgments about the value of web-based content, many students are either unaware of how to determine whether or not a digital source is credible or are reluctant to use these resources because of institutional requirements for peer-reviewed sources. It is worth noting that although the students collected at least five pieces of digital content for their Scoop.it pages, they were unable to cite these in their essays as peer-reviewed resources were mandatory. The inability to draw on the content that the students curated was raised as a potential drawback of the Scoop.it task: "None of the sources were peer-reviewed on Scoop.it yet we were apparently meant to only use peer-reviewed sources for the essay." Moreover, this research assessed students' perceptions of whether or not Scoop it had assisted their information literacy skills but it did not actually measure them. In future iterations of this study, it would be worthwhile to test whether or not the Scoop.it task contributed to an improvement in the students' digital information literacy skills by getting the students to complete a literacy skills test both prior to and after the Scoop.it assessment task.

Focus group

The focus group discussions were broadly consistent with the qualitative data from the survey. The results suggest that the students' were motivated by the Scoop.it task to the extent that they were willing to invest greater effort into the completion of the assignment. Rather than simply satisfying the minimum criteria of the task (collecting five pieces of digital content), the students wanted to make their Scoop.it pages presentable and utilise the additional functionality of the platform: "I want to play with it more and I've been thinking about doing other stuff with it...I wanted to play with the interface and make it more presentable and stuff. I enjoyed it." The inclusion of the Scoop.it component into the curriculum also extended learning beyond the classroom and encouraged students to co-create knowledge with both their classmates and the wider community: "I would come to uni and then go home to [Scoop.it] and see what other people had scooped..." While the responses to the Scoop.it task were overwhelmingly positive, a disjunction between the students' desire to utilise digital content in their essays and institutional requirements to use peer-reviewed sources was apparent, with one student reporting that the tool would be invaluable for education, "especially if it were able to access peer-reviewed materials."

Conclusion

This study explored the potential of the digital curation platform Scoop.it as a tool for both facilitating engaging learning experiences and cultivating digital information literacy skills among higher education students. The results of the project indicate that using Scoop.it to curate a web page relating to interesting, cutting-edge technology was an effective engagement strategy. Its potential as a tool for cultivating students' digital information literacy skills was, however, less apparent.

The collection of data in this project involved three separate methods; analysis of the students' Scoop.it pages, a survey questionnaire and focus group interviews. The results suggest that the students were motivated to engage with the assessment task due to the outward-facing nature of the Scoop.it platform. The knowledge that their Scoop.it pages were openly accessible compelled the students to invest greater effort into the task and high results were thus achieved. The students openly reported that they enjoyed the Scoop.it task more than an essay and indicated a desire to use Scoop.it in other situations. The potential of Scoop.it as a tool for cultivating digital information literacy skills among higher education students is, however, less apparent and further research in this area is required. While the majority of students exhibited the signs of analysis and criticality that are indicative of digital information literacy skills, others reported difficulty determining the value and credibility of web-based content. Universities therefore have an obligation to provide students with opportunities to engage with digital technologies and utilise digital resources. Higher education students need to be able to judge the

validity and reliability of information they find online; not just the peer-reviewed content that has been institutionally approved and is available in the library. While institutions continue to deny the appropriation of web-based resources, students' ability to find, analyse, and critically evaluate online information will remain unchanged and core competencies, such as digital information literacy, will inevitably fall by the wayside.

References

Antonio, A., Martin, N., Stagg, A. (2012). Engaging higher education students via digital curation, In *Future* challenges, sustainable futures. Proceedings ascilite Wellington 2012,

http://www.ascilite.org.au/conferences/wellington12/2012/pagec16a.html.

- Astin, A. (1993). What matters in college? Four critical years revisited. San Francisco: Jossey-Bass. Chapman, E. (2003). Alternative approaches to assessing student engagement rates, *Practical assessment, research and evaluation*, 8(13), <u>http://pareonline.net/getvn.asp?v=8&n=13</u> [viewed 7 Mar 2013].
- Coates, H., Hillman, J., Jackson, D., Tan, L., Daws, A., Rainsford, D. & Murphy, M. (2008). Attracting, engaging and retaining: New conversations about learning, *Australasian Student Engagement Report* (AUSSE), Camberwell: ACER.

Hockings, C., Cooke, S., Yamashita, H., McGinty, S. & Bowl, M. (2008). Switched off: A study of disengagement among computing students at two universities, *Research Papers in Education*, 23(2), 191-201.

- JISC. (2013). Developing digital literacies programme. [online] Available at http://www.jisc.ac.uk/whatwedo/programmes/elearning/developingdigitalliteracies.aspx.
- Kuh, G. (2002). The National Survey of Student Engagement: Conceptual Framework and Overview of Psychometric Properties. Retrieved 25 June 2013: http://nsse.iub.edu/pdf/conceptual_framework_2003.pdf
- Laboratory for Innovative Technology in Education. (2013). *New technologies and 21st century skills* [online] Available at <u>http://newtech.coe.uh.edu/</u>.
- Laird, T. & Kuh, G. (2005). Student experiences with information technology and their relationship to other aspects of student engagement, *Research in Higher Education*, 46(2), 211-233.
- Lea, M. & Jones, S. (2011). Digital literacies in higher education: exploring textual and technological practice, *Studies in Higher Education*, 36(4), 377-393.
- McLoughlin, C. & Lee, M. (2010). Personalised and self-regulated learning in the Web 2.0 era: International exemplars of innovative pedagogy using social software, *Australasian Journal of Educational Technology*, 26(1), 28-43.
- Pascarella, E. T., & Terenzini, P. T. (2005). How college affects students: Vol. 2 A third decade of research. San Francisco: Jossey-Bass.

Scime, E. (2009). *The content strategist as digital curator*. <u>http://www.dopedata.com/2009/12/08/the-content-</u> strategits-as-digital-curator/ [viewed 30 May 2012]

Wheeler, S. (2011). *The great collective*, <u>http://steve-wheeler.blogspot.com.au/2011/07/great-collective.html#!/2011/07/great-collective.html</u>.

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