Title

Active apps: using content curation apps to facilitate active engagement in flexible learning environments.

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OVERVIEW

Overview, Aims and Context

This project focused on the use of a digital curation app, Flipboard that can be used in class as part of active learning sessions, to encourage students to bring their own device for learning (BYOD4L) and engage in active learning activities.

Aim:

To ascertain the perceived effectiveness of using content curation digital apps in active learning environments upon student learning and engagement:

Objectives:

To encourage social and collaborative learning amongst students;

To encourage students to take ownership of their own learning;

To move beyond 'teacher-centred to 'student-centred' learning;

To extend the use of content curation apps in active learning environments across the Ulster University Business School;

To extend the evidence base as to the perceived impact of content curation apps in active learning environments on student learning and engagement.

Description

The project focused on the use of a content curation digital apps, Flipboard in a range of modules at different levels across the Ulster University Business School, including cross campus and conducted across two different semesters.

Students were encouraged to use the new resource and engage with it on a regular basis to enhance and broaden their knowledge in the subject specific area. Directed guidance was be given on a weekly basis where some highlighted articles were showcased towards the end of each class and students encouraged

to access the app resource and read further between lectures and in preparation for their active learning seminars.

Design

Methodology:

Norton advocates action research for teaching and learning that is reflective in nature with the aim of improving "some aspect of the student learning experience" (2009: XV). This active learning project falls within this domain, as it aimed to ascertain the effectiveness of content curation digital apps in active learning settings upon student learning and engagement. Part of the design was to help identify a potentially more effective mechanism for providing students with up-to-date topical information for their studies that they would be willing and able to engage with on a regular basis. Through researching what works best in what contexts, the aim was also to put to use what is evidenced as best practice as a result of those findings, disseminating that as best practice and encouraging others to implement elements of it into their own teaching practice. To this end the project fits with an action research approach which "is fundamentally about the transformation of practice" (McIntosh, 2010: 35) and simultaneously improving the student experience.

Project Design:

The project design focused on the use of content curation digital apps and in particular the Flipboard app in a range of modules at different levels across the Ulster University Business School, including cross campus and conducted across two different semesters.

Typical composition of the student groups was full time undergraduates (mostly aged 18-22) and post graduates. All students in the study group under question had access to either a smartphone or tablet which could run the Flipboard app. Flipboard was chosen as the app for a number of reasons: it is one of the top digital curation tools (Green and Green, 2014); it is a free app (no cost implications); most modern smartphones already come with the app pre-loaded; all students in the study group have access to a device which could run the app efficiently; and it is known for being user-friendly (Chaffey, 2015). Students were encouraged to use the new resource and engage with it on a regular basis to enhance and broaden their knowledge in the subject specific area. Structured active learning seminars were then designed around subject specific content in the digital magazines housed within the Flipboard app.

Data Gathering Techniques:

Data was gathered through a range of techniques including student focus groups and staff reflective logs. Several focus groups were be conducted to gather in-depth qualitative data from those students who have had these technologies incorporated into their modules. Staff also recorded their reflections of the active learning sessions using a reflective record pro-forma, such reflection is consistent with an action research approach. The engagement of a research assistant for this aspect of the project enhanced objectivity and reduced bias.

RESULTS

Findings and Conclusions:

Results were summarised under three core sections as summarised in Table 1. Section A explores issues in relation to Flipboard and learning. Section B considers the impact and preferences of the type of device used

to facilitate Flipboard in the classroom and at home. Section C investigates student perceptions of the Flipboard app in terms of improvements which may enhance future learning.

Categorisation of Results	Over-arching Themes for Analysis	Themes
Section A	Learning	 Access to new ideas Independent learning Group discussion Application Motivation and Engagement The Learning Environment
Section B	Device	 Portability and Flexibility Academic work Vs Leisure Visualisation
Section C	The APP	 Collaboration Navigation Organisation/Folders

According to the findings, students considered the Flipboard sessions to be beneficial in adding value to their learning by bridging the gap between personal experience, industry/employment/the real world and theory. They unanimously agreed that learning was enhanced through group discussion and collaboration, although were aware that not all individuals for a number of reasons, engaged well in class. Just under half of the participants however believed that it was the articles recommended by the lecturer which prompted class discussion and these were generally accessed through the URL. The reason for this was to cut out inefficient time in flipping irrelevant articles shown in the app.

Participants suggested a number of ways in which classes could promote motivation and engagement for the benefit of the group as a whole. Over three quarters of participants used their phone to access information because phones are accessible, more portable and facilitate informal learning. Results further demonstrate that Flipboard serves the function of encouraging independent learning, with students enjoying the ability to reap the rewards of what they "put in" to the research. Students suggested that Flipboard enhances basic theory taught in class and adds value through real life comparisons.

The staff reflective records revealed the following:

Students liked reminder email; Engaged less confident students; Encouraged student creativity; Student discussion gained momentum; Table top 'post it' poster focused group thinking/discussion/collaboration/fun; Students were more creative as not an assessed activity; Developed knowledge for other assessment/exams; Logistically – space challenges; Moving rooms disengaged the students; Students with either no device or smart phone; Giving time in class to read article; Slow to get students engaged in discussion. **EVALUATION Reflective Commentary** Reflecting on the overall project the team feel that this was a worthwhile active learning innovation, but that some refinements could be made and that the space issues still remain a challenge in designing active learning activities. Other recommendations from the overall project are as follows: Wider incorporation into the curriculum and module assessments; Encourage active engagement; Improve learning environment/space/prioritise existing spaces; Promote use of larger screen devices; Support through online chat or blogs; Improve navigation through use of folders/app design improvements; Incorporate table top flipcharts/poster sheets; There were still questions over whether this might be a useful assessment activity as opposed to a nonassessed seminar. Student Engagement (to be completed by the student partner): The student partners in this project were the students enrolled on the modules. The following are some of the extracts for the student focus groups based on some of the main themes from the findings: Accessing new ideas "In my flat I don't have live TV I only have a fire stick that's all that we watch. And it's good because it

"In my flat I don't have live TV I only have a fire stick that's all that we watch. And it's good because it makes you watch news and it highlights just the articles you are interested in. I'm interested in events so as well I read some articles that weren't even part of our seminar".

Encouraging independent learning

".....we are given the articles but we are doing the analysis and thinking out the theory ourselves".

• Promoting group discussion

"...to get different ways to pull apart the article. It made you understand and respect other peoples' opinions"

Developing application of theory to practice

"Yes it was direct application, you're using it in a real situation. Some articles might have been hard to decipher, you can then pretty much go through the theory in detail and apply it. That is the helpful part"

• Enhancing motivation and engagement

"It all depends on the group that you are in, if you are in a shy group or one that has problems engaging then it's difficult. I was lucky that in my group we all liked to talk and share discussion."

• Flexibility and portability

"I got myself an iPad and I never used it all, I had nothing to use it for. But I found that for this thing I thought I could use my iPad, I thought it was class. So if I was waiting on a train or something I would do a bit of reading on this."

Learning Environment and Engagement:

The appropriate learning space for this project was vital to its success, however it was exceptionally difficult to ensure such space for every session on every campus.

This was the most challenging aspect of introducing this active learning enhancement and initiative in the University.

Impact

According to the findings, students considered the Flipboard sessions to be beneficial in adding value to their learning by bridging the gap between personal experience, industry/employment/the real world and theory. They unanimously agreed that learning was enhanced through group discussion and collaboration.

This is evidence by the following extracts from the student focus groups and staff reflective logs:

Student focus Groups:

"....we had a 2 week seminar on employability and careers, and one of the skills she said were missing in students was consumer awareness. This is what that APP does because I don't read newspapers or listen to the news, so these articles promote awareness".

"If there was less articles you'd get a notification on your device when the lecturer has added it....so it prompts you prepare for class. So because it's hooked up to all the other classes...you end up with loads of notifications...anything global marketing, not just what we are looking for."

"... To get different ways to pull apart the article. It made you understand and respect other peoples' opinions".

"Yes it was direct application, you're using it in a real situation. Some articles might have been hard to decipher, you can then pretty much go through the theory in detail and apply it. That is the helpful part".

"Each week it was related to the lecture so that when we were doing our essays you can slot the examples in, for example one week we looked at crisis that happened at events. X can say well this can happen or that can happen but the flip sessions actually bring that to life".

"We were asked to use some of the examples on flipboard to use as evidence for our exam, which is beneficial because when you are learning there and then you can actually apply it. We broke down each article and learned the theory behind itso we build up a relevance to the theory from the start. And we then could give more detail in our exams".

"And I suppose it reinforces my learning by adding value to it"

Staff Reflective Logs:

"Giving the students time to discuss it in groups went well and I could hear quite heated debates during the preparation time which we good."

"Students asked were they being assessed and when they heard this I was surprised how they really relaxed which was encouraging and spoke their minds more freely and came up with some great funky ideas to address sustainability challenges with events." "It was interesting to note how the quieter students in the class started to gain confidence and happy to articulate their view or opinion"

"The one element that is frustrating is the use of the space as it is hard to get the students into groups in a linear classroom layout."

"It is clear to me that space and being able to book the most appropriate space is the biggest issues for trying to engage with an encourage active learning activities such as this."

STRATEGIC DEVELOPMENT

Transferability

This project is easily transferable to any other discipline where the discussion of discipline specific content is paramount in achieving the course and module learning outcomes.

This project could certainly be extended and developed for a further Faculty interdisciplinary leaning project.

The format and structure of the sessions has already been devised by the project team and it could easily be adapted by other project teams.

In addition members of the project team would be happy to host Flipboard Tutor session/s to demonstrate the use of the app and how to get it up and running for a specific discipline/subject area. **Dissemination (internal and external)**

The aim of dissemination activities is to engage in two way discussions with the intended audiences and focuses on dissemination for awareness as well as dissemination for deeper understanding. It is also the intention that a "ripple" effect of dissemination will take place as more staff utilise this technology and share their experiences with colleagues across the UUBS and the university, in essence dissemination should become a self-perpetuating activity.

Opportunities for dissemination are being actively pursued by the project team and these will include dissemination of interim findings at the CHERP Conferences, Events, and lunchtime seminars. The project team intend submit as a full research paper to the CHERP Journal Perspectives on Pedagogy and Practice as well as a case study for inclusion in the CHERP Learning and Teaching Resource: SupporTaL. Staff involved have also pursued PSR activity through this project and written up their related PSR report (2016-17).

Opportunities for dissemination to the wider HE community have also been pursued including the presentation of the interim findings at a workshop at the Annual Chartered Association of Business Schools (CABS) Learning, Teaching and Student Experience Conference. This workshop was highly interactive and very well received across the HE Business School community and the project team are currently working on a submission for the same conference in 2018, where the intention is to devise a workshop based on the full findings. It is also the intention to pursue of publication in a relevant peer reviewed journals.

SUPPORTING INFORMATION

References

Beagrie, N. (2008). Digital curation for science, digital libraries, and individuals. International Journal of Digital Curation, 1(1), 3-16.

Beetham, H. and Sharpe, R. (2013) Rethinking Pedagogy for a Digital Age: Designing for 21st Century Learning. 2nd ed., London: Routledge.

Chaffey, D. (2015) Digital Business and e-commerce management: strategy, implementation and practice. 6th ed.Harlow: Pearson.

Christopher, A. S., and Goolsbee, J. Z. (2010) Character size and reading to remember from small displays. Computers & Education (55), 1056-1062.

Conole, G., De Laat, M., Dillon, T. and Darby, J. (2008). 'Disruptive technologies', 'pedagogical innovation': What's new? Findings from an in-depth study of students' use and perception of technology. Computers and Education, 50(2), 511-524.

Deschaine, M. E. and Sharma, S. E (2015) The Five Cs of Digital Curation: Supporting Twenty-First-Century Teaching and Learning. InSight: A Journal of Scholarly Teaching, 10, 19-24.

Gackenbach, J. (2011) Psychology and the Internet: Intrapersonal, Interpersonal, and Transpersonal Implications. London: Elsevier.

Green, J. and Green, T. (2014) Techspotting: Curating the Web. Tech Trends, 58 (1). 11-12.

Greener, S. and Wakefield, C. (2015) Developing confidence in the use of digital tools in teaching. Electronic Journal of E-Learning, 13 (4), 260-267.

Jose, S. (2016) Thriving in the digital reality of the cyber world: Towards a new teaching and learning design. Media Watch, 7 (1), 116-128.

Maier, P. and Warren, A. (2013) Integr@ting Technology in Learning and Teaching – a practical guide for educators. 3rd ed., London: Routledge.

McIntosh, P. (2010) Action Research and Reflective Practice: Creative and Visual Methods to Facilitate Reflection and Learning. London: Routledge.

McNiff, J., and Whitehead, J. (2010) You and Your Action Research Project. London: Routledge. Singh, G. and Hardaker, G. (2014) Barriers and enablers to adoption and diffusion of eLearning: A systematic review of the literature – a need for an integrative approach. Education and Training, 56(2-3), 105 – 121.

Ting, Y. (2012) The Pitfalls of Mobile Devices in Learning: A different view and implications for pedagogical design.

Journal of Educational Computing Research, 46 (2), 119-134.

Weller, M. (2011) The Digital Scholar. London: Bloomsbury Publishing PLC.

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