Using PebblePad for dissertation management within Newcastle Business School

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The Context

Newcastle Business School (NBS) has a global reputation for delivering some of the best business management education in the UK. NBS has been awarded double accreditation from the Association of Advance Collegiate Schools of Business (AACSB international) placing it in the top 1% of business schools worldwide. NBS won the prestigious Times Higher Education (THE) Business School of the Year award in 2015.

NBS helps and enables individuals to achieve leadership, management and career potential through research-rich, business relevant and academic excellent education. The dissertation module is an individual, student-led investigation into an applied business problem or issue and is central to all undergraduate programmes within NBS. The goal of the dissertation is to provide all NBS undergraduates with the underpinning knowledge of theory and practice of international business management, combined with skillful use of professional and managerial techniques and processes and an awareness of ethical issues that impact on business and professional practice, leading ultimately to increased employability.

The Problem

Each year, over 800 students undertake the NBS dissertation module supported by over 100 academic staff. Logistical issues in managing such large numbers are significant. Until 2015 a paper-based system was used and particular difficulties included:

- Matching students to tutors who are knowledgeable in the specific area of the research and also the proposed methodology
- Managing ethical approval proposals
- Having a management overview of student progress during the dissertation
Expanding upon each of these issues in turn:

It is important for the student that they have a dissertation supervisor who has the requisite experience and background to ensure that the student has the best chance of succeeding with their dissertation project. The tutor will need to provide relevant guidance, support and advice for the duration of the dissertation and ensure that the focus of the study is achievable and appropriate to the student's future employment needs. With such large numbers of students, the paper-based allocation process was extremely cumbersome and time consuming, relying on the knowledge of the lead tutors to allocate each student to the most appropriate academic tutor.

Ethical approval must be obtained prior to commencing any research. Paper and email based solutions have been used in the past but these pose significant problems in respect of administration and management of such large numbers of students. Finding a suitable technology-based solution to replace paper-based ethical submission processes has proved to be difficult in the past. Emailing submissions between those concerned does not provide a robust and auditable process. Specifying and building a bespoke solution is both costly and time consuming.

The dissertation is a 'student-led' research module over a period of 6 or more months. The onus is on the student to ensure that they progress in a timely fashion and do not fall behind their research plan. In the past, a paper-based supervision log book was used to provide a record of supervision meetings and any actions agreed during the meetings. Whilst providing an appropriate format in which to record the meetings, the paper-based log book had inherent problems related to sharing of current information – the log book was always in the student’s possession. This system worked well for those students who progressed according to schedule, however it did not efficiently flag up students who were beginning to falter early enough to take appropriate action.

From a management and strategic perspective existing methods provided little or no management information or oversight. It was not possible to clearly identify progress at a group or individual level. For example, it was difficult to have any clear picture as to how many students had not yet submitted their proposal or ethics submissions – key points in the process where student engagement could falter.
The Approach

Three PebblePad workbooks were developed,

- Dissertation Proposal (Mandatory)
- Ethics Submission (Mandatory)
- Supervision logbook (Optional)

A single ATLAS workspace was created using the Blackboard LTI link automating the process of adding students and tutors to the workspace. Three assignments were used, one for each workbook.

The dissertation proposal workbook consisted of five pages. The front page gathered information required to allocate a suitable tutor, with the remaining pages allowing expansion on the proposal. The front page allowed a student to select the main management area of the research, e.g. HR, marketing, etc. This choice was further refined using ‘many from many’ options. A similar ‘skills audit’ of tutors was conducted to identify their areas of expertise. Once all submissions were received the information from all applications was exported in .csv format and used to match each student to a suitable tutor.

Once tutors were allocated, students were placed in PebblePad Sets and feedback was provided on their dissertation proposal. Students were then able to apply for ethical consent using the second workbook before finally commencing their research project. Whist the use of PebblePad was mandatory for the dissertation proposal and ethics submission, the use of the dissertation supervision log book was optional but students were actively encouraged to use it.

Supporting such a large number of students (and tutors) using PebblePad was identified early as a potential issue. A range of help and guidance materials was developed and these included step by step guides, video tutorials and FAQs. A second set of tutor specific materials was also developed and tutors were invited to attend a 1 hour training / awareness session. Support materials provided to students also covered the generic use of PebblePad during their research project to store research data and, more importantly, to actively reflect upon their progress. A custom template covering Gibbs Reflective Cycle (Gibbs, 1988) was made available institution-wide to assist the students with reflection.

The Results

Key Outcomes Were:

Substantially reduced administration: The LTI link with Blackboard automated the process of having to create PebblePad accounts for the students and add them to the workspace – this was invaluable in setting up the workspace, especially with such large numbers.
Relatively few IT helpline enquiries: Whilst the student experience will be the subject of an academic review, it is clear from the lack of requests for support (e.g. calls to the IT helpdesk) that the support materials assisted individuals to become self-sufficient. With over 100 academic staff assessing using ATLAS for the first time the lack of requests for support for them also indicated the correct level of supporting materials.

Availability of management information: For the first time ever it was possible for the overall dissertation manager to have a clear and accurate picture of individual and group progression. The information from ATLAS was used as a prompt to re-engage those students who appeared to be ‘falling behind’.

Improved student/academic experience: A full academic evaluation of the project will take place in 2016, focusing on investigating the experiences from both the student and academic perspective. Early indications are that student engagement has been positive. This tutor feedback indicates some of the benefits:

“I am just looking through my undergraduate dissertation research proposals via ATLAS. As you know, I am a complete duffer with technology and have been a little cynical about this innovation. However, I wanted to let you know what a fantastic innovation this is. No longer is my desk cluttered with paper and no longer do I need to juggle triplicate forms or handwrite comments. No longer do I need to file things and then forget where I have filed them.

It is wonderful being able to see students’ work on one side of my screen and being able to comment alongside. This innovation massively improves both the efficiency and effectiveness of my feedback and will, in turn, if the full dissertations are uploaded, reduce the time involved in grading while, crucially, providing the student with richer, more readable feedback. I can also see ways in which the medium will enable us to second mark on-line.”

Robust and auditable process: For the first time the support provided to the student during the dissertation process can be classed as robust and auditable. Throughout the entire dissertation process the support and feedback provided to the student is in one place, not dispersed within numerous emails. All records are accessible by managers and can be called upon should they be needed.

Related outcomes: Tutors seeing and using Pebble+ and ATLAS for the first time have seen potential for embedding it on their programmes of study, thus introducing the potential of PebblePad to students earlier in their academic studies.
Lessons Learned

The greatest lessons learnt are:

- Need to get early support from key stakeholders
- Need for simple but well-designed workbooks/processes
- Quality support materials are vital to ensure that students and staff can engage easily
- Step by step video guides were most popular
- Ensure that support materials are very specific
- The larger the cohort of students the more obvious the benefits – it is easy to manage a dissertation module with 20 students without technology but not 800+
- Teamwork between academic module staff and technical staff is needed

Barriers:

- Resistance to change across the board
- Difficulty engaging certain academics with the process

While the full evaluation has not yet taken place, the project has run exceptionally well. This said, the plan will be to expand the project to encourage the use of PebblePad as the preferred option for safe and secure storage of research data.

Currently, submission of the final dissertation is done via the more traditional routes as it is a single word document. It is only this document that is summatively assessed and thus given a mark. Consideration is being given to the idea that the final dissertation report should form part of a larger workbook submitted at the end of the module which includes the proposal, ethics submission, research data, etc.

What can others learn from this?

- Think big – PebblePad really comes into its own when managing large numbers.
- Think laterally – Uses where PebblePad can be easily configured go well beyond the standard approach of the assessed portfolio/workbook.
- Think support – Proactively supporting new users in PebblePad is vital for the success of any PebblePad project. A series of targeted ‘how to’ YouTube style videos supported by step-by-step guides can really reduce user frustration / dissatisfaction and ultimately reduce frantic calls for reactive support.
- Think simple – It is easy to overcomplicate matters - technology should make life easier for all involved. The workbooks used in this project were revised several times until the final versions were complete. Each time they were simplified.
- Think efficiency – How can such a project increase efficiency, i.e. save academic / administration
time. Clearly, this is difficult to measure or quantify. Any technology which makes life harder is not worth it.

• Think savings – An electronic ethics submission process will be on many University's wish lists. A bespoke product to do this will be difficult to specify and expensive to build, yet PebblePad can be easily configured to undertake such a task and is well within the budget for every university.

• Think student – It is always easy to forget that this entire process is for the benefit of the student – they need something to take away to provide evidence of their learning and employability. This PebblePad project ensures each student gets the correct support and feedback throughout their project. It also gives them the portability to take their research information with them into the next stage of their personal journey.

In Brief – Showcasing ‘Future Readiness’ with PebblePad

The dissertation is the business undergraduate's opportunity to showcase their skills and employability by conducting an investigation into an applied business problem or issue. PebblePad is the medium/technology that brings this student-led investigation into the 21st century by ensuring that throughout their project each student is provided with richer and more accessible feedback and support.

References