Implementation of online submission and marking in Worcester Business School

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Introduction
Worcester Business School (WBS) is currently in the process of adopting on-line submission and assessment (marking) procedures. In order to evaluate this, a pilot project was undertaken to highlight the pros and cons to both staff and students. The report begins by outlining some of the current problems with the existing manual system and then proceeds to discuss the findings of the study through the resulting advantages and disadvantages of adopting on-line submission.

The Current System
The existing manual submission procedures are relatively straightforward and familiar to staff and students. Each completed assignment is posted in a physical dropbox together with the relevant paperwork. The paperwork identifies each piece of work with a student (anonymously via the student id) and allows university support staff to automatically record the submission by scanning a printed barcode.

However, WBS had encountered several problems with this manual submission system. One major issue is that every semester between six and ten submissions are lost between the time the student posts the assignment in the dropbox and when the student collects the marked paper. There have been cases where students have insisted they have submitted the assignment, and yet the assignment was not found and not scanned into the SOLE tracking system. Paperwork mistakes also confuse the manual procedures. Mixing the documentation for two different assignments can lead to the wrong submission being given to assessment tutor. The submission will simply follow the incorrect documentation. This type of mistake is easy to make, but takes a significant amount of time to resolve by tracking down the correct assignment and submission documentation.

The submission process itself can be very inconvenient for students, especially those attending part-time. Students have to be on the University premises to post their submission. This may at first seem perfectly reasonable, until you consider specific circumstances. In January 2010, when much of the U.K. was closed due to snow, many students were unable to reach the University to submit assignments. The problem was averted by asking students to email their submission, and then submit another paper copy when they came back to the university. However, these ad hoc solutions can lead to other subsequent problems if not managed thoroughly. One such similar event led to the creation of duplicate sets of paperwork and caused lecturers to mark some assignments twice. This is very easy to do when confronted with over 200 submissions for a single assignment. WBS has also many foreign students who travel to their home countries during the Christmas holiday. They find it inconvenient to return to the University in early January just to submit an assignment. Some foreign students also
encounter a similar situation where they are asked to complete a reassessment during summer, and yet are no longer resident in the U.K.

The Pilot Project
Clearly, there are potential benefits to adopting on-line procedures for student submission. However, there may well also be a number of technical and operational challenges that need exploring. Therefore, it was decided to implement a pilot project by introducing on-line submission and marking to two undergraduate modules. A Business Management module (BUSM2101 – Business Information Systems) and a Computing module (COMP2113 – Electronic Business) were chosen because each had a class size of under 40 students and assessment types that were conducive to the pilot project. By only choosing two relatively small modules, the potential benefit could be observed, whilst limiting the impact of any problems.

Students enrolled on these modules were asked to submit their assignments in MS Word format, using the on-line submission function within the Blackboard Virtual Learning Environment (VLE). These Word documents were then copied to the PC of the module tutor ready for marking on-line. Assignment feedback, including the overall comments and the final grade were appended to each Word document using the “comment” function within MS Word. When all the assignments had been marked they were copied back to the Blackboard VLE, and released to students after moderation. The moderation process was also conducted on-line simply by allowing the moderating tutors access to the relevant area of Blackboard.

Findings
The pilot project highlighted a number of advantages to on-line submissions:

1) **Student preference.**
   Informal and formal feedback, via the module evaluation, indicates that students prefer on-line submission. To assist the process, students were given written directions and also asked to submit a ‘test’ assignment. They expressed surprise at the ease of online submissions and several asked why more of their modules did not have this ability.

2) **Immediate marking.**
   With manual submission, there a considerable lag between when an assignment is submitted via the dropbox and when it is available to be marked. This is due to administrative procedures needed to formally record the submission. Support staff may wait until they have a significant number of assignments before beginning this process. In the case of on-line submission, assignments are ready to be marked once the student pressed the ‘submit’ button within the Blackboard VLE. For example, the tutor was able to begin marking the BUSM2101 module several days before the assignment hand-in date, and the final marking was completed only three days after.

3) **Eliminate lost assignments.**
   The major issue of lost assignments that plagued the manual system is completely removed with on-line submission. An electronic copy of the assignment is located on the Blackboard VLE, and can be retrieved at any time. If either staff or students were to lose their copy of the assignment, they could simply retrieve another. Any non-submissions by students can be identified immediately and dealt with if necessary.
4) **Reduce administrative burden.**
The manual submission system clearly has a significant administrative overhead for support staff and the on-line system should reduce this. Assignments no longer have to be collected from the dropbox, collated and then scanned to record the submission. The assignments do not have to be presented to and collected from tutor before and after marking. Finally, the marked assignments do not have to be physically returned to students.

5) **Student Feedback.**
With manual submission, WBS had calculated that only 50-65% assignments are collected by students after they have been marked. Students are able to obtain their overall grade from the SOLE system and so many fail to collect the actual assignment, missing out on vital feedback from tutors. With on-line submissions, the Blackboard VLE is able to track whether students have accessed their assignments after marking. Although, there is no guarantee students are actually reading comments carefully, statistics show that 94% of BUSM2101 students and 97% of COMP2113 students accessed the assignment feedback folder within six days of its release.

Clearly, from the points made above there are many benefits to adopting an on-line submission process. However, the findings of the pilot project also highlighted a number of issues for consideration.

1) **Lack of anonymity**
There is currently no ability to mark assignments anonymously, as Blackboard shows each submission with the student’s name. Anonymity is fundamental to module assessment and this issue will have to be resolved if on-line submissions are to be taken forward.

2) **Alignment with current systems**
Currently, the University’s registry system sends automated emails if the student has not submitted an assignment. Unfortunately, the SOLE tracking system is not integrated with Blackboard submissions and therefore students submitting on-line will still receive the automated emails. For the purpose of the pilot, we simply asked them to ignore email and later asked Registry to remove the pilot modules from the automated email system.

When using the on-line system for the first time, students were concerned that their submission had been accepted. To alleviate these concerns, the tutor emailed the each student to confirm submission and that their Word file could be opened successfully. Clearly, it would save time if the system could be enhanced to email students automatically.

3) **Technical issues**
There were a number a minor technical problems that came to light during the pilot project, many of which were due to incompatibilities between the students’ PCs, the tutors’ PCs and the University’s IT systems. In one case, a student was unable to submit his assignment using Blackboard. After some experimentation, the issue was resolved by switching the student’s internet browser from an old version of Firefox to Internet Explorer. Another student was unable to open her marked assignment using
her home laptop. Unfortunately, the laptop had an earlier version of Microsoft Office than the one used by the tutor. This was resolved by the tutor creating a backward-compatible version on the marked assignment, though software is freely available to solve this incompatibly.

4) **External examiner moderation**
   To continue using the on-line submission / marking as a truly paperless process, it was necessary to create a procedure to allow external examiners to moderate the assessment and associated paperwork. To facilitate this, the University created an additional login ID and password to allow the external examiners to access both pilot modules via the Blackboard VLE. Step-by-step directions were also created to direct the external examiners to the related folders and files.

5) **Initial set up**
   There was some additional administrative work creating the assignment folder in Blackboard and understanding its functionality. After the first assignment was set up, it was relatively easy to duplicate the process for the other modules and assignments. However, it would be beneficial to initiate a training session for lecturers who are new to this Blackboard submission function.

**Conclusion**
The purpose of the pilot project was to explore the potential of the on-line submission and marking of student assignments. The findings of the project have highlighted the potential benefits as well as a number of administrative and technical issues that need further examination. However, despite these issues it was an overall positive experience for both tutors and students. Students were especially pleased with the ease of the submission process and tutors enjoyed the very high rate of students accessing assignment feedback on-line.