Introduction

The electronic assignment system (EAS) is the system designed to manage the processes of electronic submission, marking and return of assignments in the School of Nursing & Midwifery (SoNM, or ‘the School’). The system was introduced School-wide in semester 1, 2011, using the Flinders Learning Online (FLO) learning management system (LMS), which is based on the Blackboard platform. (Please note that as of semester 1, 2012, Flinders University will use a Moodle-based LMS.)

A system principle to provide philosophical foundation for the system was developed:

*Assignments generated in a digital format should be submitted, marked and returned in a digital format.*

Application of the principle means that EAS is in effect mandatory rather than a choice made by students or staff. The existing ‘paper’ system of printed assignment submission to the School Office remains for assignments for which it is suited (for example, portfolios). In effect, the introduction of EAS was an introduction of a ‘dual’ assignment submission system within the School.

The assumed benefits for EAS were that it:

- streamlines the submission and returns process for electronically generated documents
- tracks student assignments more effectively through receipting and document dating
- reduces paper waste caused by unnecessary printing
- makes document sharing between teaching staff easier
- lightens the assignment load – no more paper lugging
- provides feedback more efficiently – comments can be re-used
- stores assignments for ready retrieval in case they are lost or accidentally deleted.

The evaluation of EAS aims to understand the system within the broader context of a significant change of practice in the School, focusing as much on the cultural and management issues as on the technical and operational aspects of the system. The final evaluation report is still in progress, and will be published in 2012.

The final evaluation report will:

- report on the impacts of EAS to the stakeholders
- inform the operational shape of EAS in the School in 2012
- identify a set of principles, and potentially transferable practices, that may be useful in guiding other schools and faculties, and potentially other universities, to develop their own response to managing the submission of electronically generated assignments
- make recommendations to the School’s Board of Studies

This preliminary report documents the results of the staff and student user experience surveys, communicates some of the main issues reported in the surveys, and outlines the School’s intentions and/or progress so far in addressing these issues.
Quick stats

In semester 1, 2011, as a result of the introduction of EAS school-wide:

- 16 skills development workshops were conducted for staff in managing various EAS-related tasks
- There were 114 workshop attendances
- Participants reported 83% overall satisfaction with the workshops
- 36 ‘how-to’ sheets and guidance resources were developed for staff and students
- Staff website pages received an average of 280 hits per month
- The student web page received an average of 3934 hits per month (February – July 2011)
- 62 topics used EAS (out of a possible 86) = 71% usage across topics
- 61% of the assessments across all topics were EAS-suitable assignment types (electronically generated)
- 100% of EAS-suitable assignment types used EAS
- There was a 74% increase in usage of electronic assignment submission from the same time in 2010
- 364 dropboxes were created in FLO – an 81% increase from the same time in 2010
- 76% of dropboxes used the single dropbox method (markers select their students from the topic list)
- 9,381 assignments were submitted through EAS, plus 354 resubmissions
- e-marking exemptions were granted to five staff for assistance with a combined 202 assignments
- An average of 1.25 hours was spent on each e-marking exempted assignment
- There was no increased paper usage in the School

User experience surveys – staff and students

The Social and Behavioural Research Ethics Committee approved the user experience survey instruments for staff and students. The survey questions were designed to capture information related to technical issues, work practices, satisfaction, agreement and resources in relation to EAS. Survey Monkey was used to gather responses anonymously and to generate basic reports. Staff and students were surveyed separately; staff during the mid-year break, and students at the beginning of semester 2. Each cohort had a two-week period within which to respond; however, the staff survey was extended by one week as some staff were taking leave.

Please note that:

- Some questions allowed for multiple responses to account for multiple experiences (for instance, staff may have picked up assignments using different methods for different topics). Therefore, some of the combined results may add up to more than 100% (e.g. 60% used method A, 55% used method B).
- All figures are rounded up or down to the nearest whole number.

Staff survey

54 respondents took the survey and 50 completed it, from a possible 159 teaching staff (including 123 casual staff) in the School – most would have been marking staff. This equates to an overall staff response rate of 34%.

One third of the teaching staff were also topic coordinators, managing EAS set-up and their teaching teams. Topic coordinators had extra questions related to these functions.

All respondents were directed to respond to e-marking questions, and general questions related to attitudes to the system. A small number of respondents were not directly involved in EAS; they were directed to complete the attitudinal questions only.

Student survey

116 eligible students (students enrolled in semester 1, 2011) responded to the survey, out of an approximate possible 2,500 enrolled across the School at this time (5% response rate). All respondents used EAS in their course of study.
**Staff user experience survey – summary of main findings**

**Overall satisfaction with EAS:** 16% very satisfied, 35% mostly satisfied = **51% combined overall satisfaction.**

![Bar chart showing overall satisfaction with EAS](chart.png)

Benefits using EAS identified in the survey comments included:

- the ability to refer to previous student work on resubmission
- checking the word count
- checking any assignment (topic coordinator response)

**Management of EAS** (topic coordinators only section)

- 40% of respondent topic coordinators were first-time users of the assignment tool in FLO.
- The majority of assignments created in FLO used the single dropbox method – teaching teams selected their students from a list. Only one topic team used a ‘randomly’ distributed marking method for assignments (tutors did not necessarily mark their tutorial students).
- Extension requests were generally managed by the topic coordinator.
- The electronic extension request form was widely used.
- Cover sheets were used but needed management – returning, adding etc.
- Late assignments were generally collected by the teaching team (rather than the topic coordinator).
- Resubmission management in topic teams was varied - some requests via topic coordinator, others managed by tutors.
- Respondents reported an average 31 extra hours were spent on EAS-specific tasks:
  - developing own skills – 7 hours average per person
  - dealing with technical difficulties – 7 hours average per person
  - supporting teaching team with EAS tasks – 7 hours average per person
  - managing the assignments in FLO – 6 hours average per person
  - setting up the dropboxes – 4 hours average per person.
Assignment pickup and e-marking

- Two assignment pick-up methods were evenly used:
  - tutorial-based groups – TCs created groups based on tutorial groups, and markers picked up their assignments from there
  - the single dropbox method - markers selected their assignments from the entire list of students.
- Both assignment pickup methods were seen to be problematic; the single dropbox method more so due to having to select students from a (sometimes large) student list.
- All respondents used Microsoft Word for e-marking. 21% also used Adobe Acrobat for marking in pdf for the first time.
- Comment boxes on the side was the feature most widely used, along with track changes on text and highlighting text.
- 57% of markers made use of the 'comment bank’ strategy to re-use comments.
- 87% of markers used a marking guide or rubric when providing feedback.
- Marking was done at home and in the office; laptops were used in 58% of cases.
- Markers reported that they enjoyed e-marking (53%), that they felt confident e-marking (87%), and that they thought they would get better/faster at e-marking over time (66%).
- 36% of markers felt that the quality of the feedback improved with e-marking. 58% disagreed.
- 60% of markers thought that e-marking took longer than paper-based marking.
- Respondents were almost evenly split on preferences between e-marking and paper-based marking.
- 80% of respondents thought that students should be marked by their own tutors for continuity of learning.

Issues with EAS

- 82% of respondents reported that they experienced muscle fatigue and 73% reported that they experienced eye strain. Problems were managed on the whole by ‘changing their habits’ and ‘treating themselves’.
- A variety of technical issues were encountered, the main ones being issues with file formats, and returning assignments in FLO. Only 5 respondents reported having no technical issues.
- 23% of issues were not resolved. Respondents managed issues in the main by trying again, or referring to how-to sheets.
- Survey comments – scan for main recurring themes:
  - Extra time taken: 48 references
  - Frustrations with technical issues/skills/system limitations: 40 references
  - Frustrations with assignment dropbox set-up and collection on FLO: 34 references
  - Frustrations with lack of choice/support/workload: 25 references
  - Frustrations with student management of EAS: 17 references (i.e. students not knowing the correct procedure, causing incorrect uploading, submission to wrong dropbox, incompatible file format, using the dropbox incorrectly, not knowing where resources are).

Agreement with EAS

- Respondents overwhelmingly agreed that on the whole, the initial assumptions about the benefits of EAS were sound (see preamble).
- 68% of respondents agreed that the EAS principle is sound (see preamble); however, many still thought that EAS should be a choice for topic coordinators (52%), and a choice for marking staff (62%).
- Opinions were split on whether EAS should be a choice for students, with 45% for choice, and 49% against.
- Respondents disagreed (36%) or had no opinions (36%) on whether the EAS steering group represented staff interests.
- Respondents agreed (42%) or had no opinion (34%) about whether EAS should have been implemented alongside the new FLO (in Moodle, for 2012).
- Staff overwhelmingly agreed EAS adds extra tasks (76%).
- 50% of respondents thought that EAS should be across the whole university.
• Respondents leaned towards disagreement that it was the topic coordinator’s role to manage EAS in FLO (44% disagreement to 38% agreement).
• 90% of respondents agreed that topic coordinators need resources/support for managing EAS.

**Student user experience survey – summary of main findings**

For 41% of the 116 student respondents, this was their first experience using an electronic assignment submission and returns system. Of those that had done so before, 46% claimed that they had a small amount of experience, with only 14% (16 students) claiming to be very experienced.

**Overall satisfaction with EAS:** 37% very satisfied, 39% mostly satisfied = **76% combined overall satisfaction**

![Bar chart showing overall satisfaction with EAS](chart)

**Benefits:** 88% of students reported that EAS saved them time, 78% reported that it saved paper / printing expenses

**Using EAS**

• 85% of students used the coversheet as planned (inserted into the assignment document).
• Students reported that in 58% of cases they inserted the marking guide or rubric at the end of their assignment document. In 31% of cases lecturers inserted it for them.
• On the whole, students claimed that they did not need to convert their file types before submitting (83%). 17% converted their files. In 9% of cases, the file was either returned for converting, or was converted by the lecturer.
• 80% of the time, students requesting an extension used the electronic extension request form.
• In 92% of cases, students received their marked assignments back through FLO; however, a small number were returned by email (10%) or in printed form (10%).

**Issues, support and resources**

• 77% of students reported no technical difficulties; the most common difficulties were with submitting the assignment, or knowing if the assignment had been submitted properly (combined 27%).
To resolve technical difficulties, students predominantly emailed the lecturer for help (65%); they also contacted the FLO helpdesk (32%), and asked other students for help (29%).

In 73% of cases of technical difficulties reported, the issue was resolved; however, students also reported emailing the assignment (42% of cases) and printing for submission (15% of cases).

46% of student respondents used the assignment submission resources webpage. 30% of students reported that they were unaware of this resource.

Students who accessed the assignment submission resources found them either useful or very useful:
- Resources for writing your assignment (93%)
- How-to sheet: Preparing your assignment for submission (86%)
- Tips for successful assignment submission (85%)
- Help links (53%)

25% of respondents practised assignment submission in FLO before submitting, and found that to be helpful.

Survey comments – scan for main recurring themes (all are from the student’s perspective):
- Knowing what to do but not able to do it (technical, skills, system limitations): 32 references
- Frustrations with lack of support/resources, not knowing what to do: 24 references
- Frustrations with staff management of EAS, service quality: 23 references.

Assignment feedback

- In 89% of cases, students’ assignments were marked by their tutorial lecturer; 43% were reported as marked by another lecturer from their topic; and in 20% of cases, the students did not know who had marked their assignment.
- A slight majority of students felt that it was important that their lecturer was the one to mark their assignment (55%). The others were happy for someone else to mark it, or did not care who marked it.
- Forms of feedback: students found all forms of feedback useful. The most useful form reported was comments provided to the side (90%), closely followed by comments provided at the end (88%), and the marking guide or rubric (81%).
- 27% of students reported that feedback they received on the e-marked assignment was better than paper-based feedback.