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Subject Online Survey (SOS): An Online Tool to Support Improvement in Teaching and Learning

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Abstract

Traditionally, data relating to the conduct of subjects at the University of Wollongong has been collected for teachers with one main purpose in mind: to provide the teacher with supporting information as to their teaching ability for the purposes of promotion. SOS is a web based system which teachers can use to author customised surveys to collect information about the subject they teach. These surveys are completed anonymously by the students via the web (using randomly generated, survey specific numeric tokens) and the data is automatically collated and returned to the teacher. The teacher may also produce the surveys in hard copy, for manual distribution and collation. The system provides a 'non-threatening' and 'informal' mechanism by which teachers can obtain useful information about the subjects they develop and teach in terms of subject based criteria rather than the 'teacher based criteria' of formal Teaching Surveys. In this time of declining University budgets, SOS provides a very cost efficient solution to the collection of this data. This paper provides a background to the development of SOS in the context of the needs of the University of Wollongong and its teachers. It briefly outlines the main features of the system, new features being added to Version 2 and reports on the outcomes for the early adopters.

SOS (SUBJECT ONLINE SURVEY) : AN ONLINE TOOL TO SUPPORT IMPROVEMENT IN TEACHING AND LEARNING.

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ABSTRACT: Traditionally, data relating to the conduct of subjects at the University of Wollongong has been collected for teachers with one main purpose in mind: to provide the teacher with supporting information as to their teaching ability for the purposes of promotion.

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BACKGROUND

In 1998, the Director of CEDIR, Associate Professor Sandra Wills, secured funding to conduct research on the development of an 'informal' online survey system. The goal of this system was to provide teachers with personal formative data on the success of their subjects from a student's perception, allowing them to improve teaching and learning outcomes for students without the need to resort to numerous and expensive formal Teaching Surveys. The research working party examined the online methods used to conduct teaching surveys by 15 Australian universities including the Subject Evaluation kit developed by the Griffith Institute for Higher Education (GIHE) at Griffith University [1]. In summary the findings included:

- most existing web-sites were highly University specific
- none were using the web exclusively to distribute and collate the data
- most surveys seemed to consist of set questions plus some optional ones selected from item banks.

From this research the working party made several recommendations which later formed the basis of the development specifications for Subject OnLine Survey (SOS). These included:

- the tool should be totally web based and should require minimum web skills to operate it;
- there should be an item bank of 'standard questions' and the ability to author individual questions;
- there should be a variety of questions types available such as Likert scale, True and False, Yes and No
- there would need to be a concurrent staff development program

During the research phase, a generic evaluation tool LEO [2] or Learning Evaluation Online, which is a template based in the as OXYGEN (Object eXtensible analYsis and Generation of Education coNtent) software engine developed by Albert Ip [3] was identified as a possible engine and later implemented.

SUBJECT ONLINE SURVEY (SOS)

SOS is a web based system which provides a simple and intuitive interface through which teachers can construct

and author customised surveys designed to collect information about the success or otherwise of the subjects and/or subject components that they provide for their students. These surveys and the returned data are password secure and student access is anonymous, survey specific and controlled via 'tokens'. The data is auto-collated and is made available through a data collection site and/or via automatic email posting.

DEVELOPING A QUESTION DATABASE

The Teaching Survey database previously in use within the university contained many hundreds of questions which were either directly suited or with modification could be used successfully. Many additional questions have been added to take account of a wider range of delivery options than the traditional lectures, tutorials, and laboratories including flexible and online delivery.

EVALUATION

Version 1 of the system was made available to three faculties within the university: Engineering, Commerce and Public Health. Over a period of approximately 6 months a total of almost 1000 students were surveyed using SOS In 2000, the University has launched two new remote centres at which two full degree programs are being offered flexibly including online. SOS will be used as part of the evaluation strategy for this initiative.

Much of the evaluative data collected so far is in the form of comments and suggestions from users. The most common responses include
- the simplicity of the authoring interface and low level of computer skills needed to operate it;
- the ease and speed of survey and the quick turn around compared to paper based surveys;
- the ease of customisation for a variety of different student groups and needs.

Teachers using the system to date have identified the following possible weaknesses of the current version:
- the 'set' 7 point Likert scale, possibility of others being available;
- no mechanism for students to see aggregated results, and;
- the need to manually modify the data collected before exporting to a spreadsheet.

FUTURE DIRECTIONS

User feedback over the trial 6 moths period has given us direction in further development into version two, greatly expanding the applicability of the system to all campus teaching and learning. Some of these include:

- The existing databases will be greatly expanded to incorporate all questions currently in use at UOW.
- Question categories will be expanded and current question categorisation will be re-assessed.
- Sets of faculty based "Standard Surveys" will be built up and provided at the top level of authoring.
- In the longer term, normative data on each question in the database will be collected, collated and analysed.
- Preliminary data analysis by teachers will be supported by a down loadable Excel macro which will have built-in frequency counts, bar chart generation and cross-tabulation.
- Finally, the program of staff training needs to be extended to include developing an understanding of the *application* of the survey results to teaching.

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