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## LEARNING DESIGN AT THE UNIVERSITY OF WOLLONGONG

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#### Abstract

This paper describes the work done by the author to develop and document a Learning Design process at CEDIR, a centrally funded and located educational development support unit at the University of Wollongong. CEDIR works with educational technology as an intrinsic part of educational design. The Learning Design unit was set up in January 2002 with the aim of ensuring sound pedagogical design of CEDIR educational products and to maximise staff development opportunities during their development The new service processes and tools developed to facilitate these aims have been further refined and evaluated in 2003. This paper reports on the evaluation of the academic experience of participating in the learning design process via survey and interview. The author concludes that learning design at the University of Wollongong values academic partnership and academic staff development. By analysing the learning design process, staff development opportunities can be identified and planned into the educational resource development process. A larger study now needs to be undertaken and feedback from other institutions is sought.

#### Keywords

Learning design, educational resource development, staff development

## Introduction and Context

CEDIR is a centrally funded and located educational development support unit at the University of Wollongong. Following a restructure of CEDIR, a new Learning Design unit was set up in January 2002.

Previously, educational products were developed by a production unit with input from educational development staff working in a consulting role. The level and type of input provided by the educational developer would be flexible depending on the size and scope of the project, and the level of support the academic partner required to make decisions regarding the development of their educational resources. While this model was appropriate for the organisational structure and staffing levels at that time, it did not always ensure consistent approach or results from a management perspective. "The unstructured work component - involving communications, meetings and decision making - has variable output quality. As a result, some projects proceed smoothly, others seem to be a long hard effort." (Lambert, 2000)

During 2000 universities focused on issues of quality. Preparations for the national quality audits have seen units define how they know they are doing quality work ie how they evaluate their work (see http:// www.auqa.edu.au/). It was into this context that the Learning Design unit was born. Learning design staff sought to build on the strengths of the educational development consultation model previously used. One aim was to integrate the pedagogical concerns more fully into production, and the location of the new unit within the production unit was central to this (see Figure 1). The title "Learning Design" was chosen to reflect a learner-centred development approach and the focus on quality.



Figure 1: Organisational structure

## Return clients and assumptions about staff development

CEDIR has long welcomed the return of clients for further production as return clients are often more effective production partners. Many return clients will have a better understanding of the educational resource development process coupled with usage of a common language that makes communication easier and the production process smoother. In addition, return clients have more knowledge of appropriate technologies in their area, can often make production decisions more quickly, and can often prepare and write better instructional material which reduces the input, and therefore time, needed from the learning designer to complete their project.

To look at it another way, it seems that the academic partner is learning along the way, skills are transferred and knowledge is developed during the process of developing educational resources. However this assumption is largely untested at CEDIR. If we can show that staff who have worked with us take away valuable skills with them along with their newly developed educational resources, we are a step closer to showing that they could deploy these skills to make further advances with their teaching.

While learning designers contribute to the organisational aim of "ensuring sound pedagogical design of CEDIR educational products" (CEDIR, 2002) they also have a staff development agenda. Thus, the role was expected to be broader than instructional design, which can be defined as "the systematic process of translating principles of learning and instruction into plans for instructional materials and activities" (Smith and Ragan, 1993.)

## Developing a new standardised Learning Design process

In line with contemporary practice, it was decided to move away from unstructured consultations and instead use a repeatable, consistent approach based on a needs analysis at the beginning of the project (Littlejohn, 2000.) The aim of the needs analysis is to understand enough about the academic partner's teaching model and context so as to be in a position to recommend appropriate pedagogical and technological solutions.

### Elements of the new model

Project initiation meetings were the first production meeting with new clients about new projects. These meetings were changed to be facilitated by a learning designer and became known as learning design consultations. A paper-based tool was urgently needed to facilitate the learning design consultation and to document information given by the academic at the meeting. The tool needed to assist in gaining an understanding of the bigger picture of the academic client's teaching and learning model, including the components of their subject, how it is assessed and any organisational constraints to their decision making ie we must use our faculty's PC labs, or we have a team of 3 tutors covering 6 tutorials.

Existing instructional design needs analysis tools were found to be too complex and lengthy to implement in CEDIR's context of large numbers of smaller projects (Joliffe, Ritter, & Stevens, 2001). After a conversation with colleagues it was decided to use the Learning Activities Model (LAM) (Caladine, 1999). The LAM model covers: Provision of (learning) materials, Interaction with materials, Interaction between learners, Interaction with facilitator and Intra-action (reflection.) A one page consultation notes sheet was developed by the author with LAM as its central element. It quickly became clear how well this tool worked within the 1-1.5 hour learning design consultation, prior to making recommendations regarding the new project. The tool had enough structure to guide the process, and enough flexibility to have wide application. It quickly gathered information from busy academics. In addition, the pedagogical nature of the model helped to stop the academic and the development team from getting carried away with technologies and to focus instead on the required educational outcomes.

After the learning design consultation the learning designer could proceed with the stages of project development, following standard instructional design phases (Smith & Ragan, 1993). Documents have been developed to support the steps in the processes not only for production staff, but to maximise the academic staff development potential at each of the production phases (see Table 1.)

Major steps in developing educational resources	Potential Academic Staff Development	Support resources
Information search, Learning design needs analysis	Better understand pedagogical & technological options	LD consult sheet, LAM
Recommendations, options: scope, approach, technologies to be used	Better understand pedagogical & technological options	Other similar projects in same & other disciplines
Facilitate choice of options, and document decisions.	Quicker decisions	Meetings outcomes emails
Write instructional elements, provide detailed instructions to programmers	Self-manage more of this process	Sample folder shows how to write instructions
Larger staged project: mock-up and evaluate first module before moving on to further production	Self-manage more of this process	Mockups done by LD staff
Development phase: facilitating edits and effective decision making, documenting any modification to project scope	Self-manage more of this process	Templates for how to request edits. Meetings outcomes emails.
Support the academic through the deployment phase	Become confident using different tools and techniques	Contact with other staff who have done so
Plan for and evaluate the deployed product	Self-manage more of this process	Survey policies, sample questions
Facilitate the reflection of the experience from development team, academic and student perspectives	Integrate this process in all teaching	Modelled by LD staff
Facilitate the application to extend the work on the project if appropriate	Self-manage more of this process	View previous successful applications

Table 1: Resources to support staff development during educational resource development.

## **Evaluating the model**

In addition to production reports showing hours worked on each project and aggregated figures across each faculty, percentage rate of return clients, and general online survey regarding customer service criteria, the author has recently undertaken a learning design survey and interview of 7 clients to try and answer the questions; "Does useful staff development take place parallel to the process of production of educational resources?" and if so, "In what areas have staff developed during this process?"

The open-ended questions asked the interviewees to describe the role, benefits and difficulties of working with the learning designer on their project. Then the interviewees were asked to comment on any student and staff outcomes of the new/redesigned subject.

These were followed by a brief survey asking the interviewees to rate 5 statements using a Likert scale (strongly agree, agree, disagree, strongly disagree, not applicable). The interviews netted richer results however the survey results are useful in regards to trends as they show consistency of answers.

#### Survey design and results

6/7 interviewees strongly agreed and 1/7 agreed to the statement "My understanding of the process of developing educational resources is higher than when I began working with the Learning Designer (LD)." 4/7 interviewees strongly agreed and 3/7 agreed to the statement "My ability to plan a course with the right face-to-face and online components is higher than when I began working with the L.D." 3/7 interviewees strongly agreed and 4/7 agreed to the statements "My understanding of how the learning activities and assessments I develop can facilitate student learning is higher than when I began working with the LD" and "My understanding of the educational pros and cons of online technologies used in my project is higher than when I began working with the LD."

The question "My ability to review and modify my subject outline to allow for use of online resources (course aims/objectives and assessment) is higher than when I began working with the LD" netted 3 "not applicable" responses, 3 "agrees" and 1 "strongly agree."

#### Interview results

The interviewees repeatedly valued the structured learning design process, and acknowledged a staff development component to their project - some more than others. Many interviewees commented on organisational constraints, particularly time and workload issues which may prevent them from fully benefiting from the newly developed skills. A selection of quotes follows.

"(The learning designer was) acting as an adviser in terms of how to package the academic content in a user-friendly way... and ... massaging of the assessment tasks in a way that will maximise participation... By acting as a kind of a sounding board between the learner and the academic, the learning designer provides a very useful brokering role, if you will."

"There was a framework that the learning designer brought to it, there is some theory about the way in which people learn, so that provided a framework to bound the discussion, instead of it being totally free ranging and therefore perhaps not coming up with a solution"

"Once you know something it's so obvious that you can't understand why somebody else doesn't know it. And I find it very hard to get back into the shoes of the naïve person (the student) and say how would they best learn that. I think the interaction we had was trying to do that and it was extraordinarily painful to do that."

"Much more was achieved than I had anticipated when I first started out. If there is any defensible exemplar of quantum leap for me, this was it."

"(The learning designer's role was) partly to help me with the design of the materials to go onto the web ... and I guess also to broaden my horizons in terms of how the learning experience for the students could been made broader than it would have been otherwise... Actually there was something else, because I did for a couple of weeks there, did some of those little exercises in a few of those lectures that seemed to go down better than I'd anticipated." (Note: the academic is referring to trying a new teaching technique.) "You managed to take our idea and turn it into something really productive to our students. So you have managed to lead the way from an educational point of view... we have thought of other ideas, and it will be easier next time... when we are writing it up, we know what (the learning designer) wants."

"(The learning designer acts) as a kind of mentor for the person who starts "ad novum" that means from scratch, someone like me... Oh indeed, the power is the process, but the process only has meaning when there is partnership. And partnership has meaning when there is relationship and rapport."

## Conclusion

From a combination of survey and interview results it is inferred that the learning design process at the University of Wollongong has a strong emphasis on staff development. Staff development runs parallel to the learning design and educational resource development process, and support resources can assist with this. However, survey data is very small (N=7) so a larger study now needs to be undertaken and feedback from other institutions is sought to clarify the usefulness of the learning design process outlined.

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