

# Teaching Using The World Wide Web

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## **The Facilitator Role**

The role of the facilitator is an essential one. The competent facilitator identifies the areas of learner motivation and readiness and provides structured and incidental resources, instruction, direction, feedback and support to assist learning. They analyse student progress and support the flagging student or extend the hungry learner. This support is essential in any form of programme delivery including the use of the world wide web.

The world wide web can be more than a 'textbook' type delivery method where the student is left to self manage and self motivate their learning. Web delivery often means that difficulties associated with delivery are transferred from the lecturer to the student, encouraging a high dropout rate. The role of lecturer, rather than being less interactive, needs to be more interactive.

With less face to face communication the lecturer should compensate by wise use of other communication. Short email messages to see how the student is coping, regular positive feedback on progress through the programme and suggestions of learning strategies that match the learner to the material. The student should feel they have all the experience and support they need to be successful.

Students have to cope with new ways of learning plus enormous amounts of sometimes incorrect information. Lecturers will need to make sure that their students are learning and not struggling with the use of the web. It is important to focus on the learning not the teaching.

*Teachers must provide unsophisticated learners with educational experiences that enable them to construct their own knowledge and make sense of massive, incomplete, and inconsistent information sources (Dede, 1996).*

## Helping a student learn

Learning is not a case of opening the learner's head and shoving information in. The traditional lecture or textbook delivery is no longer the model of choice for learning. Students need an environment that provides better support. To achieve this, the programme needs to be viewed the way the students do, without losing sight of the expected outcomes. Support mechanisms need to be developed that will make each student successful.

Students differ in their approach to learning. Some students simply need to be pointed toward a resource and they will be actively learning with minimal time and support. Other students need a patient, discovery approach with considerable links to their existing knowledge, simply to recall and comprehend the foundations of any new skill or concept. Whatever the learning style, the facilitator has a role in keeping the student actively learning. It is important to note that students who see value in the learning, or where the learning captures their interest will focus their energy on the learning and persevere.

*Wanting to learn is important to successful learning (Race, 1997).*

Once the support is in place the next essential ingredient is quality material that helps and doesn't hinder the student. They should be able to concentrate on the learning and not spend their time learning how to use the technology.

The material must be user friendly for content and navigation. Various studies show that even small amounts of information in a hypertext format can cause disorientation and a restriction to the learning process (Lee, 1996).

*If your readers are lost or have to spend time thinking about where to go next,  
they are not focussing on the learning material (Downes, 1996).*

## Effective Communication

Communication between students and with a lecturer are essential ingredients in a successful learning environment.

Face to face communication is encouraged to support those who need it. When that is not possible discussion lists and internet chat go a long way to providing the necessary communication.

Managing discussion groups and chat rooms, like any other requirement in education, is more than setting it up and telling the students to "go for it". They need to be monitored by the lecturer to add appropriate comments and feedback as well as stimulate discussion.

Like a class or discussion, chat sessions need to be planned in advance. Students should be given prior reading assignments and discussion questions. All the tricks you use to stimulate discussion in a classroom need to be used in a web chat area. (Downes, 1996)

## **Assessment**

Assessment can influence the learner's whole future. It can also motivate and direct the way students learn. Timely formative assessment can provide feedback to the student on how well they are progressing and where they should put their energy. It can also provide the lecturer with insights into possible support strategies for the student.

When the student is learning at a distance, assessment is a challenge.

It is possible to create web pages that provide some form of feedback and assessment procedure, although to do so with any sophistication requires some knowledge of CGI scripting, Java, and/or JavaScript. Assessment usually takes the form of assessing how well students recognise and recall information. In other words it is quite good at testing knowledge retention, but not suited for assessing the student's ability to present an argument. In addition the continual occurrence of assessment within the Web site can seriously interrupt the 'flow' or 'cognitive engagement' of the student, i.e. it is important to avoid over-testing (Lee, 1996).

## **Research on Web Based Learning**

Research has been done to determine whether hypermedia users perceived the greater degree of instructional control afforded by that information format. Not only did the learners perceive that control, they also exhibited greater indications of intrinsic motivation for the material. This supported Cognitive Evaluation theory which postulates that a major component of intrinsic motivation is the amount of control the learner feels over the learning situation (Jaffe, 1995).

Other research has indicated that students using the WWW scored 25% higher than students in a traditional classroom. (Schutte, 1997)

## **Flexible, Just-in-time learning**

The push toward more flexible learning has encouraged the development of web based learning as it meets the need for flexible pace/place/face (speed, location, feedback).

There is also a return to focussing on the learning approach rather than the information. The information/literacy revolution meant that we put considerable importance on information.

Now that more information is disseminated, we are putting more emphasis on learning by

doing and applying rather than only reading and listening. Workplace learning and just-in-time learning are becoming more widespread. Education is expected to go to the learner rather than the learner to their education.

A lot of learning happens by discovery and trial and then practice. Changes and requirements in the workplace mean just-in-time learning and on the job training provide the mix of practice and education. This form of learning is suited to the web delivery approach where they can access their learning and still practice in their own environment.

A bonus to the learning is that students are able to build up links to resources that, unlike a textbook, will continue to be current after the programme has ended. They learn how to get access to experts and resources without being hindered by distance or time. Or as Dede puts it

*A personal brain trust scattered geographically, but offering  
just-in-time answers to immediate questions (Dede, 1996).*

## **Resource Based Learning**

Learning often happens with a range of resources including books, practical equipment and a content expert. The lecturer of today is only one of the many resources available. The world wide web takes away the potential 'guru' status of the content expert but emphasises the resource facilitator and support person.

Virtual classrooms have a wider spectrum of peers with whom learners can collaborate than any local region can offer and a broader range of teachers and mentors than any single educational institution can afford (Dede, 1996).

One real opportunity of the world wide web is that the lecturer can simply provide links to resources that someone else is maintaining. Rather than having to keep their own notes and references current, they can refer the student to the source of the data knowing that it is up to date. The lecturer's own notes could just be a page of references to work by other people! The students themselves can benefit from the resource based learning model.

Once the students have a reasonable grasp of the content they can contribute questions and tips and publish their own ideas, taking ownership of their learning and refining their thoughts.

Students can be shown how to be selective in their web hunting and make appropriate use of the resources available.

*In all areas to teach well we need to be creative and treat computers like any other resource - with lateral thinking, imagination and ingenuity. With the computer we have to replace the question of "What can it do?" with "What can I do with it?". (Sherson, 1996)*

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