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Is there a Role for E-learning in Secondary Schools?

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Since the first school introduced compulsory Notebook programs in Victoria, the question of access to computers has been a major stumbling block for the implementation of Information and Communications Technologies across the curriculum.

In the early 1990s some schools implemented compulsory Notebook programs which created their own problems. In some instances, schools devoted all their time and energy into implementing the Notebook Program leaving themselves little energy for the necessary changes to pedagogy. Conversely, staff in schools without a Notebook Program often argued that the lack of access to computers was a crippling impediment to change. Computers were either in the wrong place, or the labs were booked or the configuration was wrong. The underlying pedagogy was often ignored.

E-Learning

One way to deal with this is to implement an E-Learning system. Some people think of an E-Learning system as an intranet and these terms are often used interchangeably. However an intranet is a place where students and staff can publish their own WebPages and only people in that community can access it. An E-Learning system, on the other hand, is a more structured learning environment where timetable and enrollment data is used to enroll teachers as instructors in the subjects they teach, and students as learners in the subjects they take.

An E-Learning system can solve problems of access as work can be accessed from school or home. This access means that the dependency of booking a computer room at a specific time is lessened and students are both encouraged and challenged to use information technology within an educational context.

Blackboard

At Parade College, Blackboard.com was introduced in 2003. Blackboard is

an E-Learning system, an on-line virtual classroom. It is a teaching and learning environment. It allows teachers to administer tests and quizzes, post grades and class notes, and host discussion boards. Through Blackboard, students are able to contact their teacher and classmates, keep a calendar, and organise tasks.

At the simplest of levels, the publication of files on Blackboard may well lessen the need for mass photocopying and that if students lose a hardcopy of a file they have access to the file on Blackboard. Most of the common file types are supported by Blackboard. There are also enormous advantages for ensuring that students are able to remain up-to-date when they miss class.

There are a variety of tools on Blackboard which enable students to submit work to their teachers through the Blackboard system. One of the great advantages of this facility is that it is secure and the teacher always knows who sent the file as user data as well as the date and the time are logged.

However, Blackboard is more than just a place to store files. In addition to using Blackboard for work lodgment in several subjects, some teachers have experimented with online assessment. In Year 11 Information Technology, students were examined via a multiple choice test. The test was created on Blackboard which gives the teacher complete control on when the test is delivered and even corrects the test as soon a it is completed. Students receive feedback and their marks virtually instantly.

Challenges

One of the major problems in secondary schools is the resistance of non Information Technology teachers to the use of computers in their subject areas. Results of studies conducted highlighted that teachers thought computer use was too time consuming and they were reluctant to hand over control of the learning environment to their students (Godfrey 2001). Whether the issue is the acquisition of new skills or moving away from the comfort zone of the instructivist approach, the problem remains that students are not being taught through modern teaching strategies. Given the large amount of educational research available in learning theories, one would anticipate that teachers would use these findings to their advantage and modernize their teaching strategies to incorporate new innovative and exciting methods of inspiring students to learn.

The real issue, however, is whether teachers are willing to let go of being the central authority and take on a different role where the teacher is not the focus. It can be argued that teaching no longer centres around

the transfer of knowledge from teacher to student. Instead, learning comes from student inquiry, critical thinking, and problem solving based on information accessed from a variety of sources (Godfrey 2001, p 16).

Newhouse's findings from his research on student achievement and teacher attitudes on the effects of computer based tools across grade levels highlighted that the lack of use of the computers is largely related to the teacher's pedagogy, their lack of experience and knowledge in using computers in the classroom, and a lack of time to experiment with computer application (Newhouse 1998, p 15). The problem is even further compounded when teachers are not willing to update their computer skills and embrace teaching strategies that facilitate the use of computers such as the constructivist approach.

Unlike normal classroom teaching, the ability to incorporate Learning Technologies into the classroom enables the teacher to engage with their students on a different level. One of the favoured pedagogical theories is the constructivist approach. It is based on the underpinning that the learner takes responsibility for constructing knowledge and not the teacher. David Loader explains that constructivism is built by the learner, not by the teacher. To take this theory further, this environment is even more conducive in a context where learners are actively engaged in constructing something in a social context to which they can add personal meaning (Romeo 2001, p 9). Using similar ideas, Romeo describes the concept of the engaged learner as a strategy that allows students to establish their own learning goals and work in collaboration to research real life issues. The teacher's role is to be a facilitator or a guide on the side rather than a sage on a stage.

Conclusion

As with any change in the use of information and communications technology, the uptake is uneven. Some staff have taken to using Blackboard and are placing all their materials for the students on it. As Blackboard is so easy to use, the question of uptake of Blackboard is not a function of the complexity of the system, rather the people who shy away from using computers in their teaching are the same people who shy away from using Blackboard. As with any information technology implementation, how schools go about ensuring the uptake of these systems is a major question.

The provision of an E-Learning system is an important factor in providing a comprehensive Information and Communications Technology solution within schools. Blackboard and other similar systems provide an easy to use, well structured medium to assist learning and teaching because

students and teachers are able to access information from anywhere around the world. An E-Learning system used properly is an important support structure for the delivery of modern, productive pedagogy.

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Most recent feedback and reviews

eLearning in secondary schools - your May infonet article by Donna Benjamin on 23 Aug 2005
Thanks Therese - your article was really useful to me as I struggle to articulate the issues associated with eLearning and learning technologies for the next issue of Infonet. I've taken the opportunity to add links to the articles in your references. They too are very worthwhile, so when I found them online I thought we may as well make the most of all this new-fangled technology.
cheers
- donna.

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