Our Computer Education Inservice Leaders

Our Computer Education Inservice Leaders (CEILs) offer more specialised inservice courses either at the Region's Computer Education Centre or at a school at the school's request. A CEIL may also conduct School Development Days in exchange for casual relief at their own school. Our Computer Education Consultants and CEILs conduct a large variety of courses that cater to current demands. 'Software to Support Science and Technology' and 'Introduction to the Internet' are just two examples.

Talented Writers and Talented Problem Solvers Camps

Talented Writers and Talented Problem Solvers Camps are another initiative of John Walters, the Leader of (NSW) Metropolitan East Computer Education Unit. The Camps not only provide activities to cater for Gifted and Talented Students, but at the same time, offer professional development to the teachers accompanying the students from each of the schools. Limited numbers are offered to each of the schools in the Region to attend these technology-rich learning environments so that a greater number of schools have the opportunity to participate. Brian Caswell, a well-known author, has attended the last several Talented Writers Camps, providing writers' workshops for the students. Computer Education Consultants and CEILs conduct other workshops in conjunction with the writing session.

These Camps offer students the opportunity to work with experts, the latest technology and exemplar software. The accompanying teachers observe each of the sessions and gain valuable ideas and knowledge for use at their own school.

Each of the programs aims to target a different area of Computer Education and various groups of teachers K–12, offering something for the new computer educator through to the more experienced.

Reference


Technology And Teacher Training

DAVID PERRY

Head of Junior School
Hamilton College, Hamilton, Vic.
Joint winner of 1995 ACEC Teacher Educator of the Year Award

INTRODUCTION

With the emphasis being placed on technology within the classroom, the training of teachers is of utmost importance. I have been actively involved in computer education for the past ten years. My initial interest arose through the need to keep ahead of my year five students. Following the completion of a Graduate Diploma in Computing, I took on the role of Junior School network manager at Somerset College, in Mudgeeraba on the Gold Coast. Whilst in this role I became involved in QSITE. It has been through QSITE, that I have had the opportunity to continually develop my computing interest and skills.

This year, 1995 has seen the culmination of my involvement in computer education. I have been fortunate enough to receive the QSITE award for Leadership in Computer education as well as being joint recipient of the National award. This year I have also accepted the position of Head of Junior School at Hamilton College, Hamilton, Victoria. This latest move opens up another avenue in the web of technology in schools.

TECHNOLOGY IN THE CLASSROOM

Having an interest in computer education, coupled with the role of network manager and most recently my appointment as Head of Junior School, technology in the classroom and the training of staff is an area of great interest. To some, the introduction of Technology into the curriculum is viewed as a new subject being imposed on schools. However, I hold the view that within Primary schools, technology particularly computing, extends across all areas of the curriculum. Computers must be viewed as a tool, and along with the other elements of technology, used to enhance the learning process.

The key to implementing technology across the curriculum is planning. To most this sounds simple enough, but for many the inclusion of computers and technology into the classroom programme is a daunting task. Integrated and Thematic approaches have been around for many years, however these are possibly the easiest ways of including technology into the curriculum. By choosing a theme, you can start to select appropriate technology-based activities.

An example of this is the perennial 'Sea' theme. Depending on the emphasis taken such a theme is an ideal way of incorporating technology into the curriculum. Within this theme a variety of activities can be carried out ranging from computer based presentations.
through to construction with Lego. Computer generated presentations such as: stories, booklets, slide shows, and research allow students to incorporate text, illustrations, sound and possible video into their work. With Lego students are able to design, construct and test items such as boats and submarines. In addition to these, students are able to explore the oceans through various compact disc packages, as well as through simulations such as Kraken by Grey Gum. Similar activities can be carried out using more conventional media; however, computer based activities enable students of all abilities to achieve. Presentations created using computers and associated technologies, are restricted by imagination rather than manipulative skills. They allow for collaborative learning as well as allowing students to think, and consider the appropriateness of material. The most critical aspect of any activity is its appropriateness to the situation.

SCHOOLS AND TECHNOLOGY
It is unrealistic to suggest that schools can afford to keep abreast of the newest and most dynamic technologies, simply due to the speed that things are changing. However, schools must continually reassess their facilities, so that students have access to technology that is not necessarily cutting edge but current. Schools need to be providing colour based computing facilities, with sound input and output along with colour printing.

Scanning and CD facilities. In addition to this schools need to be looking at access to the Internet. For some this may be a dream list, but if technology is to be a major thrust within schools, appropriate facilities must be provided. Convincing bureaucrats, school councils, and administration of the ongoing technology needs is difficult, for many technology is viewed as a one off cost.

Perhaps the most critical aspect of technology in schools is staff acceptance, without this, technology in schools will suffer. It is not a case of presenting staff with a curriculum document, staff need to be switched on to the learning that can take place through the use of technology. They must also be comfortable with the outcomes of its use. Some activities require a great deal of time in developing a presentation, and due to this the quantity of work produced by students may decline. This for some is seen as a reduction in standard and quality of teaching. However, the quality of learning that takes place in well planned activities compensates for any decline in quantity of work completed. Staff must also be users of the technology, simply having a computer in the classroom with children using it does not constitute a ‘switched on’ teacher. The successful implementation of technology in schools requires schools and teachers to view technology as an approach to improving learning. And as such teachers must modify their teaching methods to enable children to gain the greatest benefit. Schools must then communicate this to the broader school community so that both teachers and students are supported.

TEACHER TRAINING
For the successful implementation of technology there must be inservice training. How this is achieved is very much an individual decision for each school. Organisations such as QSITE contribute a great deal to teacher inservice, through its various conferences and workshops. However, the job of inservice cannot be left solely to organisations, it must also come from within schools. Teachers too must take responsibility for much of their own training. They need to become competent in the use of computers and be able to trouble shoot minor problems. This is a time consuming business and is best achieved through personal use. By becoming users of the technology, valuable inservice time can be used in developing strategies for implementing
Students working oblivious to the oncoming ship

technology into the curriculum. One of the greatest obstacles for technology inservice is convincing people that technology is an integral part of all subject areas, and as such deserves greater time and effort.

Integration of technology into the curriculum should become easier as Teacher Education graduates enter the workforce. Unfortunately this does not appear to be the case. Graduates are leaving college with computing skills, but not the skills needed to incorporate technology into the curriculum. The problem possibly stems from a lack of understanding by course designers of the role of technology, and how it can be used to enhance the learning within the various disciplines. In order to overcome this 'technology' needs to run parallel to all content taught. By viewing it as a integral thread within a subject, the appropriate use of technology can be highlighted, making students aware of the role of technology in the various subject areas.

CONCLUSION

Technology usage within schools is very important and schools are addressing it in various ways. Each approach can be argued for and against. However, as teachers I believe we need to be aware of how the appropriate use of technology can enhance learning. Teachers need to be able to consider possible activities and associated resources that will lead to specific learning outcomes. Training both pre and post service, needs to be aimed at developing the ability to think laterally. To be able to take an idea as the nucleus and attach to this resources, activities, and evaluation. It is through this ability to think and plan that appropriate activities incorporating technology will be developed. Once people are aware of the breadth of learning that can occur due to the inclusion of technology, technology with take off within schools. 

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