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Towards a Learning Society: Leta 2000

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PEB Exchange Programme on Educational Building

TOWARDS A LEARNING SOCIETY: LETA 2000

From 17 to 21 September 2000, South Australia played host to the fourth in a series of highly successful international educational events which focused on the role technology is playing and will play in the new learning environment.

LETA 2000 was one of Australia's most significant networking activities in educational technology last year. Moreover it provided an important opportunity to showcase Australia's as well as other countries' achievements in the application of information technology to learning.

The main objectives of the conference can be summarised as follows:

- to understand the importance of making lifelong learning a reality for all;
- to clarify the implications of new technologies for the learning environment;
- to identify new ideas and approaches as educational institutions respond to changes, be they schools, institutes, libraries, etc.

Places for learning, the built environment and the learning community

Fundamental changes in educational facilities were discussed at LETA 2000. Some key technical, ethical and cultural factors, which will have a direct impact on the design of future schools, were at stake, such as:

- digital technology;
- multiple intelligence;
- faculty interaction;
- student comfort and safety;
- sustainable development;
- economic sustainability;
- lifelong learning.

Educational facilities were also envisaged as playing a role in fostering and supporting learning communities. A unique system of planning and provision of educational facilities, involving the community of learners and teachers as well as the adult population in general and various authorities, was presented by Walter Koll and Cecilia Wilson. (See articles on pages 14 and 17.)

Libraries

The theme of libraries was largely debated, mainly according to the following perspectives:

- the role of the library in lifelong learning;
- the role of the library in the 21st century learning environment;
- libraries as builders of social capital;
- today's opportunities for school libraries;
- university libraries.

New technologies

The objective was triple:

- to understand what is real and relevant now about the impact of the new information and communication technology in the learning environment;
- to clarify the prospects of wireless and personal technology as well as the development of connected communities and how they will work;
- to identify who is really learning "online" and what the impact of online learning is likely to be for the 21st century institutions.

Some discussions revolved around selected innovative projects, new ideas and best practice examples of the application of technology in the learning environment. The focus was on educational building, asset management and the renewal of the built environment for learning.

The impact of information and communication technology on learning was exemplified by the highly interesting and innovative Technology School of the Future. (See article by John Travers, page 16.) The school is an example of how to explore the issues of teacher training and successful attempts to transform the operation of the conventional learning environment by changing the competence in information technology of both learners and teachers.

The assessment of the quality of online learning as well as the evaluation of its effectiveness were also at stake.

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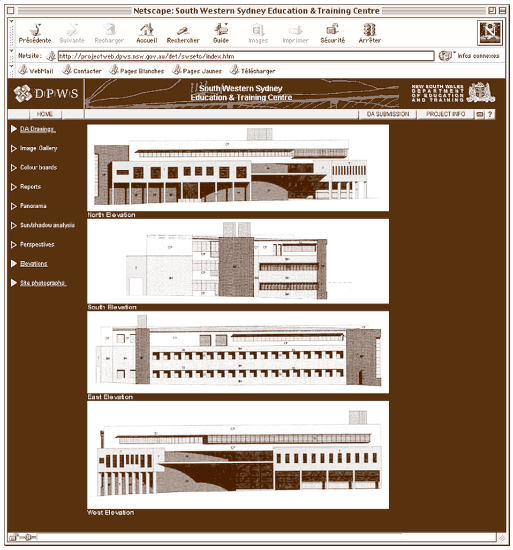
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AUSTRALIA'S "PROJECT WEB": INTERNET BASED COMMUNICATION FOR CONSTRUCTION

At many points during the lifecycle of a construction project, stakeholders and project team members communicate and exchange information and documents. This is traditionally done using paper documents that are printed, copied, reviewed, e-mailed, delivered, couriered, posted and filed. Australia's New South Wales Department of Public Works and Services established a "Project Web" strategy for the purposes of demonstrating the potential of using an Internet based communication system to facilitate the procurement process.

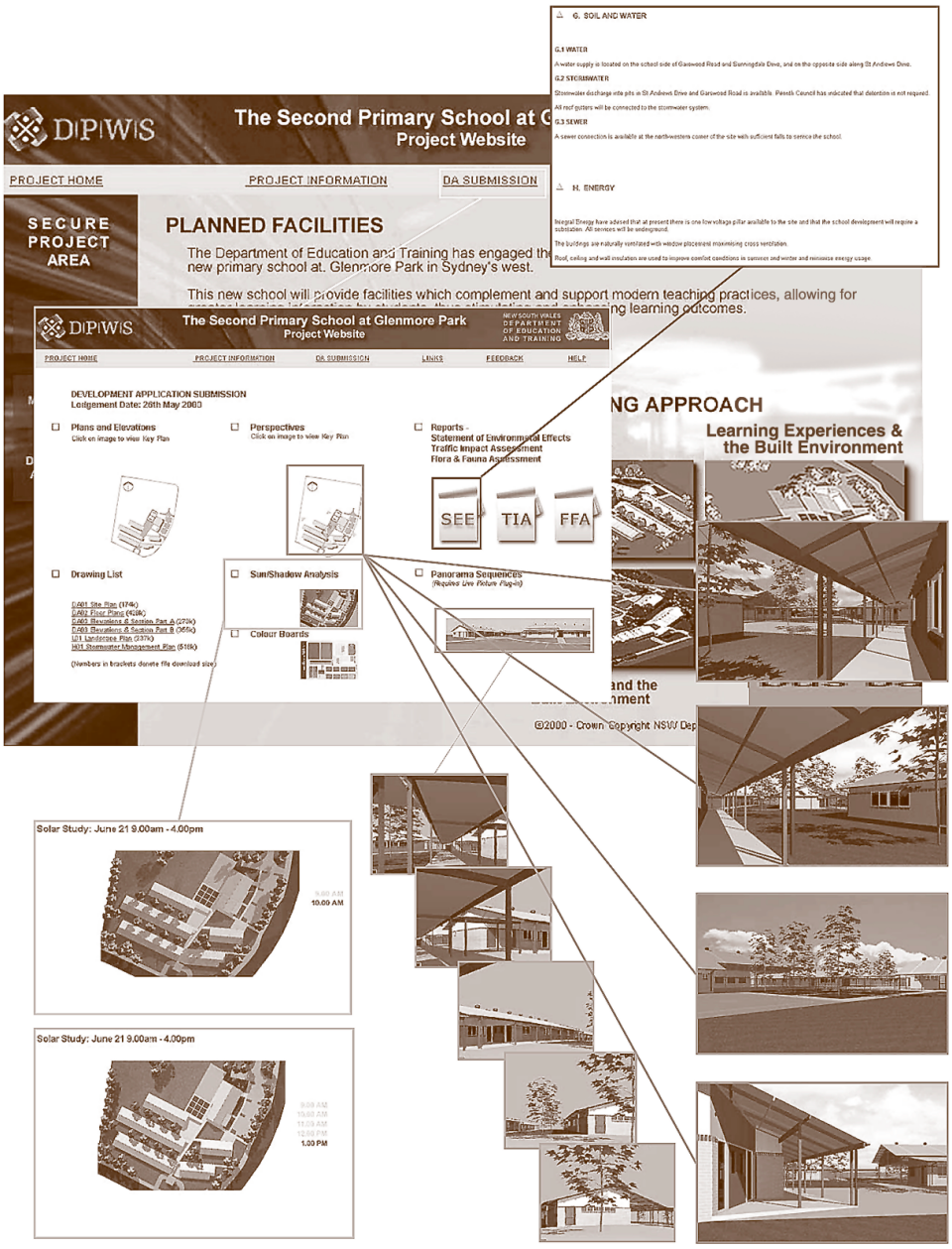
Project Web provides a central repository for all project data and information generated during a construction project's procurement phases, from concept through completion. It enables all project participants and stakeholders – client bodies, user groups, community groups, authorities, design professionals, consultants and suppliers – to access, share, collaborate, review, assess and authorise project information using Internet technology. Project Web leads to reduced costs for information transfer and delivery, shortened review and approval periods, improved information and communication to support decision-making and fewer errors.

The backbone of Project Web is an advanced document management system that supports the lodgement, storage and distribution of information with appropriate levels of security via the Internet. This allows all participants in a project to communicate and work together across different locations and time zones. Information is in one place, exists in only one version and is always current. Access to all tender documentation, site correspondence, meeting minutes, work schedules, variations, etc. are all on-line with audit trail and automatic notification.

Because it supports enhanced communication consultation and information, Project Web enables client departments to be seen as open and accessible. It gives the client access to up-to-date project information for reviewing, approving and monitoring project progress. Clients also benefit from a reduction in the procurement period and from reduced cost due to efficiency gains.

For further information, visit
http://projectweb.dpws.nsw.gov.au/

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Pages for projects involving the DPWS have a link to the Department's site. There is also a link to the client agency and access to Project Web via the client home page.

Items in the navigation bar are accessible to the public.

Project Team access to all project documents is provided through a secure password entry button.

A description of the project is provided using text, images, plans, etc.

Depending on their access right, team members can select/read/write/search for the required information.

This may be a memo, report, study, programme, action sheets, site instruction, CAD drawing, RFI or specification.

By using "red-lining" tools that are downloaded with the drawings, viewers and team members can make comments on the drawings.

Glenmore Park Public School was the first project in Australia to lodge a development application over the Internet for public viewing and comment. The public was able to view Live Picture Panoramas, animated shadow diagrams, 3D computer models, plans and all the required reports on environmental effects, traffic impact, fauna and flora, etc.

TECHNOLOGY SCHOOL OF THE FUTURE

The Technology School of the Future is a teacher development centre in Adelaide, South Australia. In June 2000 the school moved into its new purpose-built premises that ideally suit its role: to provide teacher courses in the use of learning technologies, which often go under the name of information and communication technology. Its main tool in trade is the computer, but the school is concerned with a far wider range of technologies. The new building models old, new and emerging technologies.

The building was originally the Town Hall for local government and was built in 1880, which is very old



by Australian standards. Since then it has been home for a cinema and a roller-skating rink and was derelict for a time. The original building was extended a number of times in different but generally compatible styles. Today, the entire building houses the South Australian Education Department's Conference Centre as well as the Technology School of the Future. The Conference Centre retains only the external shell of the 1930s part of the building. The Technology School of the Future retains nearly all of the original building and is an excellent example of retention of a high quality building while adapting it to different purposes.

The Technology School of the Future houses classes for teachers and students in the use of computers and other new technologies in education. The centre is a showcase for the use of educational technologies and hosts numerous visitors as well as regular clients. It is a building designed to give a strong impression about technology, which it does very well.

The external view of the building is striking: a classical late 19th century front with an art deco addition in keeping with the original style. It is easily the largest building in the vicinity, though there are many terrace shops, hotels and churches of a similar age.

The preservation of historical buildings in Australia is now greatly valued. In spite of the difficulties of preservation – the inflexibility of the building and the expense involved in conversion to modern usage – the Technology School of the Future has been adapted very effectively. The key to the success of the design is in the addition of an administrative wing on the eastern side and the addition of a large corridor with a glass wall alongside the original wall. This provides generous lighting and close contact with and visibility of the stone and brick wall.

Glass external walls can present a problem in Adelaide's hot summer. The school's are equipped with intelligent louvres, controlled by a light sensor, which automatically descend and adjust their angle to



provide shade. In strong winds the louvres automatically retract.

The modern design features are boldly industrial: large bare steel beams and prominent stainless steel air conditioning ducting. The main stairs are a highlight of the high foyer, in large timber blocks, with steel beam supports and fibre glass balustrades.

The contrasting character of the building – steel, stone, modern, old – further contrasts with the high-tech equipment in the 11 rooms. Extensive use of glass provides views from the corridors into the rooms and between rooms. The use of glass is a highly practical feature of the building; it provides easy supervision of students as well as establishing fascinating perspective, sometimes across three rooms.

Fittings within the building are crucial to its success. All rooms have extensive power and computer networking points in concealed floor cavities. Furniture is mobile and desks are modular, allowing various configurations. The flexibility of rooms has already been proven, as different usages have been easily accommodated.

The building has been highly successful both in practical terms and as a showcase of the use of technology.

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BRINGING LEARNING AND COMMUNITIES TOGETHER... AN AUSTRALIAN EXPERIENCE

For New South Wales, Australia, the germination of new learning communities is often instigated, especially in "greenfield" areas, by the provision of new educational facilities. Frequently, the development of new schools is the first occasion where a community comes together to learn, discuss and contribute to the direction they wish their new school to take.

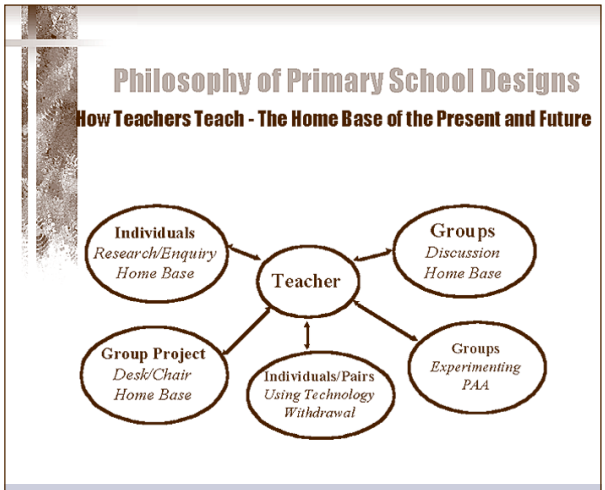
To achieve a positive learning community, an environment that fosters commitment is required. In this model the learning community must be inclusive, and it is essential that parents and community members are afforded full membership rights to the learning community. To promote this notion of "inclusiveness" there is a need to have strategies available to develop the skills and understanding of parents and teachers, separately and together.

From a facilities perspective, a major strategy developed by the Department of Education and Training to foster learning communities and encourage understanding of the role that facilities play in teaching and learning is the "Capital Works Community Presentation Kit".



The primary function of the presentation kit is to inform parents, students, teachers and other community members of the philosophies behind the design of a school, as well as of the range of facilities to be provided and the timeline for various stages to occur, and finally to outline the community's contribution

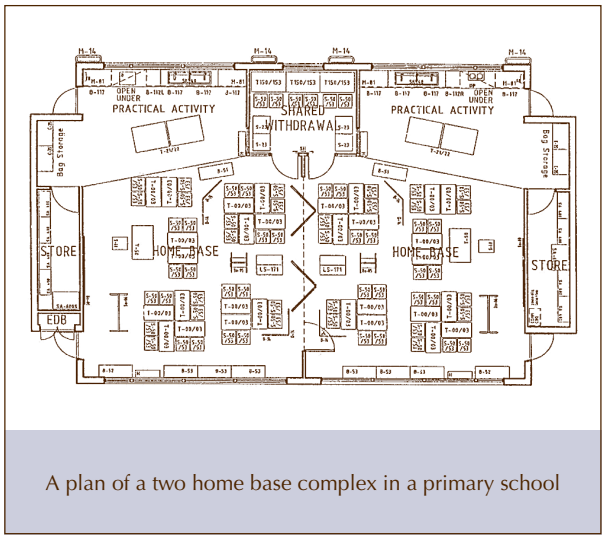
to the process. This information is an important aspect of the project. It is fundamental that the audience understands and appreciates the current philosophy of education delivery and is not reliant upon, or restricted to, their own school experiences, both good and bad. Through a simple format of presentation



This slide explains how a variety of activities can occur at any given time for a class with the teacher being a facilitator.

slides, a variety of teaching and learning strategies are explained leading to the conclusion that how teachers teach and students learn actually drive and determine the type and layout of school facilities.

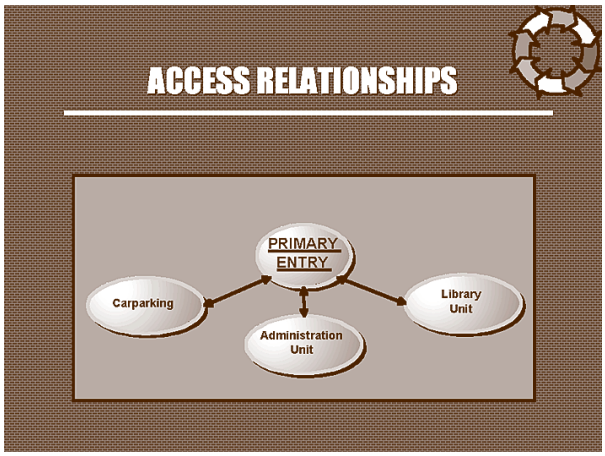
These preliminary teaching and learning concepts are enhanced by showing two-dimensional plans of all the school facilities together with actual photographs of the spaces so that people can relate to the "theory".



A plan of a two home base complex in a primary school



A primary school home base



The relationships of the facilities on a school site are also explained.



Through a process of continual evaluation of new schools, relationships of facilities are also refined. This refinement minimises such things as staff and student travel distances and improves operational matters including student and staff safety.

By now the learning community has acquired a knowledge base of how and why school facilities look the way they do; it is at this point that the presentation moves on to the environment and explains how these elements can also influence learning. In particular, the themes of colour and landscape, which are significant features of a school environment, are explained.

At the conclusion of this component of the presentation where a certain level of knowledge has been imparted and a level of understanding achieved, it is time to actively engage the fledgling learning community in the design process. This active engagement may culminate in a number of decisions requiring resolution by the learning community. These decisions include the nomination of special learning facilities to support the preferred curriculum direction for the new school, the determination between alternate design layouts and colour scheme selection.

How decisions are finally arrived at is managed by the educational leader (either a school principal or district superintendent), but the process is one of collaboration within the learning community.

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INAUGURAL MEETING OF THE AUSTRALIAN CHAPTER OF CEFPI

One of the few international associations of practitioners involved in the planning, design and operation of educational facilities is the Council for Educational Facilities Planning International (CEFPI) with headquarters in the United States.

Following a strong representation at the Baltimore International Conference of CEFPI in 1999 some 30 new Australian members have been recruited to the organisation and the Australian Chapter was formally launched at LETA 2000.

Andrew Bunting, a leading educational architect and planner from Melbourne, Victoria, was elected inaugural president of the chapter which received its charter from Ed Humble, representing the CEFPI President Jim Brady and the Board. Also present at the celebratory dinner were Dave Brittain, Prakash Nair and Bruce Jilk from the United States.

Responding to the toast to the new chapter, Bunting said, "We have a great deal to learn from each other. CEFPI offers a unique opportunity for people from architecture, education, planning and related disciplines to share ideas and information about the learning environment."

The new chapter plans to actively recruit members from Australia and New Zealand, establish a programme of research into trends in educational facilities and develop strong professional links between Australian and other CEFPI members particularly in the US and Canada.

News of the Australian Chapter will be available from the CEFPI Web site (http://www.cefpi.org) and from the LETA 2000 Web site (http://www.leta2000.sa.edu.au).

