

AUSTRALIAN *FLEXIBLE LEARNING*

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# Strategy 2000

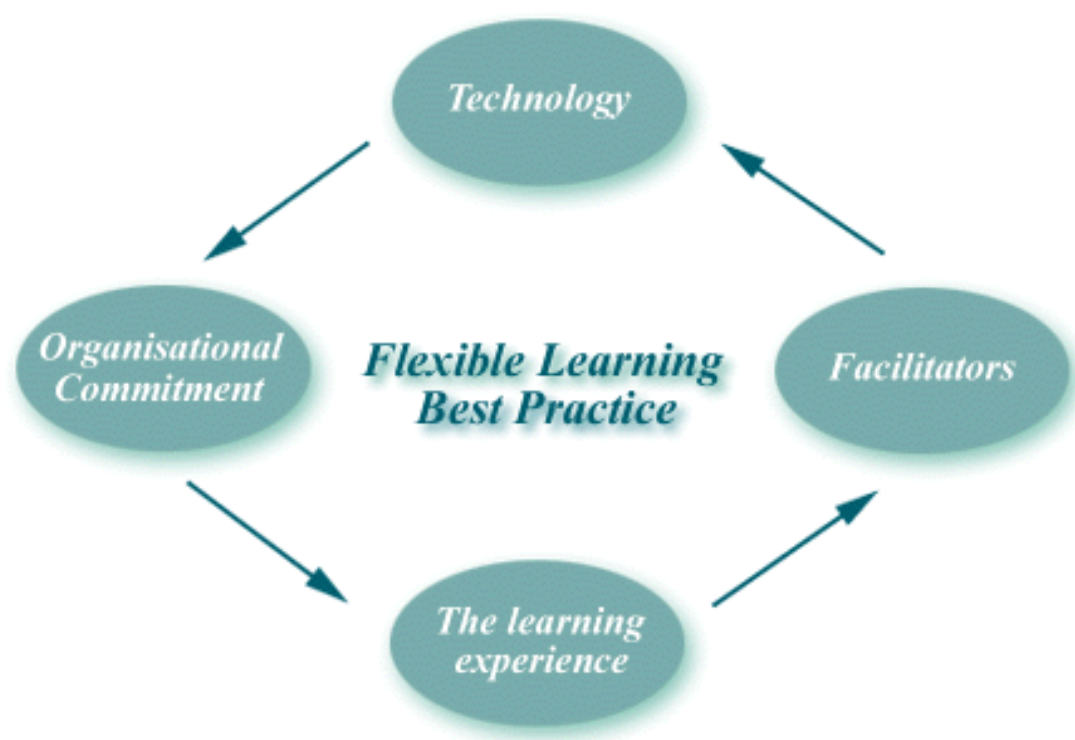
**Flexible Learning Best Practice**

**Project Report**

# Strategy 2000

## Flexible Learning Best Practice

### Project Report



This product is a Flexible Learning for the Information Economy initiative within the Framework for National Collaboration in Flexible Learning in VET 2000-2004

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**And**

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# Flexible Learning Best Practice Project Report

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## Introduction

The Flexible Learning Best Practice project was a Strategy 2000 project developed under the National Collaborative Framework for Flexible Learning in Vocational Education and Training (VET) 2000-2004. The focus of Strategy 2000 is on flexible learning for the information economy with a particular emphasis on online technologies.

The aim of the project was to encourage Registered Training Organisations to continuously improve the capabilities of their staff to provide flexible learning services by identifying and disseminating best practice strategies. The focus was on how the emerging technologies can best be used in a learning context. For the purposes of this project “online” was defined as the use of electronic interactive media.

The outcome of this project is the creation of a Flexible Learning Best Practice web site for VET staff. The Website can be accessed through the National Collaborative Framework website [www.flexiblelearning.net.au](http://www.flexiblelearning.net.au) or directly through <http://jimbo.westone.wa.gov.au/bestpractice/default.asp>

One of the major activities of the project was visiting sites and speaking to people within organisations that were involved in online learning to gather case studies for publication in the website, and to find good practice examples in various aspects of flexible learning.

The question of what Best Practice in Flexible Learning actually means became fundamental to the quest of the researchers. As the site visits were being conducted it became apparent that there were many models, approaches and paradigms that functioned very well. The researchers continued reading both overseas and local research to try and pin this elusive concept down. The idea of a continuum emerged, which allowed best practice to exist within any model under certain circumstances.

Things are moving very quickly in the online learning world. Websites that were visited in May 2000 were quite different by the end of the year. Many colleges who were not delivering online early in the year, were by the end. Products and services offered evolved and changed during the period of the project. It is a moving field and this project should be seen very much as a product of its time. The important work done during the project was in providing a starting point for discussions on what best practice in flexible learning in the context of the emerging technologies actually is. Also important was to identify a framework of benchmarks to assist providers in their own benchmarking and to provide a basic picture of where we are in regards to best practice in the year 2000. The website that has been developed draws together a wealth of practical examples of how best practice can be achieved and provides over 60 links to selected relevant websites identified during the research.

This report combines all the information that has been included in the website into a single document that can be downloaded and reproduced as necessary.

# Research Methodology

The Flexible Learning Best Practice project was conducted during 2000. Initially 2 desktop reviews were done. One, a scan of related literature and the other, a review of the world wide web looking at the websites of providers offering online learning. These reviews formed the basis of the 2<sup>nd</sup> stage of the research where the team went out and visited organisations involved in online learning. Both documents can be downloaded separately from the website

The literature and website research identified various models and issues to be considered when implementing online learning. The project team agreed that the research framework should be based on benchmarks that would be useful to any provider who was delivering online.

A template was developed to collect consistent data for the site visit stage of the project. The template (appendix 2) was based on a combination of:

- ◆ the benchmarks suggested in *Quality on the Line: Benchmarks for success in Internet-based distance education* (<http://www.ihep.com/PUB.htm>)
- ◆ a framework for implementing flexible online learning presented to the ANTA conference (2000) by Flexible Learning Fellows Jennifer Jackson and Ian McAlpine; and
- ◆ additional requirements identified through the literature scan.

During August and September 2000, 22 site visits were conducted throughout Australia to a variety of organisations (see Appendix 1). Most of the visits were to organisations delivering online learning including TAFEs, Universities, large corporations and private training organisations. The project research did not overlook the major part that large state systems such as Queensland TAFE Online and the emerging NSW TAFE Online play in facilitating good practice in online learning. Also, two private consultancies that offer services such as platforms, instructional design, staff training and change management to organisations implementing and delivering online learning were visited. See Appendix 1 for details.

The data from the site visits and ongoing literature and website scans was then analysed to form the content of the Flexible Learning Best Practice website. Only 15 case studies were developed from the site visits. Some of the organisations visited were not currently delivering online learning for various reasons, and were not included as case studies for this reason. All the organisations, whether featured as case studies, or not, contributed greatly to the overall conceptual development of the project.

After the site visits had been conducted, and the data from the research was being collated, further refinement of the benchmarks was undertaken. The final version can be found at Appendix 3.

# Towards a Definition of Flexible Learning Best Practice

In an attempt to scope the project it was important for the project team to firstly define what Flexible Learning Best Practice was. The following definitions were used.

## **Flexible Learning**

Is a learner centred approach that allows for learning when the learner wants it, where they want it, and how they want it. The new technologies allow learning to be conducted in new and more flexible ways. However, some learners may prefer a traditional classroom and teacher situation. It should be up to the learner to decide, from the options made available to them. This project has focused on flexible learning in the context of the emerging technologies.

## **Best practice**

*A concept referring to the best way of doing something, normally a function or process within an organisation. Hence for example 'best practice organisations' - those who are at the forefront have the best procedures.*

*In practical terms 'best practice' is elusive - what is best for one organisation is not necessarily best for another. Also, it is difficult to be sure that a benchmarking project has identified the 'best practices' - there may be other, better practices - just around the corner.*

*Even if an organisation has implemented 'best practices', they will not be so forever. As other organisations achieve further improvements, 'best practice' will accordingly evolve. Hence an organisation which seeks to be 'best practice' must continually strive to maintain the momentum and culture of organisational performance improvement so that it improves at a faster rate than its competitors. (OTFE, Benchmarking Manual [http://www.otfe.vic.gov.au/publi/benchmark/resources/docs\\_what/what02\\_glossary.htm](http://www.otfe.vic.gov.au/publi/benchmark/resources/docs_what/what02_glossary.htm))*

## **Flexible Learning Best Practice**

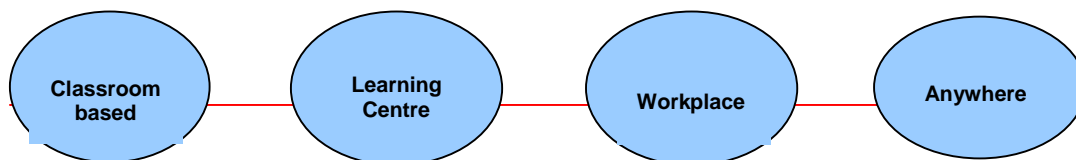
For the purposes of this project flexible learning best practice is a concept referring to the best way of delivering and implementing flexible learning in the context of the emerging technologies. Flexible Learning Best Practice organisations are those who are at the forefront and have met the challenges offered by flexible learning in innovative ways that suit their organisation while meeting the requirements of their clients. These organisations will also have mechanisms for continual improvement and will foster and support innovation.

This definition is very open and does not specify a model or a technological solution. It allows best practice to be exhibited in a variety of ways. The researchers found that because of the range of models, situations and challenges that no single model of best practice existed and that describing best practice in the context of a continuum was more useful.

# The Continuum of Online Learning Models and Best Practice

At one end of the continuum there are teachers in a traditional classroom, setting use online learning, as a classroom tool. Teachers are in control and are at the centre of this model. At the other end is the highly motivated, off campus learner, using interactive online learning materials supported by Internet communication tools, who may be a member of a moderated virtual learning community. Here the learner is at the centre of the model. Many models and options are available along the continuum. Many systems currently in use allow for a combination of models along the continuum.

The research team identified 4 models that generally describe points along the continuum. However, hybrids of these models also exist along the line. These are further explained below.

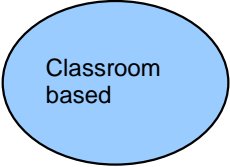


## ***Best Practice along the Continuum.***

Best practice may be exhibited at any point along the continuum under the following conditions:

- ◆ The learners/clients requirements are determined and met
- ◆ Learners/clients may choose from various options/learning models on the continuum
- ◆ A strategic decision has determined the organisation's position/s on the continuum
- ◆ The organisation has a strategic plan to expand offerings along the continuum in the context of change management and continuous improvement.

## Online in a Classroom



Classroom based


In this mode teachers use online learning materials as a teaching resource in a classroom/computer lab environment.

For many organisations this is a good springboard into flexible learning. As familiarity with the technology increases, a wider range of possibilities offered by the emerging technologies can be explored.

*Relevant Case studies:*

Adult Migrant Education Service, Victoria  
Launceston College

## Online in a Learning Centre



Learning Centre

Learning Centres are discrete computer access centres, often located within a TAFE campus, or in community-based settings. Frequently, learning centres do not provide training themselves, but act as conduits to other providers.

Historically this was the earliest model for providing technology-based learning, and it continues to have an important place, particularly in remote areas. Learning centres overcome issues related to home computer access, unreliable or expensive Internet connections, or lack of quiet study space. They provide printing, scanning and other peripheral technologies that may not be available in the home. For many inexperienced computer users, they are a convenient first step into technology-based learning, prior to online learning at home.

*Relevant Case studies:*

Queensland Open Learning Network

## Online in the Workplace



Workplace

This model features online learning provided within an organisation, frequently delivered via an Intranet. This model suits large corporations committed to training their staff internally, and where the learning focuses on organisation-specific products, services and procedures. For such companies, Internet delivery may not be appropriate, as learners are not expected to undertake learning outside their paid work time.

*Relevant Case studies:*

Telstra

## Online Anywhere



This model is where maximum flexibility is realised in terms of when and where learning may take place. It allows learners to learn in any setting they choose, at home, work, while travelling, the list is endless. This model relies on the learner being fully equipped, (or have access to the necessary technology), complete with information literacy and motivation.

A common model uses downloadable materials for offline learning. This overcomes many of the technical barriers that currently hamper Internet delivery, such as lack of modem speed, bandwidth hungry courses using multimedia, having to compete for access to a single phone line, or having to use expensive STD connections. CD-ROM based packages offer similar solutions.

Purely online, interactive delivery can be supported by synchronous or asynchronous online communication tools such as email, bulletin boards and chat rooms. This mode can also be enhanced through the use of online facilitators.

*Relevant Case studies:*

Oracle

SA Online

QANTM

## Examples of Good Practice in Flexible Learning

The initial research for the Flexible Learning Best Practice Project identified that commitment across the organisation was necessary to implement online learning successfully. Because of infrastructure requirements appropriate resources need to be allocated strategically across the organisation for course development, help services, marketing and general infrastructure requirements. Change management and facilitator and learner readiness also need to be addressed. Therefore a “whole of organisation” approach has been taken with the assumption that all aspects needed to work together for best practice to be exhibited.

The Benchmarks developed by the project team cover four major areas and the possible ways of meeting best practice in each area is identified. The areas are:

- ◆ Organisational Commitment
- ◆ Technology
- ◆ Facilitator Issues
- ◆ Learning Experience

Each area is broken down into related units and elements. The full set of benchmarks can be found at Appendix 3.

In the following pages each benchmark is presented separately with practical examples of good practice gathered from organisations that were researched included.

# Organisational Commitment

## Executive Commitment

*Good practice includes ...*

- a clear vision for the development of online learning
- a strategic plan which reflects the online learning vision
- adequate resourcing.

## Examples of good practice

### RMIT, Vic

The strategic process of implementing online learning commenced in 1998 with the formation of the 'Education and Training IT Alignment Project' (ITAP), steered by a Vice Chancellor's Committee. Building on substantial market analysis, this project made recommendations on infrastructure, courseware development, technology platforms, and the academic management system. As a result the Learning Technology Services unit was established, and a budget of \$50million over a five year period was allocated to progress RMIT's on-line learning policy.

### ORACLE Corporation, NSW

Oracle is a multi-national software development corporation, specialising in database development and related applications. Headquartered in the US, but with bases worldwide, Oracle competes with IBM as the world's largest IT provider.

IT training is an essential component of Oracle's operations. The company is committed to the value of training - for example, managing director of Oracle in Australia, Phil Kieley, is the chair of the IT&T Industry Training Board. At the same time, Oracle's business philosophy is that providing high quality training products and learning experiences supports sales and marketing of Oracle software.

### TELSTRA, Vic

Telstra is Australia's largest telecommunications corporation. It provides service Australia-wide and has a highly diverse and dispersed workforce. As a committed learning organisation, training is an integral part of its operations.

There is a straightforward strategic direction to move all of Telstra's training online. A National Manager of Technology Based Learning is responsible for a large online product development division that is constantly expanding its offering of online learning to the organisation. Currently there are approximately 630 online modules

available to staff, 270 of which have been developed internally, with the remainder being sourced externally. Courses are generally short (around 2-4hrs) and designed to meet the specific needs of the organisation.

#### **QANTM, QLD**

QANTM is Australia's largest 'cooperative media centre,' with offices in Brisbane, Darwin and Hobart. Established through Commonwealth funding in 1996, QANTM is backed by the Queensland, Northern Territory and Commonwealth Governments, five Queensland universities, TAFE Queensland, Silicon Graphics Pty Ltd and Telstra. It now operates as a commercial provider in its own right, specialising in multimedia training, consultancy and software development.

QANTM sees its role as a 'coordinator, facilitator, stimulator and innovator to sustainable industry growth'. As an organisation QANTM prides itself on being fast and flexible. It is committed to a team-based approach, with a strategy of partnering with other organisations in the delivery of multimedia training. For example, QANTM offers the Diploma of Multimedia in partnership with the Southbank Institute of TAFE, using Queensland TAFE online.

#### **Wodonga Institute of TAFE, VIC**

Although the implementation of online learning at Wodonga TAFE is still in the early stages, two recent events have increased the momentum of change. The appointment of Adrian Marron as Director in 1999, and the awarding of a Flexible Learning Fellowship to Chris Horton, manager of Planning and Educational Services, has established a very supportive climate for online learning development. There is a strong awareness that online learning will become an increasing learner expectation as E-business becomes the norm.

Resources for online materials development are allocated on the basis of a business performance agreement. The Educational Development Services unit sells their services both to the TAFE and to external clients. 43% of the unit's income in 1999-2000 was derived outside state or federal recurrent funding.

#### **State Based Responses**

State based responses such as, Queensland TAFE Online, South Australia Online and the emerging NSW TAFE Online all display good practice in executive commitment. All have been created from vision at the highest level, and are resourced to strategically assist the whole TAFE system in their state to move to online delivery. The Case Studies of these organisations provide further detail. NB the Victorian Virtual Campus (<http://www.tafevc.com.au/>) was not included in this year's studies but also falls into this category.

## Management

*Good practice includes ...*

- strategies to manage the changes, and risks, associated with online learning
- identification of potential online clients and their needs
- use of partnerships to maximise the quality and diversity of offerings
- use of research to keep pace with current developments, and stimulate innovation
- a systematic approach to the professional development of all staff involved.

## Examples of good practice

### **West Coast Online, WA**

During 2000 West Coast Online ran five online awareness programs targeted at facilitation and management staff. One of these projects involved Program Managers who met every second week in August and September to chat, online, about a range of topics relevant to the implementation of online learning in their program areas. Each session lasted for one hour and guest speakers were invited to contribute. Because of the online nature of the chat, interstate guests were regular participants.

Chat log files were sent to all participants after each session. The first two sessions encouraged debate, and the third (on the costs and benefits of online learning) produced a resolution for a small committee to pursue the issues raised.

In 2000, about 50 academic staff members have undertaken some form of training in the application of online technologies to their teaching practice. Some staff have undertaken work-based professional development through Learnscope, other staff have been through the WestOne Program Area Tutor (PAT) and College Online Coordinator (COCO) Schemes. Action learning models have been found to be the most successful approach. West Coast College will be implementing a core professional development program in 2001 that will take account of good practice approaches. A range of options and methodologies will be presented in a modular form to enable staff to pick and choose the skills that will be most appropriate to them. It is anticipated that this just-in-time approach will provide an excellent platform for innovative online learning pilots.

**QANTM**

QANTM is a small, non-hierarchical organisation, committed to a team-based approach, with a strategy of partnering with other organisations in the delivery of multimedia training.

QANTM's partnership strategy is achieved by providing onsite QANTM staff to partner organisations. Initially QANTM staff visit the new site to audit the organisation's capacity to deliver the training. This includes looking at human and physical resources, as well as doing a market analysis to determine the appropriate level of auspicing and moderation. QANTM supports the partner organisation in a range of ways, from offering Certificate IV in Multimedia to participating staff, to professional development, mentoring and on-call advice, usually through email.

**Wodonga  
TAFE, Vic**

A key outcome from Chris Horton's Flexible Learning Fellowship has been a change management plan designed to take Wodonga to the point where the emerging technologies are used throughout the organisation.

The consultative planning approach focused on identifying and developing strategies for a number of key areas of change. Voluntary focus groups within the institute were convened to put recommendations for improvement to management. This reflective system improvement strategy also focused on ways of supporting the innovation required in online learning development. An Information Technology & Communication policy is currently being developed.

Wodonga is also actively looking to partner with organisations both locally and outside their region. They were one of the first nine institutes to take part in the Victorian Virtual Campus. With the aim of avoiding duplication by cooperating rather than competing, Wodonga is a member of a professional development consortium with Chisholm, Gordon and Northern Metropolitan Institutes. The consortium is in the process of developing units of competency and online support materials.

**Adult Migrant  
Education  
Service  
(AMES), Vic**

AMES has a gradual approach to implementing online learning, with a documented change management strategy. Management is particularly conscious of the potential for burn-out with early adopters, and deliberately proceeds with caution.

For example, because of the high face-to-face support needs of AMES clients, and their lack of access to home computers, online learning is predominantly used as a tool in the classroom. There is no real distinction between face to face and online delivery. This approach is gently moving the whole organisation forward in the context of the emerging technologies.

## Evaluation

*Good practice includes ...*

- strategies to review and enhance the quality of online offerings
- a systematic process for gathering and analysing client feedback
- a plan to measure longer term outcomes and cost effectiveness.

## Examples of Good Practice

**ORACLE, NSW** Oracle places a premium on the development of world class learning materials, with rigorous quality assurance processes applied to all stages of the development process. Student feedback is gathered systematically throughout the learning process, and tracked carefully through purpose-built databases.

**RMIT, Vic** An evaluation component has been built in to RMIT's Education and Training IT Alignment Project (ITAP), including the position of Evaluation Coordinator, and identification of a set of measurable outcomes. Evaluation of the Distributed Learning System is ongoing and involves focus groups, case studies and on-line questionnaires. Data is available from the Learning System and will be increasingly used to evaluate program effectiveness. A number of evaluation reports are available on RMIT's website.

**TELSTRA, Vic** Evaluation of the educational effectiveness of learning programs is a core activity at Telstra. For example, all externally sourced courses are evaluated by the online learning unit or the relevant business unit.

In addition, managers are regularly asked to measure the cost efficiency and effectiveness of the training. They find this is not always easy to do, especially if trying to link to the "bottom line". Measuring effectiveness through course completions is not considered useful, as many learners will simply take what they need from a learning package and leave it at that. However, in Telstra's view, this is still a successful outcome.

# The Learning Experience

## Learning Programs

*Good practice includes ...*

- an educational rationale for decisions about choice of platform
- agreed standards for the design of learning programs, and assessment procedures
- understanding by developers of the differences between online and face-to-face teaching and assessment
- incorporation of adult learning principles in program design
- use of communication tools to promote interactivity and collaboration
- a flexible design to accommodate a variety of learner preferences and contexts
- procedures to maintain, review and update learning programs.

## Examples of good practice

### **Solutions onLine (CIT)**

is the major developer of online courseware at Canberra Institute of Technology. Underpinning their approach to materials development is the idea that learners should engage with the content and concepts of the courseware rather than the technology.

Materials are presented as short, highly interactive 'chunks of learning'. A key approach is the concept of 'metaphoric learning' - the online equivalent to role-play and simulation. This has proved highly suitable for teaching values and for example has been used very successfully in training related to sexual harassment. CIT staff also find that the anonymity of online learning can encourage a higher degree of engagement and honesty than in a classroom. This is another feature that suits values-based education.

### **SA TAFE Online**

SA Online believes instructional designers are pivotal, but distinguishes between the skills of 'conventional' instructional design, and those required for the online era. These include:

- understanding issues of bandwidth

- understanding how plug-ins may exclude potential students, and knowing when, as well as when not, to use them
- willingness to fit the technology to the learning situation using a problem solving approach, rather than re-employing a favourite model
- direct experience of learning and teaching in an online environment
- using communication tools to develop a community of learners
- being able to judge whether online learning is appropriate for a particular client group.

SA Online is notable for its work in pioneering the use of WebCT as a platform for establishing co-operative online learning communities.

**Northern Territory University.**

Course materials are developed onsite using a project team approach. Project teams include a reference group, an educational designer - someone with who is familiar with both the IT and education, a subject specialist, project manager, web designer and a technical designer. Excellent documentation is developed to support this process. The project is scoped and performance measures and outcomes are clearly stated. User testing is considered fundamentally important. Both internal and external user testing takes place. The project plans cover this aspect well.

Participative pedagogy predominates. Tutors have found that learning can be much more participatory in an online context. The technology is used to engage learners divergently, not just presenting the obvious. Care is taken to determine who is being taught and what technology is best. Engagement is through action and reflection.

WWWThreads is the main discussion tool used. Questions are regularly put to groups by the tutor rather than dealing individually with each student. Chat lines are well used and highly moderated. Use of the communication tools is increasing throughout the organisation.

**ORACLE**

Oracle places a premium on the development of world class learning materials, with rigorous quality assurance processes applied to all stages of the development process.

World-leading instructional designers are employed to ensure that pedagogy and appropriate use of technology for the desired learning outcomes drive the development. Most learning materials make heavy use of graphics and diagrams, and sometimes sound, however 'full multimedia' is not seen as appropriate for most of Oracle's subject matter.

An initial assessment process is used to tailor courses to the needs of individual learners. Each course follows a mastery learning model. The courseware generates assessment throughout, and will not allow learners to proceed until each test has been completed to a required standard. Where learning gaps are identified, the student is referred to appropriate revision material.

Formal, supervised, computer-generated examinations are used for final assessment. These take place in approved testing centres.

Significantly, Oracle achieves a very high level of course completion.

## **Student Support**

*Good practice includes ...*

- learner-focused website providing course details, enrolment information, orientation, career counselling and other support services
- programs that assist learners to use the online system, and develop information literacy
- tracking systems to monitor learner activity online
- access to comprehensive help systems.

## **Examples of good practice**

### **RMIT**

Students receive an orientation CD-ROM containing training and information about the Distributed Learning System (DLS). They are also given a personalised page on enrolment through the Learning System with information on the courses they are enrolled in, and access to appropriate resources, communication tools and activities.

A customer service co-ordinator for the DLS offers support to users from 9.00 am – 9.00 pm. There is also printed material and a help desk available for students, covering Institute and faculty information.

### **QANTM**

Students receive a starter kit that introduces their course and the organisation, provides basic information about the hardware and software they will use, instructions about assessment, and how to upload and download. A low rate of subsequent help calls related

to these issues indicates the value of the starter kit.

With a feedback benchmark of 48 hours, QANTM is committed to a high level of interaction with students. A student tracking system keeps a history of participation in chat sessions and use of email, and teachers will contact students if they have not logged in for two days. Help desk, email and telephone support is available.

Post-course support is also a feature. Students are advised of relevant jobs and potential employers to approach. The student tracking system follows students after graduation, and a free job placement service is available. Students can also register for contract work.

### **SA Online**

A three-level help system assists online delivery units to support students. The allocated facilitator is the initial point of contact, identifying students' Internet and IT skills and organising any training or mentoring that may be required. More difficult needs are referred to a helpdesk, or an IT specialist.

Because online learning creates the expectation that facilitators are available 24 hours of the day, the online helpdesk has set a response time benchmark of 24 hours.

SA Online is planning a Virtual Learning Environment with a focus on career counselling. This will include a search facility for vocation and mode of study.

### **Canberra Institute Of Technology (CIT)**

The Department of Community Development, CIT, has developed its own online induction package. This is followed by a face to face interview to determine motivation and commitment, and to establish an individual learning plan and contract.

There is also an excellent website that provides rudimentary online learning capability for all the courses. Although the Department offers no online courses, students who cannot attend structured classes can use the website to access all the learning resources that are provided to face-to-face students.

The website includes chat and email facilities, as well as links to libraries and electronic databases. It also provides general assistance to students in the department. For example, each course has specific (lesson-level) information that is updated regularly by teachers. The website keeps statistics, not just on hits, but length of time spent on each page, the identify of students and teachers accessing, and the number of hits on each page. This allows tutors to identify when a page is useful or requires updating.

# Technology

*Good practice includes ...*

- use of the VET preferred standards for decisions about technology infrastructure
- a technology plan, linked to larger organisational planning
- adequate measures to maintain the security and reliability of the system
- easy access to technical support for staff and learners
- alternative technology options available to low end users.

## Examples of good practice

### **RMIT**

Very few RMIT courses are delivered exclusively online, however the Distributed Learning System is highly integrated with classroom practice. Interactive text-based materials and communication tools such as bulletin boards, synchronous chat and e-mail are seen as an enhancement of, rather than a replacement for, classroom interaction.

The major delivery platform is 'Blackboard', with systems such as Course Information, 'WebBoard', 'Perception' and 'Weblearn' fully integrated. The DLS supports face to face delivery, but offers significant flexibility to learners in that much of the material is put onto the Learning System for those who cannot attend lectures.

The technology plan is well developed and integral to the implementation of the Information Technology Alignment Project (ITAP). There is a centralised security system, in which all users (staff & students) have passwords

A customer service co-ordinator for the DLS offers support to users from 9.00 am – 9.00 pm. There is also printed material and a help desk available for students, covering Institute and faculty information.

### **NSW TAFE ONLINE**

NSW TAFE Online is a series of projects covering all aspects of implementation, with the aim of integrating online learning throughout the NSW TAFE sector, moving the whole organisation to an e-business orientation. The system rests on very secure and powerful technology, with a massive hardware infrastructure. A 'wide area network' is used for all corporate systems, and all software is bought under statewide licence.

As an e-business NSW TAFE is aiming to deliver all current customer services online. For example, students will be able to enrol online for all courses, using an enrolment system which will have financial, authentication and selection process features. The website currently being developed will provide the services.

Among the many issues to be resolved for the implementation of online learning, is the need to balance the need for network security with clients' need for access. The very secure firewalls mean that currently people cannot access the network outside an institution except by using separate servers that are not part of the larger system. Security is highly desirable, but is also a barrier.

## **TELSTRA**

As a telecommunications organisation, Telstra links learning technology into its whole-of-organisation planning. In 1997 the company implemented a customised Southrock platform. This platform provides a whole learning system which tracks learner usage, maintains records, and includes communication tools such as bulletin boards and chat rooms. With only one crash in three years, the system is extremely reliable.

Security is very tight. Firewall restrictions are one of the reasons that training is only offered over an intranet. And as employees have indicated they prefer to learn at work, rather than at home, at this stage there is no push for offering training over the web. Support to users is provided by a help desk, as well as through online tutors.

## **Launceston Secondary College**

Launceston College has a comprehensive Learning Technology Plan (2000-2002) which is aligned with its strategic plan. Beginning with the Open Learning program, online offerings have been extended to the pre-tertiary and VET areas of the college curriculum. These involve a mix of in-house content, some commercial products and limited use of WebCT programs. The plan is to integrate on-line technology into classroom situations across the college, as well as offer complete on-line courses. A help desk is also available to staff for 'just-in-time' advice and support.

*Broadband Launceston* is a federally funded project which will provide Telstra's new DSL (Digital Subscriber Line) Internet access to 9000 sites in the Launceston area, enabling connections at 100 times the speed of a normal modem connection. As Launceston College is already facing bandwidth issues, it sees many potential benefits from the new project. Increased use of videoconferencing is one example.

**Northern  
Territory  
University  
(NTU)**

The cost and reliability of connection for learners accessing web services in remote locations in the Northern Territory is a big issue for online learning. Much of the remote delivery has to be supported by CD-ROMs. Web access in general is not particularly robust. Email is problematic at best and does not work at worst. The university itself has plenty of computer labs for student access.

# Facilitators

*Good practice includes ...*

- understanding the differences between online and face-to-face teaching and assessment
- efficient management of online communication with individuals and groups of learners
- adapting online communication to learners' preferences and contexts
- quick response times for feedback to learners
- accommodating learners with a range of learning needs, styles and contexts
- supporting and mentoring inexperienced facilitators
- maintaining innovative practice through knowledge of current research and trends.

## Examples of good practice

### **Wodonga Institute of TAFE**

Teachers at Wodonga TAFE deliver both online and face to face. Between 25 and 30% of the Wodonga workforce has been exposed to some kind of online material development project. The aim of this is to use the development process as a way of easing staff into the use of online learning methodologies in their teaching practice. Ultimately, Wodonga staff members are expected to be multi-skilled as both teachers and instructional designers.

This approach extends to the development of courses for professional development of tutors, such as Wodonga's online course in mentoring. The course design consciously highlights the difference between online and face-to-face modes, and facilitates the change in skill and attitude required.

### **ORACLE**

Although Oracle's resource materials are designed to stand on their own, face-to-face provision of training is also a core part of their operation, often at the client's enterprise. Oracle has high expectations of the trainers employed to deliver face to face. Contractors are used as well as in-house staff, with most facilitators having teaching degrees as well as content expertise.

New facilitators are assigned a mentor, and there is some co-teaching in the early stages. Performance appraisal is used to ensure appropriate professional development, and generous

development opportunities are provided to facilitators to promote the highest possible performance. Student feedback is gathered systematically throughout the learning process, and tracked carefully through purpose-built databases.

To minimise burnout and ensure currency in their field, teaching staff are rotated within the organisation, with facilitators either working in the classroom, or assigned to a technology-based team.

## **Launceston College**

Launceston College has a comprehensive Learning Technology Plan (2000-2002) which is aligned with its strategic plan. A key component is the approach to the professional development of staff.

With an average age of around 47, teachers' level of comfort with technology varies greatly. Yet the college has set the aim of enabling all teachers to develop proficiency in learning technologies.

To achieve this, each year, teacher IT competencies are assessed, or previously acquired qualifications are recognised. All staff complete an individual learning plan based on their particular needs. This then informs the implementation strategy for the college's Professional Development plan for the following year.

To support the PD plan, seven 'lead learners' have been appointed, and given one 'line' of time release, to develop and deliver a multi-faceted PD program. The 'lead learners' work with staff in a wide variety of ways, including study groups, peer coaching, technology coaches and mentoring. The approach is tailored to fit the individual's learning plan.

## **SA ONLINE**

SA Online believes online learning can increase the level of communication in a learning situation, and is an important equaliser for students with disabilities, or problems with interpersonal communication. Like instructional designers, online facilitators need unique skills, including:

- experience of online study
- moderating communication facilities
- engaging students through proactive facilitation of discussion, using bulletin boards and chat sessions
- personalising the course through appropriate interactions
- following up inactive students
- minimising attrition at key stages, such as enrolment, the initial learning experience, the first assignment
- updating course material, often at a midway point in response to feedback or new information.

## The Case Studies

In total 22 sites were visited. The research team visited a variety of organisations that serviced a variety of clients in each state and territory throughout Australia.

Providers in the following categories were identified:

- Small business providers
- Govt RTOs
- Private RTOs
- Enterprise
- University
- ACE
- Product based
- School
- Commercial

A report from each site visit was prepared from the template that was developed for the research, however, only the organisations that were currently delivering online learning were selected to be developed into a case study for publishing. A couple of the organisations visited had been early adopters and had suspended online delivery to re-assess and take stock of what had been learned. The visits also coincided with the launch of a new version of the Virtual Campus in Victoria which meant that many providers were waiting for that development before they moved on. Another issue confronted by the researchers was that online delivery is so new that for some providers it was too early in the cycle for any conclusions to be drawn. All had great plans for the future, and made worthwhile contributions to the conceptual development of the project.

It needs to be noted that the uptake of online learning by organisations and learners is increasing, developing and changing at a rapid rate. The case studies could only depict the approaches of organisation at the time that the visit took place.

# TAFE Queensland Online

## Summary

TAFE Queensland Online (TQOL) is a provider of online education and training services to TAFE Queensland Institutes.

## Context

Established by the Queensland state government in 1998, TAFE Queensland Online is a business unit of TAFE Queensland set up to give TAFE Queensland Institutes a competitive edge in the online market segment.

As a business unit TQOL generates income from service provision as well as managing corporate functions. All 16 TAFE Queensland Institutes are shareholders and contribute to its financial viability. Through service agreements with the Institutes, TQOL provides a basic enrolment and student tracking service, allows access to all online materials and manages the online enrolment and payment processes. Delivery is managed by the Institutes.

## Key Features

### Learning Materials

TQOL uses a range of development tools including 'Flash' and 'Dreamweaver' but because of bandwidth problems in rural Queensland, adopts a very simple approach to web design. In order to make information attractive and accessible to the broadest group, ease of navigation is considered extremely important.

Although TQOL acknowledges the value of text, interactivity and visual effects are considered essential.

Technology is a tool to be used in the service of course design, learners' needs and sound pedagogy but not as the key element. The pedagogy for online learning is an area needing further research

### Student Support

All information in relation to courses, fees, admission and assessment requirements is available through the TAFE Queensland Website, [www.tafe.net](http://www.tafe.net). Additional online support for students studying online is provided by the TAFE Institute at which students have enrolled. The majority of student support is online but is also available through telephone and email. Students are offered a free course on how to use email and the Internet and staff also have access to information about delivery and development strategies. The website has a FAQ area.

## **Future Plans**

Online courses are currently being developed for the Tourism and Hospitality, Information Technology, Small Business, Rural and Retail industries. These are based on training packages and add to the courses currently being offered via this medium. TAFE Queensland currently has in excess of 120 online offerings including a newly accredited Certificate IV and Diploma in Project Management due for release in January 2001.

Improved Quality Assurance procedures are being developed to keep pace with the changing nature of the IT industry.

In the future TQOL plans to offer online RPL (Recognition of Prior Learning) and job-seeking services, and to improve its links with learning facilitators in the Institutes.

## **Key Messages**

- Creating a business relationship between the online service unit (TQOL) and the TAFE Institutes has the strategic value of establishing a supply and demand relationship, with inbuilt accountability.
- TQOL's emphasis on 'information design' and appropriate pedagogy recognises the importance of information (rather than entertainment) as a key motivation for people accessing the Internet.

## **Contact**

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# Queensland Open Learning Network (QOLN)

## Summary

Through a network of community-based Open Learning Centres the Queensland Open Learning Network has stimulated the uptake of new communication and information technologies in regional, rural and remote Queensland, and provided local access to a wide range of online learning opportunities.

## Context

The Queensland Open Learning Network (QOLN) is a ten year old initiative of the Queensland Government. QOLN operates approximately 50 Open Learning Centres in regional, rural and remote areas of Queensland, providing 24 hour access to on-line and off-line communication and information technologies for local communities.

Managed by local coordinators, each centre provides a range of services including:

- Internet and videoconferencing
- audiographic conferencing, teleconferencing and television broadcasting or narrow casting.
- information on courses, providers, and enrolment processes
- technology induction and familiarisation services.

The centres offer people a quiet study area away from home, supported by high level technology, interaction with other learners and assistance from the centre coordinator.

QOLN's core business is not online delivery of training. Its main role is to assist online learners by facilitating partnerships with provider organisations which take responsibility for delivery. The Open Learning Centres also operate as assessment centres for their partner organisations.

## Key Features

### Audiographic conferencing

QOLN specialises in audiographic conferencing. This has proved to be a very cost effective, interactive communication tool which meets clients' educational and training needs. At one third the cost of video conferencing it does not have the same high infrastructure or bandwidth requirements.

### Coordinator development

Coordinators operate within a team structure. All new coordinators go to Brisbane for a formal induction, while six have been identified as group coordinators. They provide peer support and leadership, and act as mentors to newer/less experienced coordinators.

## **Future Plans**

QOLN is an effective change agent for the uptake of emerging technologies in the rural and remote areas. CEO, Anne Gooley, is a Flexible Learning Fellow and is focussing on change management through strategic partnerships with a wide range of organisations such as, the universities and VET providers. As core government funding diminishes, QOLN is by necessity becoming more self-funded, diversifying its activities and taking on various government policy consultation contracts.

## **Key Messages**

- Although information technology is becoming more and more pervasive, there is still a need for strategic initiatives to promote access to online learning opportunities for all.

## **Contact**

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# **QANTM**

## **Summary**

Through strategic partnerships with a range of providers, QANTM stimulates the uptake of opportunities offered by the emerging technologies, and provides increased value to clients.

## **Context**

QANTM is Australia's largest 'cooperative media centre,' with offices in Brisbane, Darwin and Hobart. Established through Commonwealth funding in 1996, QANTM is backed by the Queensland, Northern Territory and Commonwealth Governments, five Queensland universities, TAFE Queensland, Silicon Graphics Pty Ltd and Telstra. It now operates as a commercial provider in its own right, specialising in multimedia training, consultancy and software development.

QANTM sees its role as a 'coordinator, facilitator, stimulator and innovator to sustainable industry growth'. As an organisation QANTM prides itself on being fast and flexible. It is committed to a team-based approach, with a strategy of partnering with other organisations in the delivery of multimedia training. For example, QANTM offers the Diploma of Multimedia in partnership with the Southbank Institute of TAFE, using Queensland TAFE online.

## **Key Features**

### Partnerships

QANTM's partnership strategy is achieved by providing onsite QANTM staff to partner organisations. Initially QANTM staff visit the new site to audit the organisation's capacity to deliver the training. This includes looking at human and physical resources, as well as doing a market analysis to determine the appropriate level of auspicing and moderation. QANTM supports the partner organisation in a range of ways, from offering Certificate IV in Multimedia to participating staff, to professional development, mentoring and on-call advice, usually through email.

### Delivery

QANTM's research and development unit produces new products based on industry need and the emergence of new software and hardware. Its training products are updated on a yearly basis.

QANTM courses are not actually conducted online. Students download the materials they need and are therefore not so constrained by Internet fallibility.

However assessment is carried out online. Multimedia students are required to publish their assignments on the web, and receive peer feedback as well as

assessment from the instructor, using synchronous and asynchronous options. A database tracks the history of each client, and their contribution to chat sessions. This is considered in the summative assessment of the student.

'Cybercamps' are a QANTM initiative for younger clients. These comprise week-long holiday workshops, aimed at both high school students and teachers. They offer the opportunity to gain work experience in multimedia production, using current, industry standard multimedia and Internet software on high-end NT workstations.

### Student Induction and Support

Students receive a starter kit that introduces their course and the organisation, provides basic information about the hardware and software they will use, instructions about assessment, and how to upload and download. A low rate of subsequent help calls related to these issues indicates the value of the starter kit.

With a feedback benchmark of 48 hours, QANTM is committed to a high level of interaction with students. A student tracking system keeps a history of participation in chat sessions and use of email, and teachers will contact students if they have not logged in for two days. Help desk, email and telephone support is available.

Post-course support is also a feature. Students are advised of relevant jobs and potential employers to approach. The student tracking system follows students after graduation, and a free job placement service is available. Students can also register for contract work.

### **Key Messages**

- Partnerships increase flexibility and maximise the range of services and value available to the client. QANTM's strategy illustrates the benefits to be gained from partnerships based on careful preliminary analysis and rigorous audit of partners' needs.
- New delivery technology means a need for new, more sophisticated mechanisms for student support. QANTM's student tracking system is a good example.

### **Contact**

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# Southbank Inst of TAFE, Morningside Campus, Qld

## Summary

At Southbank TAFE in Queensland it is 'bottom up' initiatives which have stimulated the move into the online era.

## Context

The Morningside campus of Brisbane's Southbank Institute of TAFE houses a Multimedia Delivery Unit within its Technology and Engineering department. The unit delivers a Diploma of Multimedia to close to 100 fully online students and 100 classroom-based students.

Originally, establishment of the multimedia unit was an initiative of the Technology and Engineering department rather than a strategic priority of the Institute. However, changes in the VET sector, technology and student demand have generated increased awareness of the online imperative.

The multimedia unit has partnerships with QANTM for development and training, and with TAFE Queensland Online for server support and other technical, communication and enrolment services.

## Key Features

### Multimedia Delivery Unit

Originally the section that set up the multimedia unit offered Certificate IV in Multimedia to any staff interested within the Printing and Arts area. Those who participated became converts and some opted to teach the course. Currently there are 4 teachers and two tutors in the unit, with QANTM also providing additional teaching. All staff have done at least Diploma of Multimedia, with some having completed, or in the process of completing an IT degree. The unit is a tightly knit team with a high level of communication, supported by informal mentoring and moderation.

The Diploma of Multimedia and supporting online resources were developed onsite. The small size of the team meant that the same people worked on course design, development of content materials and instructional design. This approach is seen as contributing to the coherence of their final product, and the fact that pedagogical principles have been incorporated in a natural way.

Ironically, multimedia has not been used to a great degree because it is so bandwidth hungry. Southbank materials are largely written in PDF format, with a range of communication tools used to provide interactivity. Students download and work offline, and assignments are uploaded.

## Telstra Site Induction

Southbank also offers the Telstra Site Induction online. This is a mandatory induction course which after successful completion enables contractors to enter a Telstra Site. There has been over 1 100 enrolled students in this fee-for-service program which is delivered via TAFE Queensland Online.

## **Future Plans**

Southbank is now in the process of developing an Institute-wide five-year plan incorporating a technology strategy. The multimedia unit will be reaccommodated within this plan and timeframe. Already an E-technology business unit has been created.

## **Key Messages**

- The 'sandwich model' of change management recommends a careful mix of 'top down' and 'bottom up'. But often the initial stimulus for change comes from unexpected sources which have little to do with organised processes of strategic planning. Progressive organisations remain open to these 'messages from the edge'.
- The life of early adopters can be lonely. For organisations to harvest the benefits of individual initiative, it is essential to devise clever strategies for protecting and encouraging the 'renegades at the edge of the organisation'.

## **Contact**

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# Oracle Corporation Australia Pty Ltd

## Summary

Oracle Corporation achieves impressive results by applying rigorous QA standards to the development of its learning products, the expertise of its facilitators, and the provision of support.

## Context

Oracle is a multi-national software development corporation, specialising in database development and related applications. Headquartered in the US, but with bases worldwide, Oracle competes with IBM as the world's largest IT provider.

IT training is an essential component of Oracle's operations. The company is committed to the value of training - for example, managing director of Oracle in Australia, Phil Kieley, is the chair of the IT&T Industry Training Board. At the same time, Oracle's business philosophy is that providing high quality training products and learning experiences supports sales and marketing of Oracle software.

Oracle offers 130 courses in a variety of modes, ranging from onsite instructor-led classes using computer labs, to remote delivery using stand-alone CD-ROMs.

Currently none of Oracle's training is offered online. All courseware is CD-ROM based because the company believes this medium offers greater security and stability than the Internet in its current state. However many client organisations (such as Telstra) deliver Oracle training products through their intranets.

## Key Features

### Learning Products

Oracle places a premium on the development of world class learning materials, with rigorous quality assurance processes applied to all stages of the development process.

World-leading instructional designers are employed to ensure that pedagogy and appropriate use of technology for the desired learning outcomes drive the development. Most learning materials make heavy use of graphics and diagrams, and sometimes sound, however 'full multimedia' is not seen as appropriate for most of Oracle's subject matter.

An initial assessment process is used to tailor courses to the needs of individual learners. Each course follows a mastery learning model. The courseware generates assessment throughout, and will not allow learners to proceed until each test has been completed to a required standard. Where learning gaps are identified, the student is referred to appropriate revision material.

Formal, supervised, computer-generated examinations are used for final assessment. These take place in approved testing centres.

Significantly, Oracle achieves a very high level of course completion.

### Facilitators

Although Oracle's resource materials are designed to stand on their own, face-to-face provision of training is also a core part of their operation, often off-site in the client's enterprise. Oracle has high expectations of the trainers employed to deliver face to face. Contractors are used as well as in-house staff, with most facilitators having teaching degrees as well as content expertise.

New facilitators are assigned a mentor, and there is some co-teaching in the early stages. Performance appraisal is used to ensure appropriate professional development, and generous development opportunities are provided to facilitators to promote the highest possible performance. Student feedback is gathered systematically throughout the learning process, and tracked carefully through purpose-built databases.

To minimise burnout and ensure currency in their field, teaching staff are rotated within the organisation, with facilitators either working in the classroom, or assigned to a technology-based team.

### Student Support

While most learners would have training organised for them through their employer, comprehensive information from admission to course costs is available on the Oracle website. This information is also available from Oracle Consultants. Specific course requirements are notified on enrolment.

Learners can choose between two modes of delivery: instructor-led or technology-based. Face-to-face courses are expensive, but a high standard of support is offered at all stages of the learning process. For example, Oracle consultants will support clients in the workplace after training is completed. The technology-based courses are provided on CD-ROM with strong print-based support.

For both modes, additional assistance is available through the Oracle website, email and help lines.

Help desk support is also available to all users of Oracle products, whether or not they have completed relevant training.

While most Oracle learning products require a high level of computer literacy, IT novices can choose an instructor-led course to help them overcome any initial technology barriers.

## **Future Plans**

Currently, Oracle's learning products are developed in the US. However, at the time of writing, Oracle Australia is applying to be a Registered Training Organisation (RTO), and may consider developing materials to meet the outcomes of the Australian IT training package.

## **Key Messages**

- Oracle's operation illustrates how powerful learning results from applying demanding standards to each side of a triangular relationship: high quality learning materials, effective facilitators, and comprehensive student support. Many institutions in the online field achieve only modest results because they neglect one or more of these components (usually student support).

## **Contact**

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# NSW TAFE Online

## Summary

NSW TAFE Online is pursuing a systemic approach to implementation of the new technologies which will see an integrated, coherent approach to online learning across the NSW TAFE sector.

## Context

A number of individual NSW TAFE's have pursued online learning initiatives over the last five years – New England, Illawarra and Riverina Institutes are leading examples. However NSW TAFE Online originated in 1996 as a state-based program for implementing online learning at a systemic level.

NSW TAFE Online is a series of projects covering all aspects of implementation, with the aim of integrating online learning throughout the NSW TAFE sector, moving the whole organisation to an e-business orientation.

Tony Brady, Executive Director of Technical and Further Education says, 'We are capacity building at this time – we don't mind reinventing the wheel, as it's not quite been built round yet.'

The system rests on very secure and powerful technology, with a massive hardware infrastructure. A 'wide area network' is used for all corporate systems, and all software is bought under statewide licence.

## Key Features

### Learning Materials

NSW TAFE Online consists of ten major programs:

1. A re-engineered web presence
2. Network enhancement
3. Development of online learningware
4. Staff training & development strategy
5. Tools for online delivery and integration with existing IT systems
6. Online enrolment and e-commerce transactions
7. Marketing (strategic branding, pricing and promotion policies)
8. Metadata tagging
9. Future maintenance and development policies
10. Access & Equity policy and facilitation

At the time of writing the major focus for activity is with 34 learningware teams. The learningware development process has been designed with the strategic intention of building skills and knowledge across the state. Projects must involve at least two

Institutes and one ESD (curriculum expert). And because teachers are used in the instructional design there is no separation between developers and deliverers. Those who wish to have the opportunity can be involved. The process is backed by a comprehensive staff-training program.

## **Future Plans**

The learningware program currently includes 34 development projects with a budget of over five million dollars. A further round of learningware proposals will be contracted in early 2001. The platform is still to be selected. At present 'The Learning Manager' and 'Blackboard' are being used, however 30 of the projects are using "Janison Solutions' Toolbox" that has been designed for the NSW operating system.

As an e-business NSW TAFE is aiming to deliver all current customer services online. For example, students will be able to enrol online for all courses, using an enrolment system which will have financial, authentication and selection process features. The website currently being developed will provide the services.

Among the many issues to be resolved for the implementation of online learning, is the need to balance the need for network security with clients' need for access. The very secure firewalls mean that currently people cannot access the network outside an institution except by using separate servers that are not part of the larger system. Security is highly desirable, but is also a barrier to high levels of interactivity.

## **Key Messages**

- Large-scale strategic planning beginning at the government level is a major stimulus for change. The key challenge lies in ensuring that system-level change successfully translates into the practice of teachers 'on the ground'.

## **Contact**

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# TAFE South Australia Online

## Summary

SA Online has been, and continues to be a pioneering organisation in the implementation of online learning in Australia. Their use of WebCT in particular has had a major influence on a large number of organisations and systems across the country.

## Context

Beginning in 1993, SA TAFE has had the longest involvement in online learning of any Australian state, building on a history of commitment to distance education, including use of videoconferencing. Originally, dealing with the problem of distance was the driving factor behind South Australia's online initiative. However, the fact that around 70% of current distance education students live in metropolitan areas, suggests that demand for flexibility is now a key motive.

Management of SA TAFE has a high level of understanding and commitment to online learning, and has sought to integrate it into as many levels of the organisation as possible.

A major partnership has existed with WebCT at an international level for the past five years. This has provided opportunities to offer services, sales and purchase of WebCT products within Australia. SA Online is also a Web CT mentor within Australia.

## Key Features

### Continuous Improvement

TAFE SA Online uses a three-way approach to continuous improvement:

- there is a systematic process for gathering client feedback, including both students and those who franchise SA online resources.
- management encourages monitoring of organisations worldwide for innovative approaches, and benchmarking against international standards.
- staff are involved in networking, conferences and overseas travel to see international examples of best practice, and gain a perspective from outside the organisation.

Improving online provision by developing staff capability is an ongoing priority, while international perspectives inform the requirements for research and development.

## Partnerships

Partnerships are also considered critical in the continuous improvement approach because partners' expectations drive improvement. For example, SA Online has active research partnerships with Sydney University of Technology, NCVET and ANTA. Current research and development activity is focusing on:

- how people learn in an online environment
- the profile of an online deliverer
- the factors that encourage early adopters of innovation
- how to replicate successful innovations.

SA Online also plays a major role in the implementation of WebCT across most states and territories. For example, SA Online has developed a major partnership with Western Australia's 'WestOne' organisation, joining its steering committee, lending key staff, helping WestOne adopt WebCT as their platform, providing professional development and networking at Director level. Now WestOne is offering product back to SA Online. A strong partnership also exists with TAFE Tasmania.

## Student Support

A three-level help system assists online delivery units to support students. The allocated facilitator is the initial point of contact, identifying students' Internet and IT skills and organising any training or mentoring that may be required. More difficult needs are referred to a helpdesk, or an IT specialist.

Because online learning creates the expectation that facilitators are available 24 hours of the day, the online helpdesk has set a response time benchmark of 24 hours.

## Instructional Design

SA Online believes instructional designers are pivotal, but distinguishes between the skills of 'conventional' instructional design, and those required for the online era. These include:

- understanding issues of bandwidth
- understanding how plug-ins may exclude potential students, and knowing when, as well as when not, to use them
- willingness to fit the technology to the learning situation using a problem solving approach, rather than re-employing a favourite model
- direct experience of learning and teaching in an online environment
- using communication tools to develop a community of learners
- being able to judge whether online learning is appropriate for a particular client group.

## Facilitators

SA Online believes online learning can increase the level of communication in a learning situation, and is an important equaliser for students with disabilities, or problems with interpersonal communication. Like instructional designers, online facilitators need unique skills, including:

- experience of online study
- moderating communication facilities
- engaging students through proactive facilitation of discussion, using bulletin boards and chat sessions
- personalising the course through appropriate interactions
- following up inactive students
- minimising attrition at key stages, such as enrolment, the initial learning experience, the first assignment
- updating course material, often at a midway point in response to feedback or new information.

## **Future Plans**

A rigorous program of equipment upgrading is in place, with a doubling of capacity every six months.

Existing online courses are being reviewed and development teams have been set up to upgrade modules as needed.

There is an expansion of online delivery into the Pacific Islands. Technological infrastructure is a major barrier at present, however, relationships are being developed that will evolve with the technology.

SA Online is planning a Virtual Learning Environment with a focus on career counselling. This will include a search facility for vocation and mode of study.

## **Key Messages**

- 'Early adopters' are a key ingredient in driving change, but face the danger of continuing to be locked in to an original model, when the rest of the world has moved on. SA Online's commitment to continuous improvement and international benchmarking ensures that they continue to be at the cutting edge in online learning.

## **Contact**

Neil Strong, Executive Manager Online Education

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# Wodonga Institute of TAFE, Victoria

## Summary

A carefully worked out change management plan, and a deliberate strategy of involving staff in both the design and delivery of online programs has Wodonga TAFE well placed to capitalise on the opportunities offered by emerging technologies.

## Context

Wodonga TAFE opened in the late 1980's. As a small semi-rural Institute it is very aware of meeting regional needs, and has worked hard to develop close ties with industry and learners in its community, and with state and national ITB networks. Wodonga has a particular focus on small and home business. It currently offers or has developed online learning across a wide range of industries including: post-basic nursing, management, training, welding, electronics, training and horticulture.

Although the implementation of online learning at Wodonga TAFE is still in the early stages, two recent events have increased the momentum of change. The appointment of Adrian Marron as Director in 1999, and the awarding of a Flexible Learning Fellowship to Chris Horton, manager of Planning and Educational Services, has established a very supportive climate for online learning development.

While Wodonga does not currently have a large number of students enrolled online, there is a strong awareness that online learning will become an increasing learner expectation as E-business becomes the norm.

'Online learning has huge potential ... it is a natural learner expectation in our increasingly hi tech society, and there is pressure to adapt quickly to the inevitable learner needs. There is also a change in the way that customer loyalty is sustained', says Chris Horton.

Wodonga Institute has a fully fitted multimedia and design unit that has developed online learning products for various national training packages, including Automotive. The unit is currently developing four CD-Rom products for simulated training in assessment, customer service, diagnostics, and load-shifting.

The institute also supports three distance/flexible learning centres. These operate as a community resource for remote/online learning as well as for face-to-face learning in communities that are isolated or have specific local training needs.

## Key Features

### Change Management

A key outcome from Chris Horton's Flexible Learning Fellowship has been a change management plan designed to take Wodonga to the point where the emerging technologies are used throughout the organisation. (See website: [www.wodonga.tafe.edu.au](http://www.wodonga.tafe.edu.au)) The implementation of this plan is driven by three cross-

organisational Enterprise Development Teams, researching and setting out the processes to develop and enhance Flexible Learning, Workforce Capability, and Resource Management.

A consultative planning approach was used to identify and develop strategies for a number of key areas of change. Voluntary focus groups within the institute were convened to put recommendations for improvement to management. This reflective system improvement strategy also focused on ways of supporting the innovation required in online learning development. An Information Technology & Communication policy is currently being developed.

Wodonga is also actively looking to partner with organisations both locally and outside their region, as well as internationally. They were one of the first nine institutes to take part in the Victorian Virtual Campus. With the aim of avoiding duplication by cooperating rather than competing, Wodonga is a member of a professional development consortium with Chisholm, Gordon and Northern Metropolitan Institutes. The consortium is in the process of developing units of competency and online support materials.

### Professional Development

Teachers at Wodonga TAFE have a mix of online and face to face delivery, while 25% of the Wodonga workforce has been exposed to some kind of development project. The aim of this is to use the development process as a way of easing staff into the use of online learning methodologies in their teaching practice. Ultimately, many Wodonga staff members are expected to be multi-skilled as both teachers and instructional designers.

This approach extends to the development of courses for professional development of tutors, such as Wodonga's online course in mentoring. The course design consciously highlights the difference between online and face-to-face modes, and facilitates the change in skill and attitude required.

### Resource Development

Project teams are used for the development of online learning materials. These teams include staff who will be involved in delivering the training, and who are subject and client experts. For example, Wodonga staff used a LearnScope project to develop an online Electronics course. Currently Wodonga's Welding and Electronics courses service a small clientele that stretches across Australia.

Resources for materials development are allocated on the basis of a business performance agreement. The Educational Development Services unit sells their services both to the TAFE and to external clients. 57% of the unit's income in 1999-2000 was derived from commercial activities, 43% from state or federal recurrent funding.

## **Future Plans**

Wodonga plans to increase its online operation, and has various courses in development at the time of writing.

A student induction kit is also being developed and will be available with the launch of the 2<sup>nd</sup> phase of the Victorian Virtual Campus.

## **Key Messages**

- Involving staff in planning for the implementation of change that will affect them is a proven change management strategy. Not only does it promote ownership of the changes, it also maximises the range of good ideas available to the organisation.
- Rigid segmentation of roles within development teams can be an unproductive and inflexible approach. The Wodonga experience shows that overlapping roles, and blurring the difference between design and delivery can lead to powerful professional development.

## **Contact**

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# Telstra Learning, Victoria

## Summary

Backed by whole of organisation commitment, Telstra combines sophisticated technology, high quality instructional design, on-the-job learning and comprehensive support to achieve training that matches the company's needs.

## Context

Telstra is Australia's largest telecommunications corporation. It provides service Australia-wide and has a highly diverse and dispersed workforce. As a committed learning organisation, training is an integral part of its operations.

"If you don't have people in the process of learning it won't work" says Graham Wright, National Manager, Technology Based Learning.

Training at Telstra is delivered mainly to staff, however, some online training is also provided to contractors.

There is a straightforward strategic direction to move all of Telstra's training online. Currently there are approximately 630 online modules available to staff, 270 of which have been developed internally, with the remainder being sourced externally. Courses are generally short (around 2-4hrs) and designed to meet the specific needs of the organisation.

## Key Features

### Learning Products

In 1997 Telstra implemented a customised Southrock platform. This platform provides a whole learning system which tracks student usage, maintains records, and includes communication tools such as bulletin boards and chat rooms.

90 instructional designers are currently employed, 30 of whom have Instructional Design qualifications. Professional development is provided on a weekly basis.

### Facilitators

Telstra courses are designed to 'stand alone', however, tutors – usually a supervisor or line manager - are assigned to most courses, and many business units include training officers.

Online facilitation is not a full-time responsibility for the tutors - the virtual classroom model has not been adopted. Facilitators combine their online learning responsibilities with other roles in the organisation. Assessment is achieved online and through workplace assessment.

An information pack has been developed for each course to assist the facilitator. There is also help desk support and more informal support throughout the organisation.

### Student Support

Supervisors select appropriate training for staff based on performance reviews. Enrolment is generally open-ended, but may be offered over a period of time to meet a specific organisational learning need. For example, GST training was offered over June and July this year.

People recruited to Telstra have a high level of computer literacy. The learning system is user-friendly and no specific training is provided initially. There is a support matrix with the line manager, the online module and, where appropriate, an online support tutor.

All necessary hardware and software for learning is provided by the company.

### **Future Plans**

- There is currently a major review taking place in Telstra on how learning is delivered, which will improve the support given to facilitators.
- Online learning offerings will be expanded.

### **Key Messages**

- Because Telstra has taken full control of its organisational learning, it is achieving cost savings. Providing 'just in time' training on the job and using the knowledge and skills of supervisors and relevant staff members to supplement the online courseware is a highly relevant solution to their training needs.
- Strong instructional design in courseware combined with on-the-job learning and support provide a high quality learning experience
- Training needs are identified through performance appraisal. In this way employees only undertake training that is needed, and line managers can use training to improve the operation of their units.

### **Contact**

Graeme Wright, National Manager, Technology Based Learning

# Adult Multicultural Education Services (AMES), Victoria

## Summary

AMES blends the flexibility of online learning with the supportive environment of face-to-face classroom interaction to meet the needs of its clients.

## Context

Adult Migrant Education Services Victoria maintains 26 locations across Melbourne, offering a wide range of nationally accredited, competency-based programs to a client group that is predominantly unemployed. Its core business is to meet entry level and literacy skill development needs in a high support environment.

On line learning is used across the organisation and is integrated into most learning opportunities that AMES offers. Much of the online material sits on AMES' 'Virtual Independent Learner Centre' web site.

Each unit within AMES is seen as a customer to the others, so that units purchase services and products within the organisation. This is how much of the development in the Online Services Unit is resourced.

## Key Features

None of the AMES courses are offered totally online, however most courses use some online components, although the proportion varies. Because of the high face-to-face support needs of AMES clients, and their lack of access to home computers, online learning is predominantly used as a tool in the classroom. There is no real distinction between face to face and online delivery.

Most of the online materials at AMES are text based learning materials developed by teachers as a normal part of resource development. AMES also uses the Victorian Virtual Campus which is based on Web CT.

## Key Messages

- Context and clients' learning needs determine how online learning materials should be used. The AMES case study is a useful reminder that online learning does not necessarily imply independent or isolated learning. It can make a powerful contribution by adding flexibility to a conventional classroom situation.

## Contact

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# RMIT, Vic

## Summary

The RMIT story illustrates top level management planning and support for the development and implementation of on-line learning. Matched by carefully planned professional development and evaluation strategies, the organisation is steering a massive cultural change for staff and students.

## Context

Based in Melbourne, RMIT is one of the largest educational organisations in Australia. The Institute offers both TAFE and University study to a cohort of approximately 50,000 students. Through partnerships with colleges, universities and professional associations, RMIT courses are taught in a dozen countries. Currently a campus is being established in Hanoi, with parallel developments in China through the Global University Alliance.

600 (of a total of 2000) subjects include a substantial on-line component. From a base of zero at the end of 1998, there are now 12,000 students registered as users of RMIT's Distributed Learning System (DLS).

The strategic process of implementing online learning commenced in 1998 with the formation of the 'Education and Training IT Alignment Project' (ITAP), steered by a Vice Chancellor's Committee. Building on substantial market analysis, this project made recommendations on infrastructure, courseware development, technology platforms, and the academic management system. As a result the Learning Technology Services unit was established, and a budget of \$50 million over a five year period was allocated to progress RMIT's on-line learning policy.

## Key Features

### Delivery

Very few RMIT courses are delivered exclusively online, however the Distributed Learning System is highly integrated with classroom practice. Interactive text-based materials and communication tools such as bulletin boards, synchronous chat and e-mail are seen as an enhancement of, rather than a replacement for, classroom interaction.

The major delivery platform is 'Blackboard', with systems such as Course Information, 'WebBoard', 'Perception' and 'Weblearn' fully integrated.

The DLS supports face to face delivery, but offers significant flexibility to learners in that much of the material is put onto the Learning System for those who cannot attend lectures. This flexibility is considered a prime way of meeting the challenges posed by the diversity of students studying at RMIT.

For courseware, the RMIT preference is to develop learning guides, rather than stand-alone learning packages, however there is increasing use of multimedia.

### Student Support

Students receive an orientation CD ROM containing training and information about the Distributed Learning System. They are also given a personalised page on enrolment through the Learning System with information on the courses they are enrolled in, and access to appropriate resources, communication tools and activities.

A customer service co-ordinator for the DLS offers support to users from 9.00 am – 9.00 pm. There is also printed material and a help desk available for students, covering Institute and faculty information.

### Professional Development

RMIT has a large staff and recognises the huge professional development implications of introducing a Distributed Learning System. In particular there is a need to develop instructional design expertise to complement the content specialisations.

A comprehensive professional development program is co-ordinated and integrated through the ITAP team and the DLS team working together with Learning Support Groups.

The strategy includes providing support materials and online learning tools for staff, as well as a Learning Technology Mentoring program. Members of each department have been identified for training, with over 250 staff having received basic training on using the Learning System and developing learning materials for online use. Training workshops are also held for mentors with other PD sessions. The DLS team work closely with the mentors.

### Evaluation

An evaluation component has been built in to the ITAP, including the position of Evaluation Coordinator, and identification of a set of measurable outcomes. Evaluation of the Distributed Learning System is ongoing and involves focus groups, case studies and on-line questionnaires. Data is available from the Learning System and will be increasingly used to evaluate program effectiveness.

A number of evaluation reports are available on RMIT's website.

### **Future Plans**

RMIT has a strong focus on moving courses online. There have been a series of incentives to ensure that all courses go online, or at least contain an online component.

## **Key Messages**

- RMIT teachers are all required to incorporate online learning in their practice. This involves a massive cultural shift. To successfully support change on this scale, comprehensive and well targeted professional development is essential.
- The RMIT case study highlights one of the few organisations to pursue evaluation in a systematic and rigorous way. Taking evaluation seriously is critical to successfully embed the changes and promote continuous improvement.

## **Contact**

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# Launceston College, Tasmania

## Summary

Launceston College matches a strong executive commitment to online learning with a comprehensive professional development plan for its staff, using a range of innovative strategies to provide targeted professional learning opportunities.

## Context

Launceston College is a Tasmanian senior secondary college that combines a Year 11/12 curriculum with a wide range of vocational education and training programs. One of the largest secondary schools in Australia, the college has 1300 students studying subjects through its 'Open Learning School'. Half of these students are over 21. Some are child-rearers aiming to re-enter the workforce; many are older students seeking qualifications for the job market or to enter university.

Launceston College first became involved in open learning in 1996, when the Tasmanian Open Learning Service devolved delivery of its Year 11/12 distance education curriculum to the eight Tasmanian secondary colleges.

With the arrival of the current principal, came a strong executive commitment to the development of online learning at Launceston College. Beginning with the Open Learning program, online offerings have now been extended to the pre-tertiary and VET areas. These involve a mix of in-house content, some commercial products and limited use of WebCT programs. The plan is to integrate on-line technology into classroom situations across the college, as well as offer complete on-line courses. Eventually college staff hope to develop a range of commercial on-line products, marketable to international students.

## Key Features

### Professional Development

Launceston College has a comprehensive Learning Technology Plan (2000-2002) which is aligned with its strategic plan. A key component is the approach to the professional development of staff.

With an average age of around 47, teachers' level of comfort with technology varies greatly. Yet the college has set the aim of enabling all teachers to develop proficiency in learning technologies.

To achieve this, each year, teacher IT competencies are assessed, or previously acquired qualifications are recognised. All staff complete an individual learning plan based on their particular needs. This then informs the implementation strategy for the college's Professional Development plan for the following year.

To support the PD plan, seven 'lead learners' have been appointed, and given one 'line' of time release, to develop and deliver a multi-faceted PD program. The 'lead learners' work with staff in a wide variety of ways, including study groups, peer coaching, technology coaches and mentoring. The approach is tailored to fit the individual's learning plan.

A help desk is also available to staff for 'just-in-time' advice and support.

### Student Support

Classroom teachers at Launceston College train their students in the use of technologies for on-line learning as an accepted part of the classroom experience. However there are also partnership arrangements with local on-line access centres to provide basic computer training and support for Open Learning students.

### **Future Plans**

*Broadband Launceston* is a federally funded project which will provide Telstra's new DSL (Digital Subscriber Line) Internet access to 9000 sites in the Launceston area, enabling connections at 100 times the speed of a normal modem connection.

As Launceston College is already facing bandwidth issues, it sees many potential benefits from the new project. Increased use of videoconferencing is one example.

Another initiative being considered is the use of digital video to capture in-class explanations and demonstrations that open learning students would otherwise miss. These could be bundled onto CD as MPEG, even including different teachers' presentations of the same material.

### **Key Messages**

- Many organisations make the mistake of planning for the technology, but neglecting the development of staff skills. The Launceston College experience highlights the critical importance of aligning professional development plans with the organisation's strategic and technological directions.
- To capitalise on the benefits of online technology, the professional development of staff needs to be planned and resourced as thoroughly as any other aspect of an organisation's strategic plan.

### **Contact**

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# Northern Territory University (NTU)

## Summary

Despite the difficulties of offering online learning in remote areas, the Northern Territory University has experienced significant growth in demand from students, and as a result has established high standards in resource development, online facilitation and student support.

## Context

Northern Territory University (NTU) is situated in Darwin far away from the big cities of the eastern seaboard. It services the whole Territory where possible and has many Indigenous students. NTU is currently in the research and development phase of implementing online learning.

The cost and reliability of connection for learners accessing web services in remote locations in the Northern Territory is a big issue for online learning. Much of the remote delivery has to be supported by CD-ROMs. Web access in general is not particularly robust. Email is problematic at best and does not work at worst. The university itself has computer labs for student access.

Online courses are currently offered in Tropical Environment Management, Common units in undergraduate study and the Indigenous Languages project.

NTU has a partnership with Open Learning Australia to provide flexible learning options. There has been huge growth here, from eight students undertaking 16 units in 1998 to 115 students undertaking 175 units in 2000.

## Key Features

### Resource Development

Course materials are developed onsite using a project team approach. Project teams include a reference group, an educational designer - someone with who is familiar with both the IT and education, a subject specialist, project manager, web designer and a technical designer. Excellent documentation is developed to support this process. The project is scoped and performance measures and outcomes are clearly stated. User testing is considered fundamentally important. Both internal and external user testing takes place. The project plans cover this aspect well.

Participative pedagogy predominates. Tutors have found that learning can be much more participatory in an online context. The technology is used to engage learners divergently, not just presenting the obvious. Care is taken to determine who is being taught and what technology is best. Engagement is through action and reflection.

## Student Support

Online information skill development is a part of most courses. This covers evaluating websites, access to catalogues and how to search the web. This training is currently delivered face to face. The library catalogue is online and the library has its own website.

There is a general demand for flexibility from students. Having the Common Units online allows students to fast track through their degree. They can complete a degree in less than three years.

There is no real focus on email. Questions are regularly put to groups by the tutor rather than dealing individually with each student. Discussion software is well used and highly moderated. Use of the communication tools is increasing throughout the organisation.

## **Future Plans**

- Most online learning developed so far has been for the university sector. Currently online resources for the Certificate II in Sport and Recreation are being developed for the VET sector. Subject specialists will be used to ensure the resources meet training package requirements.
- A study skills website is currently being developed.
- An online information literacy course is under development.

## **Key Messages**

- Online facilitation is a critical new skill for teachers in the online era. With effective facilitation, and the right communication tools, the inherent isolation of online learning can be overcome, and genuinely participative and cooperative learning encouraged.
- Developing effective information skills is a critical skill for online learners. To make the best use of the Internet's boundless information resources, learners need to know how to locate the information they need, and discriminate between material of varying quality. The NTU example shows how effective student support includes essential skill development as well as administrative information.

## **Contact**

Barbara White, Director, Interactive Learning Division  
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# Canberra Institute of Technology (CIT)

## Summary

CIT is a diverse Institute, but with an overriding commitment to flexible learning. Several of its faculties and business units feature highly innovative programs which capitalise on the potential of the emerging technologies.

## Context

CIT has two Divisions, five faculties, two learning centres and an independent commercial arm called CIT Solutions. While there is a strong institution-wide commitment to flexible learning, decisions about online learning and adoption of the emerging technologies are made independently by each faculty.

In general, there is not a great deal of online learning offered by CIT. They have flexible delivery centres that use online delivery to enhance other forms of flexible learning. However the commercial arm, CIT Solutions has a business unit (Solutions onLine) that delivers to a significant number of students, mostly in partnership with a variety of commercial clients.

## Key Features

### Learning Products

Solutions onLine is the major developer of online courseware at Canberra Institute of Technology. Underpinning their approach to materials development is the idea that learners should engage with the content and concepts of the courseware rather than the technology. They also recognise that the language of online learning is fundamentally different from conventional written and spoken language – a forthcoming paper will explore the issues of ‘making meaning on a computer screen’.

Solutions onLine materials are presented as short, highly interactive ‘chunks of learning’. A key approach is the concept of ‘metaphoric learning’ - the online equivalent to role-play and simulation. This has proved highly suitable for values education, and has been used very successfully in training about sexual harassment. CIT staff also find that the anonymity of online learning can encourage a higher degree of engagement and honesty than in a classroom. This is another feature that suits values-based education.

### Student Support

The Department of Community Development, CIT, has developed its own online induction package. This is followed by a face to face interview to determine motivation and commitment, and to establish an individual learning plan and contract.

There is also an excellent website which provides rudimentary online learning capability for all the courses. Although the Department offers no online courses, students who cannot attend structured classes can use the website to access all the learning resources that are provided to face-to-face students.

The website includes chat and email facilities, as well as links to libraries and electronic databases. It also provides general assistance to students in the department. For example, each course has specific (lesson-level) information that is updated regularly by teachers. The website keeps statistics, not just on hits, but length of time spent on each page, the identity of students and teachers accessing, and the number of hits on each page. This allows tutors to identify when a page is useful or requires updating.

### Professional Development

CIT provides its own teacher education. This ranges from formal teacher qualifications to professional development on specific issues. Both casual and permanent staff are eligible to participate. Part of the more recent teacher training has been delivered online, so that teachers can experience being online learners themselves. A short course in flexible delivery is also delivered online.

### **Future Plans**

CIT hopes to capitalise on the laying of fibre optic cable throughout the ACT, a development that will bring broadband Internet access to most homes and business in the territory. Already there is an extremely high level of access to the Internet by people in the ACT. For example, dean of Business and Information Technology, Peter LeCornu, surveyed his students to find that 90% had PC access outside that provided by CIT.

There is no uniform delivery platform at CIT, however the institute is in the process of moving to WebCT. Solutions onLine has developed the CIT Learning System that is a customised version of the Techworks (now TMP Worldwide Learning) learning system.

### **Key Messages**

- While much online learning material still tends to duplicate conventional approaches, tracking systems such as the one used by the Department of Community Development powerfully illustrate the potential of new technology to take training delivery to new levels of client support and service.
- Contrary to some conventional wisdom that online learning will reduce collaboration and interaction among learners, the example of sexual harassment training through onLine Solutions shows that online learning can actually stimulate participation and interaction, particularly in sensitive educational areas.

### **Contact**

Rhonda Daniell or Peter LeCornu

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[www.citsolutions.cit.act.edu.au](http://www.citsolutions.cit.act.edu.au)

# West Coast Online, West Coast College of TAFE, WA

## Summary

West Coast Online is rapidly taking the West Coast College of TAFE into the online era through innovative R & D pilots, and clever approaches to professional development.

## Context

West Coast College of TAFE has had a commitment to flexible learning for nearly a decade. The establishment of West Coast Online as a business unit of West Coast College is part of the College's evolving flexible learning strategy, and signals a major move into the online learning mode.

In 2001, West Coast College will offer Certificate II in Retail Operations online, the Certificate III in Children's Services as well as single units from Art and Design, Science and Technology, Building and Construction and Business Studies .

It has also recently completed a major pilot in the Hospitality industry – a good example of the unit's strategy for introducing change by attracting external funding, and seeking willing staff to be involved in ground-breaking projects.

Because West Coast Online has been established as a Research and Development unit, much of its work is experimental, stretching the boundaries of current practice. For this reason a Risk Management Plan has been developed and accepted by the College's Executive.

Partnership arrangements include collaboration with other TAFE colleges and industry. Some resource and professional development is done in partnership with WestOne Online.

## Key Features

### Evaluation

A Hospitality Internet Project was a key West Coast Online pilot in 1999, involving a total of 139 learners. A thorough evaluation of the project has been conducted to assist with continual improvement strategies, and to provide a perspective on the effectiveness of online learning compared to traditional training.

The Project involved four Registered Training Organisations – West Coast College, Central West College, Great Southern Regional College and Hospitality Group Training. The Project is a significant example of a collaborative exercise which benefited learners and training providers alike.

The evaluation report can be found at <http://www.westcoast.wa.edu.au/>

## Change Management through Professional Development

During 2000 West Coast Online ran five online awareness programs targeted at facilitation and management staff. One of these projects involved Program Managers who met every second week in August and September to chat, online, about a range of topics relevant to the implementation of online learning in their program areas. Each session lasted for one hour and guest speakers were invited to contribute. Because of the online nature of the chat, interstate guests were regular participants.

Chat log files were sent to all participants after each session. The first two sessions encouraged debate, and the third (on the costs and benefits of online learning) produced a resolution for a small committee to pursue the issues raised.

In 2000, about 50 academic staff members have undertaken some form of training in the application of online technologies to their teaching practice. Some staff have undertaken work-based professional development through Learnscope, other staff have been through the WestOne Program Area Tutor (PAT) and College Online Coordinator (COCO) Schemes. . Action learning models have been found to be the most successful approach. West Coast College will be implementing a core professional development program in 2001 that will take account of good practice approaches. A range of options and methodologies will be presented in a modular form to enable staff to pick and choose the skills that will be most appropriate to them. It is anticipated that this just-in-time approach will provide an excellent platform for innovative online learning pilots.

## Technology Solutions

The server used by West Coast Online is physically located at a Telstra server farm in Sydney but administered locally. This arrangement was specifically chosen for its high reliability and performance speed in an effort to provide the best possible service to all users.

## **Future Plans**

West Coast Online has developed a Business Plan for 2001 which includes the following key strategic initiatives:

- Continue to tender for the development of ANTA Toolboxes as these have proven to be excellent vehicles for professional development.
- Implement Retail and Childcare Toolboxes for a range of client groups on- and off-campus. This will include customisation of content and development of good practice learner support mechanisms.
- Develop and implement a core professional development program for West Coast College staff.
- Identify and obtain high quality learning objects that can be easily integrated into current teaching and learning practices.

- Develop a just-in-time online learning system for corporate professional development on the West Coast College Intranet.
- Integrate data base functionality into the West Coast College web site.

### **Key Messages**

- Using online technologies to conduct professional development about online learning is an obvious, but nevertheless clever, high yield strategy.
- Putting facilitation staff at the centre of the educational design model is a useful way of building expertise and generating ownership.
- Develop a modularised, just-in-time professional model for the application of online technologies to teaching and learning.
- Work with industry to build customised dimensions of Toolboxes.

### **Contact**

Frank Bate Manager, West Coast Online  
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## **Discussion points**

This project has uncovered lively debate in the area of best practice in online learning. This section of the paper points to some of these issues and may hopefully provide a starting point for discussion during the conference.

### **Does online learning facilitate a shift to a truly learner centred approach?**

Can students learn other than from a teacher?

There seems to be a belief in many organisations that a student cannot learn without the presence or input from a teacher. There is a reluctance to put the learning in the hands of a computer program. The tendency to create a virtual classroom and simulate a classroom environment online is a symptom of this

There is a major shift occurring in pedagogy and the tools we have available in the online teaching environment, to help the learner take the central role. The teacher becomes a facilitator and mentors for the learning. Peers can also provide learning.

Learners themselves have to make the shift to being independent learners. How can this be facilitated?

### **Closed loop learning vs reflective practice learning – which is best practice?**

Best practice in instructional design and the issues that surround development of an online course are central issues to the implementation of online learning.

Many providers, particularly the corporate ones favour closed loop learning, where the learning material is presented sequentially and as each concept is covered the learner is quizzed, on successful completion of the quiz the learner will be allowed access to the next concept. These courses are intelligent and will often assess a learner before the learning commences. The course will then be tailored specifically to that learner.

Reflective learning allows the learner to see the whole of the course, be aware of the learning outcomes and gain a picture of the course on commencement. Learners can move around the module and choose assessment as required.

### **Best practice strategies to address range learning styles**

In the classroom situation teachers can adjust their materials and lesson plans to accommodate predominating and individual learning styles. Language that may be appropriate to one learning group and not to another is easy to substitute. Most online learning products try to be everything to all. Is this best practice or are there other ways?

## **How best to use the interaction tools.**

Best Practice in online learning relies on the use of communication tools. For many facilitators the use of these tools is too time consuming. Many complain that the interaction in online learning is far greater than what they get with their classroom learners. Is this indicating that in fact many learners feel safer in a virtual environment to ask questions, without fear of public reprisal. Do these tools in fact stimulate more interaction than a classroom?

If so how do we get really good value out of these time consuming pursuits?  
Is it necessary to use them at all?

## **Evaluation**

Most online courses are evaluated in their implementation/pilot stage and then not again. Students are a great resource for advice on the currency of weblinks and information provided in the course. There was very little evidence of this resource being used. One teacher was bemoaning the difficulty of knowing when a web link had gone dead or changed. Surely the solution is to use feedback from the students to identify this kind of thing.

## **Evaluation issues – why do it, how to do it**

### **Measuring success of online learning courses**

Measurement of success no longer needs to be restricted to completion. Technology is now available to track students and their involvement in the course and where they stop. “Just because someone doesn’t finish a course does not mean they did not get the learning they wanted and that they left at that point”

Greg Webb at OTEN provides this model:

- ◆ Working rates – students who have submitted at least one piece of work.
- ◆ module completion rates
- ◆ course completion rates.

“Course completion is less reliable for indicating success as learners may withdraw from a course early for positive reasons.” (ODDLA Papers July 2000) eg getting a job.

## **Websites**

The research found that Websites are not being used to their full potential both in the support for the online learner and as a marketing tool. Websites are rarely used as information distribution tools outside the direct training delivery. Information on courses or what learners can expect from learning online is scarce.

## **What are the components/characteristics of a good website to deliver online learning?**

### **What examples of good websites have you come across?**

## Appendix 1 List of sites visited

Org type	Organisation	Date of visit	Case study included
<b>TAFE</b>	TAFE Queensland Open Learning Institute (OLI)	24/7/00	yes
<b>Community</b>	Queensland Open Learning Network	25/7	yes
<b>Commercial</b>	QANTM	25/7	yes
<b>TAFE</b>	South Bank Institute/Cool	26/7	yes
<b>Distance Ed.</b>	OTEN	26/7/00	Not currently delivering online
<b>Commercial</b>	Oracle	27/7/00	Yes – withdrawn from web until clearance from USA is received.
<b>Commercial</b>	TMP World-Wide Learning	15 August	Consultancy – not delivering
<b>TAFE</b>	NSW TAFE Online	14 August	yes
<b>Commercial</b>	NetSpot	3/08/00	Consultancy – not delivering
<b>TAFE</b>	TAFE SA	4/8/00	yes
<b>TAFE</b>	Wodonga TAFE	8/8	yes
<b>Enterprise</b>	Telstra Learning	9/8 a	yes
<b>Community</b>	AMES	10/8/00	yes
<b>Uni/tafe</b>	RMIT	10/8/00	yes
<b>TAFE</b>	TAFE Tasmania	25/07/00	Delivery only just begun – too early
<b>Secondary College</b>	Launceston College	17/08/00	yes
<b>uni/tafe</b>	Northern Territory University	23/08/00	yes
<b>TAFE</b>	Canberra Institute of Technology	11/12/Oct	yes
<b>TAFE</b>	WestCoast Online (Joondalup)	8/9/00	yes
<b>Community</b>	WA Telecentre Network	8/9/00	
<b>TAFE</b>	Geralton Central West	9/9/00	
<b>Community</b>	South Eastern Enterprise Network	6/9/00	

## Appendix 2 Template for Site Visits

### FLEXIBLE LEARNING BEST PRACTICE

<b>Name of Organisation</b>	
<b>Name of Contact</b>	
<b>Position of Contact</b>	
<b>Contact details: Phone:</b>	
<b>Address:</b>	
<b>E-mail</b>	
<b>FAX</b>	
<b>Organisation's URL</b>	
<b>Names of courses offered with an on-line component:</b>  <b>Indicate how much of each course is offered on-line e.g. 100% or 50%or 25% etc.</b>	
<b>To be included in Networking 2000 Conference</b>	
<b>Date visited</b>	

**Type of organisation.**

Interviewed

<b>Organisational Commitment</b>	<b>Look For</b>	<b>Details</b>	<b>rate</b>
Executive Commitment	<ul style="list-style-type: none"> <li>◆ Pro-active</li> <li>◆ Visioning</li> <li>◆ Where does online fit within the organisation</li> <li>◆ Are there links to the organisation's strategy plan</li> <li>◆ Appropriate resource allocation</li> <li>◆ Included in Strategic plan</li> </ul>		
Management	<ul style="list-style-type: none"> <li>◆ Change management</li> <li>◆ Risk management</li> <li>◆ Market analysis and response</li> <li>◆ Continuous improvement strategies</li> <li>◆ Research and development</li> <li>◆ Partnerships with other organisations</li> <li>◆ Awareness of difference between online teaching and face to face requirements</li> </ul>		
Evaluation and Assessment	<ul style="list-style-type: none"> <li>◆ The program's educational effectiveness and teaching/learning process is evaluated</li> <li>◆ Data on enrolment, costs, and successful innovative uses of technology are used to evaluate program effectiveness</li> </ul>		

Technology	Look for	Details	rate
	<ul style="list-style-type: none"> <li>◆ Technology Plan</li> <li>◆ Security</li> <li>◆ Back up systems</li> <li>◆ Reliability of System: incident reports, help calls, stats, risk management</li> <li>◆ Building and maintenance of the system</li> <li>◆ Links with larger organisation planning</li> <li>◆ Use of preferred standards</li> <li>◆ Support to users</li> </ul>		
Instructional Design	<ul style="list-style-type: none"> <li>◆ Text-based vrs interactive see app.</li> <li>◆ Learning guide vs learning material see app</li> <li>◆ Use of Multimedia</li> <li>◆ What platform</li> <li>◆ Software</li> <li>◆ QA</li> <li>◆ Review of materials</li> <li>◆ Relationship to accredited courses</li> <li>◆ Developed on site or acquired from elsewhere.</li> <li>◆ Does pedagogy drive the process</li> </ul>		

The facilitator	Look For	Details	rate
	<ul style="list-style-type: none"> <li>◆ Comfort with the technology?</li> <li>◆ What proportion of their work is online?</li> <li>◆ What professional development have they done</li> <li>◆ PD they would like?</li> <li>◆ What issues?</li> <li>◆ Monitoring arrangements</li> <li>◆ Moderation</li> <li>◆ Availably of technical assistance</li> <li>◆ How is assessment achieved?</li> <li>◆ Any team approach</li> <li>◆ Learner centred</li> <li>◆ Flexible arrangements</li> <li>◆ Identification of learner preferred learning style</li> </ul>		

The Learning experience	Look For	Details	rate
Student Support	<ul style="list-style-type: none"> <li>◆ Students receive information about admission requirements, tuition and fees, books and supplies, technical and assessment requirements, and students support services</li> <li>◆ Students are provided with hands-on training and information to aid them in securing material through electronic databases interlibrary loans, government archives, news services and other sources</li> <li>◆ access to technical assistance including detailed instructions regarding the electronic media used, practice sessions prior to the beginning of the course and convenient access to technical support staff</li> </ul>		
Evaluation & Continual Improvement	<ul style="list-style-type: none"> <li>◆ Retention?</li> <li>◆ Satisfaction?</li> <li>◆ Any other states?</li> </ul>		
Reason for Studying online	<ul style="list-style-type: none"> <li>◆ lifelong learning?</li> <li>◆ To get a job?</li> <li>◆ On-the job training?</li> </ul>		
Interaction	<ul style="list-style-type: none"> <li>◆ Tools used</li> <li>◆ Moderation of chat lines and email lists</li> <li>◆ Feedback benchmarks</li> </ul>		

## Appendix to Site Visit Template

### Site Variables

#### **Learning Guide versus Learning Material**

Much material advertised as an online course was limited to references to other resources, whether web-based or hardcopy. Typically learning guides are along the lines of "read pages 1-57 of your textbook".

Example: South West TAFE's online Automotive Cert 2. Whereas Learning Material actually delivers a learning opportunity through explanation, demonstration, suggestions of observations to make or things to try, feedback or some other form of interactivity. Some sites such as Wodonga's Cert 1&2 modules provide both.

#### **Learning Toolkit versus Communication Toolkit**

Often an online site is nothing more than a distribution & communication medium for information that would otherwise need to be printed or posted. As such it saves on printing costs for the institution and is quicker than "snail mail" through the postal system. Usually there is email access to a tutor or at the least a distance/flexible delivery office. Sometimes there are opportunities for students and teachers to communicate using a bulletin board (asynchronous communication) or a chatroom, web-blackboard or conference facilities (synchronous communication) but if content of sample sites is anything to go by then these facilities aren't highly utilised. Synchronous communication has the disadvantage that participants need to make themselves available to be online at a certain time, contrary to flexible delivery theory that not being on-campus means you can study anytime at your leisure and fit around work commitments. This may be the reason that such facilities are rarely used.

#### **Text-based versus Interactive**

Sadly many online courses could easily be replaced, at convenience to the student, by a hardcopy print-out of the material. Thereby saving online costs with their Internet service provider for material they can browse in a book.

While the Internet is a cheap distribution medium for institutions looking at saving printing costs it is actually expensive for the student. The student must have access to :

a computer

a printer

Web browser and email software + any plug-ins required to view interactive components

Hourly costs for online time

Phone costs for when all other forms of communication fail - as they do.

To offset these costs the online course should offer something more than the equivalent hardcopy course (i.e some form of interactive learning experience).

Many flexible delivery students not using online courses are still able to use a full range of online services as well as email to deliver assignments and communicate with their tutor and other students. They don't face the same costs for material downloads and printing or browse time. Example: Northern Territory University which has excellent online services such as online enrolment and course information.

## Appendix 3 Benchmarks for Best Practice in Flexible Learning

### Organisational Commitment

#### *Executive Commitment*

#### **Good practice includes ...**

- a clear vision for the development of online learning
- a strategic plan which reflects the online learning vision
- adequate resourcing.

#### *Management Practice*

#### **Good practice includes ...**

- strategies to manage the changes, and risks, associated with online learning
- identification of potential online clients and their needs
- use of partnerships to maximise the quality and diversity of offerings
- use of research to keep pace with current developments, and stimulate innovation
- a systematic approach to the professional development of all staff involved.

#### *Evaluation*

#### **Good practice includes ...**

- strategies to review and enhance the quality of online offerings
- a systematic process for gathering and analysing client feedback
- a plan to measure longer term outcomes and cost effectiveness.

## Technology

### **Good practice includes ...**

- use of the VET preferred standards for decisions about technology infrastructure
- a technology plan, linked to larger organisational planning
- adequate measures to maintain the security and reliability of the system
- easy access to technical support for staff and learners
- alternative technology options available to low end users.

## The Learning Experience

### **Learning Programs**

### **Good practice includes ...**

- an educational rationale for decisions about choice of platform
- agreed standards for the design of learning programs, and assessment procedures
- understanding by developers of the differences between online and face-to-face teaching and assessment
- incorporation of adult learning principles in program design
- use of communication tools to promote interactivity and collaboration
- a flexible design to accommodate a variety of learner preferences and contexts
- procedures to maintain, review and update learning programs.

### **Student Support**

### **Good practice includes ...**

- learner-focused website providing course details, enrolment information, orientation, career counselling and other support services
- programs that assist learners to use the online system, and develop information literacy
- tracking systems to monitor learner activity online
- access to comprehensive help systems.

## **The Facilitator**

### **Good practice includes ...**

- understanding the differences between online and face-to-face teaching and assessment
- efficient management of online communication with individuals and groups of learners
- adapting online communication to learners' preferences and contexts
- quick response times for feedback to learners
- accommodating learners with a range of learning needs, styles and contexts
- supporting and mentoring inexperienced facilitators
- maintaining innovative practice through knowledge of current research and trends.

## Appendix 4 Internet Links/Reference List

In the following lists of resources an attempt has been made to categorise the resources to reflect the areas of best practice identified by the project team. Many of the resources cover many areas in the one resource, and may be found referenced in various sections. A general list of good resources that did not necessarily fit with the categories is included at the end.

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### Organisational Commitment

#### RELATED STRATEGY 2000 PROJECT WEBSITES.

##### **Business Models for Flexible Delivery.**

<http://www.flexiblelearning.net.au/busmodels/index.html>

#### USEFUL INTERNET RESOURCES

##### **New Features for Learning Management Systems**

Bruce A. McHenry

<http://imsproject.org/feature/lms/lms.html>

An excellent background article, providing numerous links to relevant sites. Well structured and useful for decision makers.

##### **Online Education Report**

White, Gerry Oct-99

<http://www.edna.edu.au/edna/publish/system/edures/edreport.html>

Outlines quantitative research into student use of online services in Australia.

##### **Beauty Lies in the eye of the Beholder**

Calder, Judith Jun-00

International Review of Research in Open and Distance Learning (Vol 1, No 1. June 2000)

<http://www.irrodl.org/>

This paper discusses best practice, in line with the model used in this project. Covers management, pedagogy, technology and student issues.

##### **Developing and evaluating a University-wide Online Distributed Learning System: The Experience at RMIT University 1999**

Carmel McNaught, John Kenny, Paul Kennedy & Ross Lord

[http://ifets.ieee.org/periodical/vol\\_4\\_99/mcnaught.html](http://ifets.ieee.org/periodical/vol_4_99/mcnaught.html)

Outlines RMIT's IT Alignment Program in which information technology systems were aligned to the principles and goals of the Teaching and Learning Strategy.

## **Organisational Commitment (cont)**

### **Creating New Online Models for Organisational Learning**

Salmon, Gilly Jun-99, UK

<http://oubs.open.ac.uk/gilly>

Conference papers

A useful case study, providing statistics and discussion of management issues

### **Teaching and Learning Online in an Established Distance University Business School**

Salmon, Gilly Nov-99

<http://oubs.open.ac.uk/gilly>

Conference papers

### **The economics of online delivery**

Webb, Greg Jul-00

<http://www.nw99.net.au>

Very relevant paper which covers cost and management issues, and provides some useful statistics.

### **Quality on the Line**

Benchmarks for Success in Internet-based Distance Education

National Education Association, Apr-00

The Institute for Higher Education Policy

<http://www.ihep.com/PUB.htm>

### **Change Management Strategies**

<http://www.tafe.sa.edu.au/lsrcs/one/natproj/>

This website is the result of an ANTA project on implementation of online and flexible learning .

### **Survey Results - ANTA Online Technology & Learning Styles Project**

TAFE SA, 2000

<http://www.tafe.sa.edu.au/lsrcs/one/natproj/tal/survey/index.htm>

This document looks at the big picture of implementing online learning and provides some useful statistics.

## **FURTHER READING**

### **Harnessing online learning**

Tom Barron, Sep-99

In Training and d

Development, vol 53, no 9 Sept 1999 p 28-33

This article discusses various issues related to Executive Commitment.

## **Organisational Commitment (cont)**

### **Getting to grips with online delivery**

Di Booker, 2000

Useful in regard to implementation and change management issues.

National Centre for Vocational Education Research

ISBN 0 87397 606 1

### **Web based training in the workplace**

Margaret Driscoll

In Adult Learning/Technology, Summer 1999

Explains many of the options for online learning.

### **Teaching and Learning Online**

Leonie Wheeler, 1996

Open Training Services, Western Melbourne Institute of TAFE, Footscray.

A very useful and thorough document that investigates issues in the implementation of online learning and the benefits it provides.

### **E-Competent Australia**

Report on the Impact of E-Commerce on the National Training Framework

Mitchell, John May-00, ANTA

Useful for the big picture of where we are going with e-business solutions.

Appendix 4 (cont)

Internet Links/Reference List

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## Appendix 4 (cont) INTERNET Links/Reference List

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### **The Learning Experience**

#### **RELATED PROJECT WEBSITES**

##### **Quality in Online Learning: The Learners View**

<http://www.tafe.swin.edu.au/ncver/>

This website is the outcome of a project that is online surveying students through both questionnaire and focus groups. It includes a literature review and will also include benchmarks in the future.

##### **Student Online Services S2000 Project**

[www.flexiblelearning.net.au](http://www.flexiblelearning.net.au)

This website has numerous case studies and examples of innovative examples of student online services.

##### **Learner Support for Online Delivery Project - Home Page**

Cramond, Brian

<http://www.tafe.sa.edu.au/institutes/para/intech/lod/home.htm>

This website is from a project that was completed in 1997, it still a very useful site.

#### **USEFUL INTERNET RESOURCES**

##### **Learner Support services for online VET information dissemination and program delivery**

Young, Susan

<http://www.ncver.edu.au/articles/atr24web/dawe.htm>

This research focuses on good practice in providing employment services to TAFE students.

##### **What makes a Successful Online Student?**

<http://illinois.online.uillinois.edu/IONresources/onlineoverview/StudentProfile.html>

Good site that offers practical guidance for students moving to online learning. Includes quizzes and little tools to help teachers and learners determine where they are at with online learning.

##### **The OnlineLearning.net Self-Assessment Quiz**

OnlineLearning.net

This website is an interesting provider website that has a lot of information about the online learning network. It also has a useful self assessment tool and deals with learning styles.

## **The Learning Experience (Cont)**

### **Overcoming the Personal Barriers to Success in Distance Learning**

Chapter 5: Understanding Your Needs:

<http://cw.prenhall.com/dlguide/chapter5/objectives/deluxe-content.html>

This link provides some information about the book and ordering capacity. While based on distance education it is still quite relevant in the online context.

### **RuralNet - frequently asked questions**

Stannard, L

South West TAFE

<http://www.swtafe.vic.edu.au/Ruralnet/FAQ.htm>

This site is useful as an example of good practice in providing student information.

### **E-moderating: the key to teaching and learning**

Salmon, Gilly

<http://oubs.open.ac.uk/e-moderating/extracts.htm>

Highly relevant paper.

### **Top tips for increasing online interactivity**

Jasinski, Marie

[http://www.learnscope.anta.gov.au/display\\_stories](http://www.learnscope.anta.gov.au/display_stories)

Useful paper on use of communication tools.

### **The Education Debate - A New Paradigm for Library and Information Services in the On-line Learning Environment?**

Booker, Di

<http://netways.shef.ac.uk/discuss/dibook.htm>

Conference papers Mar-97

Looks at the new role of library information services and student services

### **Online Networks in VET Research Report**

#### **Establishing Online Networks for People Working in Vocational Education and Training**

Wheeler, Leonie

Australian National Training Authority

<http://wwwtafe.lib.rmit.edu.au/onlinet/>

### **RMIT University and Open Training Services for the Australian National Training Authority 1998**

Research Report. Really good information on moderation of chat, and the how to develop and online learning network. Also includes statistics

## **The Learning Experience (Cont)**

### **Online Networks in VET Toolkit**

#### **A Practical Guide to Setting Up an Online Network for People Working in Vocational Education and training**

Wheeler, Leonie

Australian National Training Authority

<http://www.tafe.lib.rmit.edu.au/onlinet/>

RMIT University and Open Training Services for the Australian National Training Authority 1998

Related to the previous publication.

### **FURTHER READING.**

#### **Flexible Delivery: Induction Strategies and Support for Learner Success**

What does the literature say?

McNickle, Cathy, 1999

Canberra Institute of Technology

#### **Flexible Delivery: Induction Strategies and Support for Learner Success**

McNickle, Cathy, 1999

Canberra Institute of Technology

#### **The Personal Interface**

##### **The Value of the "Human Factor" in supporting Technology - Supported Learning Programs**

Gooley, Anne & Skippington, Peter & Towers Steve, 2000

Queensland Open Learning Network

#### **Going online: teachers as "virtual" learners**

Corben, Helen

in Training Agenda: A Journal Of Vocational Education And Training vol 5 no 4 Nov 1997 p 8-9 (Jun-00)

Good short paper that covers the student perspective and the use of communication tools

#### **E-Mail in Tertiary Counselling Services: the technology has arrived but have we?**

Doctor, Suzette

Journal of the Australian and New Zealand Student Services Association: No 11, April 1998

Discusses counselling online

#### **Keeping quality in the picture**

Pitman, Liz

Campus Review, March 1-7, 2000

Good paper covering learner support

## Appendix 4 Internet Links/Reference List

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### Technology

#### RELATED STRATEGY PROJECT WEBSITES.

##### Online Product Development

<http://www.flexiblelearning.net.au/product/index.html>

##### VET Preferred Standards

<http://vetpst.dstc.edu.au/>

#### USEFUL INTERNET RESOURCES

Distributed Systems Technology Centre

<http://dstc.edu.au/index.html>

The **DSTC** is a joint venture supported by the [Australian Government's Cooperative Research Centres](#) Program and over 24 participating organisations. Its mission is to develop the technical infrastructure for tomorrow's enterprises including training services.

##### IMS Enterprise Best Practice and Implementation Guide

IMS Global Learning Consortium Inc, 2000

<http://www.imsproject.org/enterprise/enbest03.html>

Covers inter-operability between enterprise systems

##### New Features for Learning Management Systems

Bruce A. McHenry

<http://imsproject.org/feature/lms/lms.html>

Covers many issues including technology infrastructure questions.

##### WebCT home page

<http://about.webct.com/>

##### What is WEBCT?

Sheehan, Terri

<http://cleo.murdoch.edu.au/help/online/whatiswebct.html>

Teaching and Learning Centre, Murdoch University

This offers a good explanation of WebCT within the Murdoch context.

## Technology (cont)

### **Beauty Lies in the eye of the Beholder**

Calder, Judith

<http://www.icaap.org/>

International Review of Research in Open and Distance Learning, vol 1, no 1 ISSN 1492-3831

Discusses the question of best practice, using a model similar to the one used in this project.

### **WBT Information Centre**

Kilby, Tim

<http://www.filename.com/wbt/index.html1999>

Web Based Training: Advantages & Disadvantages  
Concise and relevant.

## **FURTHER READING**

### **Marks on the Wall**

Benchmarking Teaching and Training in VET

Peoples, Margaret, 1998

Australian National Training Authority

### **10 Things we know so far about Online Training**

Kiser, Kim

in Training Nov 1999, p66-74

### **Factors Influencing Interaction in an Online Course**

Vrasidas, Charalambos and Mclsaac, Marina Stock

The American Journal of Distance Education Vol 13 No 3 1999

Magazine Article

1999

### **Delivering Multimedia Teaching Modules via the Internet**

Mudge, Stephen M

in IETI 36,1

Magazine Article

## Appendix 4

### Internet Links/Reference List

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## Facilitators

### RELATED STRATEGY PROJECT WEBSITES.

#### Staff Capability Review Model

<http://www.flexiblelearning.net.au/capability/index.html>

#### Learnscope

<http://www.learnscope.anta.gov.au/>

### USEFUL INTERNET RESOURCES

#### Internet Delivery of Instruction

Issues of Best Teaching Practice, Administrative Hurdles, and Old-fashioned politics  
Chizmar, John F & Williams, B David 1997

<http://www.educause.edu/ir/library/html/cnc9703/cnc9703.html>

Good paper that covers pedagogical, administrative & political issues. It includes seven delivery principles.

#### What's the Difference?

A review of Contemporary Research on the Effectiveness of Distance Learning in Higher Education

Phipps, Ronald and Merisotis, Jamie Apr-99

The Institute for Higher Education Policy

[www.ihep.com](http://www.ihep.com)

Highly relevant paper relating to online pedagogy.

#### VET in Schools Learnscope Project (Tas) Final Report

<http://www.netlearn.discover.tased.edu.au:8900/public/discovervet/index.html>

1999

Covers facilitator issues and Professional Development in VET in Schools.

#### About Distributed Flexible Learning (DFL)

##### Experiential Pilot

<http://www.anu.edu.au/CEDAM/flexible/about.html>

Jan-00

Covers facilitator professional development issues.

#### Distant Voices: Teaching and Writing in a Culture of Technology

Anson, Chris M

<http://www.ncte.org/ce/jan99/anson.html>

Jan-99

Specific to teaching writing online, however, generalisations can be drawn.

## Facilitators (cont)

### **Disembodied learning**

**How flexible delivery shoots higher education in the foot, well sort of**

Beckett, David

<http://www.sociology.org/content/vol003.003/beckett.html>

Discussion on issues related to facilitators.

### **New Features for Learning Management Systems**

Bruce A. McHenry

<http://imsproject.org/feature/lms/lms.html>

Covers all aspects of online delivery and learning.

### **Teaching and Learning Online in an Established Distance University Business School**

Salmon, Gilly

<http://oubs.open.ac.uk/gilly>

Conference papers

Nov-99

Covers pedagogy, provides statistics.

## **FURTHER READING**

### **10 Things we know so far about Online Training**

Kiser, Kim

in Training Nov 1999, p66-74

### **Factors Influencing Interaction in an Online Course**

Vrasidas, Charalambos and Mclsaac, Marina Stock

The American Journal of Distance Education Vol 13 No 3 1999

Magazine Article

1999

Covers communication tools, pedagogy, teacher-centred approaches and moderation.

### **Teaching and Learning Online (TALON)**

Accredited course offered through Tropical North Queensland Institute of TAFE.

Contact Peter Carr ph 07 4042 2454

### **Teaching and Learning Online**

Wheeler, Leonie

Open Training Services

Research Paper, 1996

A thorough document, dealing mainly with executive commitment and facilitation issues.

### **Task as tamagotchi & editorial**

ESL teachers' work in the emerging hypermedia environment

Corbel, Chris Dec-99

in Prospect Vol 14, no 3

Pedagogical issues from the teacher's perspective.

## **Facilitators (cont)**

### **Computer Literacies**

Working Effectively with Electronic Texts

Corbel, Chris, 1999

National Centre for English Language Teaching and Research

A professional development course, covers facilitator issues and relates to student experience.

### **A Report on Good... Better... Best!**

**a self-evaluation activity for vocational teachers and trainers**

Peoples, Margaret, 1997

Australian National Training Authority

### **Mirrors and Measures**

Report on the development of Performance Measures for Teaching and Learning in the Vocational Education and Training Sector

MacGraw, Judy and Peoples, Margaret, 1996

Australian National Training Authority

## Internet Links/Reference List

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### More Information On Benchmarks

#### USEFUL INTERNET RESOURCES

##### **Quality on the Line**

Benchmarks for Success in Internet-based Distance Education

National Education Association, Apr-00

The Institute for Higher Education Policy

<http://www.ihep.com/PUB.htm>

Used as the basis for the benchmarks developed for the Flexible Learning Best Practice Project.

##### **Internet Delivery of Instruction**

Issues of Best Teaching Practice, Administrative Hurdles, and Old-fashioned politics

Chizmar, John F & Williams, B David 1997

<http://www.educause.edu/ir/library/html/cnc9703/cnc9703.html>

Includes 7 delivery principles

##### **Moderating on Line**

Salmon, Gilly & Giles, Ken Oct-97

Conference papers

Includes Facilitator requirement benchmarks amongst many other issues.

<http://oubs.open.ac.uk/gilly>

##### **Student Induction and Study Preparation Online**

Salmon, Gilly Sep-98

Conference papers

<http://oubs.open.ac.uk/gilly>

Covers student support principals

##### **Building Music Concepts Online**

My Guiding Principles

Lucas, Jim, 2000

<http://www.neiu.edu/~jalucas/cgi/hue0.cgi>

Principles of best practice that could be transferred to other disciplines.

#### FURTHER READING

##### **Seven Best-Practice Principles**

Peoples, Kevin, Aug-99

In The Australian TAFE Teacher, vol 33, no 2 August 1999

Good concise article covering many issues.

##### **Flexible Learning, Best Practice in establishing and Operating a Shopfront Flexible Learning Centre - A "how to" guide**

Gillespie, Paul Feb-98

Educational Technology Unit, Canberra Institute of Technology

## **General Links of interest**

### **University of NSW**

[www.fbe.unsw.edu.au/learning/teach-with-web/map.htm](http://www.fbe.unsw.edu.au/learning/teach-with-web/map.htm)

Series of papers on designing and teaching with the web. Site map will guide you to relevant sections. Excellent site that covers many of the issues.

### **Computer training and tutorial resources**

<http://www.intelinfo.com/>

Big site with lots of courses, found by search mechanism.

### **Benchnet: The Benchmarking Exchange.**

<http://www.benchnet.com/>

General site on benchmarking and best practice.

### **AVETRA Conference Program**

<http://www.aveutra.org.au/>

Future Research, Research Futures

### **Distance Learning on the Net**

<http://www.hoyle.com/distance.html>

School based information. Included are descriptions of distance education web sites, along with links to lead you to further Distance Learning and education resources on the Net.

### **Wodonga TAFE - Online Courses -**

<http://www.wodonga.tafe.edu.au/courses/online/index.htm>

Go to the online writing course from this site. Good course to get people started who want to write courses for the web.

### **South West TAFE**

Management online - course information

<http://www.swtafe.vic.edu.au/Humres/management/course.htm>

Good example of website use for course information

### **WebEd: University of Washington**

<http://depts.washington.edu/webed/resource.html>

Extensive resource list includes links to online courses

### **LearnScope news and views**

<http://www.learnscope.anta.gov.au>

Website with many resources and information related to current Strategy 2001 issues.

## **General Links of interest (cont)**

### **Welcome to OnFX**

<http://www.onfx.com.au>

Printing and Graphic Arts online courses. Demonstration course available.

### **Current Developments and Best Practice in Open and Distance Learning**

Trindale, Armando Rocha and Carmo, Hermano and Bidarra, Jose

International Review of Research in Open and Distance Learning, vol 1, no 1 ISSN 1492-3831

<http://www.icaap.org/>

This website has a lot of research papers and excellent resources related alternative education provision.

### **Best Practice in Online Delivery**

Education Research Project Aug-99

TAFE NSW Commission

<http://esd.tafensw.edu.au/resproj>

Relevant background information for implementing online learning.

### **E-Learning industry news**

[www.onlinelearning2000.com](http://www.onlinelearning2000.com)

Includes news, white papers and reports.

### **Online assessment**

[Http://sunil.umd.edu/documents/assmnt/onlinetest.htm](http://sunil.umd.edu/documents/assmnt/onlinetest.htm)

Online testing methods for web based courses. Includes a case study and references.