

# **E-learning for the mature age worker: case studies**

Prepared by:

**Kaye Bowman and Peter Kearns**

**Global Learning Services**

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## Preface

These case studies were undertaken in September and October 2007 as a component of a larger study on *E-learning for the mature aged worker*, conducted by the Research and Policy Advice Project, which is part of the Australian Flexible Learning Framework (Framework).

The Framework provides the vocational education and training (VET) system with the essential e-learning infrastructure and expertise needed to respond to the challenges of a modern economy and the training needs of Australian businesses and workers.

The Research and Policy Advice Project provides high quality, timely and evidence-based research and policy advice to inform the development and implementation of e-learning across the VET system.

The four providers chosen for the case studies were among 30 providers interviewed in the national consultations component of the study. The four providers were selected because they

- demonstrated good practices in e-learning to support education and training for the mature aged worker
- presented a focused study through providing e-learning in the Community and Health Services (C&HS) sector. This sector contains many mature aged workers who enter training programs to update their skills, a career progression, or career change opportunity to help overcome significant skill shortages and
- covered a variety of key contexts.

The studies found work in the CS&H sector is continuously changing. Developments and rapid advances in medical science and clinical practice require a commitment to ongoing learning and performance enhancement. E-learning serves as a tool to advance these objectives, especially where the workers are spread across many locations, as in the Queensland Ambulance Service, or the learners are scattered in small regional and rural communities.

CS&H workers are increasingly required to use computers. This may be to access and update patient records, to keep abreast of medical, legislative developments, organisation procedures, and to communicate with fellow workers and the public they serve. Although often not spelt out in the competencies required for CS&H jobs, computer literacy is becoming fundamental to CS&H work. Technology may be ubiquitous, but computer literacy is still not common among the many mature aged students who undertake CS&H vocational education and training (VET) programs. E-learning is used as a tool for student employability as well as to enhance teaching and learning experiences.

The studies showed a range of blended learning approaches. These included innovations through pilot testing, learner-centred strategies, and programs leading to clear outcomes in the workplace. These learning innovations extended e-learning into practical industry placements and illustrated learning in situated contexts, in some cases with the strategic objective of building a learning organisation committed to continuous improvement.

The major themes resulting from the case studies have been submitted in our full report, and have been used to develop the good practice guidelines for the use of e-learning for mature age workers provided in that report.

# Community Services and Health Program - Gilles Plains Campus TAFESA Adelaide North

*Using technology in the classroom to improve student learning and employability*

by **Kaye Bowman**

Work in the Community Services and Health (CS&H) sector is continuously changing and workers are increasingly required to use computers to keep abreast of medical and legislative development, access and update patient records, conform to organisation procedures, and communicate with fellow workers and the public they serve. Although often not spelt out in the competencies required for CS&H employment computer literacy is becoming fundamental to CS&H work.

Technology may be ubiquitous but computer literacy is still rare among the many mature aged people who take up CS&H vocational education and training (VET) programs as a career progression or career change opportunity. Recognising this, CS&H Gilles Plains Campus of TAFESA has incorporated the use of technology into their training programs to improve student employment prospects as well as to enhance teaching delivery and the students' learning experiences.

This case study discusses the factors behind the delivery of e-learning in the CS&H programs at Giles Plains Campus of TAFESA. It provides a positive example of how to embed innovative e-learning practice within a VET context and how to support mature aged students who start out their courses grappling with three daunting prospects; being a learner again, absorbing new content knowledge, and using technology in the process.

In the preparation of this case study, several visits were made to C&HS Gilles Plains Campus of TAFESA to interview lecturers, mature aged students and educational managers and to see them in operation. I especially thank Judith Fawcett, CS&H Flexible Learner Coordinator, who organised the visits and provided great insights and unfailing assistance.

## ***The need – Why blended delivery?***

From the perspective of CS&H staff the primary factor for the inclusion of e-learning components into their classroom teaching is that it meets client needs. They see computer literacy as becoming fundamental to CS&H work. The CS&H industry and individual businesses are increasingly requiring workers to have information and communication technology (ICT) skills. CS&H staff are responding. They are producing high quality graduates trained in CS&H as well as who have the employability skill of being able to use technology

The need for students to overcome the ICT hurdle was often mentioned by CS&H staff:

*It is wrong to assume mature aged learners have ICT skills. Many are on low incomes. I am staggered by the sheer volume of students, some young as well as most of the mature aged, who do not have computer literacy. This is why we have programs that integrate course context with methodology that requires the use of ICT, to build their confidence and basic employability skills.*

Manager

The use of a blended delivery approach enables a 'learning by doing' teaching approach:

*I can teach computing skills by 'stealth' – 'force' reluctant users to update skills and jump over the computing divide. They can gain recognition of the acquisition of computing skills in the workplace. I am using tools and technology relevant to so many of the current generation (of all ages and in most workplaces) – learning becomes part of their everyday life*

Lecturer

Another benefit of the blended delivery approach recognised by CS&H lecturers is that it allows different learning styles, past knowledge, and learning experiences of students to be catered for:

*We can introduce a number of different learning activities-quizzes, cross words, virtual health care centres and activities etc-that provide different pathways to the same end result, of acquiring new knowledge and competencies. Students can choose their pathway or try several.*

Lecturer

*We can offer various levels of difficulty in the activities and the student can start at the level that suits them. For example we have three levels of difficulty built into our online tests in numeracy for medication purposes for our students in enrolled nursing*

Lecturer

For mature aged students, e-learning provides choice over where and when they learn. Time management is a major concern. E-learning better accommodates their circumstances – it enables learning when convenient.

*We work five days a week in aged care. We attend TAFE one day a week to do the enrolled nursing course. We do work placements related to the course taking time off from our present jobs and we run the home. We need to be able to study in and between all of this, mostly at night. E-learning helps us. We can log on and use the CD-ROM any time.*

Two mature aged students

E-learning gives students more control and self direction with their learning. It enables self paced learning which is important to some mature aged learners.

*I take time to absorb the information. I like the fact that I can go over the material many times.*

Mature aged student

## ***How is technology and e-learning introduced to the students?***

CS&H Gilles Plains has developed an 'orientation program' that encompasses an introduction to study and learning styles and to computing. The program is embedded in every course and conducted as early as possible.

The interviewed mature age CS&H students admitted that the need to use technology to gain their education was very scary, at least at first. They had never turned on a computer before or, if they had, they had not used it very much and certainly not for education purposes.

Being a learner was also a new and daunting experience. For some of the mature aged students interviewed, it had been more than twenty years since they had been

a classroom. For others it was only a few years back but they were finding that the course they were now doing required academic learning abilities well beyond those of their previous course.

All of the mature age students started out grappling with three things at once, being a learner again, absorbing new content knowledge of their course and using technology in the process.

The CS&H Gilles Plains TAFESA induction program involves a skills audit upfront to enable tailoring of the induction.

It is not unusual to have a classroom of students with widely different and varying degrees of competency in learning, technology use and course content familiarity. Nor has an assessment of the skills of the students, especially mature aged students, necessarily been made before they start the course. For example, in fee- for-service programs the employer nominates the employee for the course, and those who enter through the TAFE admissions route have not necessarily had their previous skills in technology use queried.

The CS&H Gilles Plains TAFESA skills audit includes an investigation of learning styles. The typology used is one developed by Rob Denton of TAFESA that helps the mature aged student to (re) discover whether they predominantly are an adventurous, social, practical or conceptual learner. The technology audit asks the students about their abilities to do a range of functions related to word processing window/files management and the internet.

Those students more advanced in computing start on course based learning activities straight away while the others are provided basic computer training including in keyboard familiarity ('nimble fingers' exercises), basic computer screens and toolbar layouts, accessing the internet and email and academic recording of documents.

Classroom based e-learning is also a constant feature. The students practice their ICT skills in the process of building their course knowledge base under supervision throughout the course.

*Most need e-learning face-to-face first in a supportive environment. It takes above average persistence and organisation to be a self directed learner.*

Lecturer

Some students reported using the learning buddy system when not in the classroom.

Support services are also on offer, including additional lecturers when a new e-learning tool is being introduced or for literacy purposes or for life management issues.

*Student Support services here at Gilles Plains TAFESA are second to none. When I first came it was a little bit daunting. Everyone was clicking away on the computer and I had no skills in this direction and thought, they are all so much smarter than me. Early on the lecturers were talking in tongues, were ahead of me in technical terms. I have life experience though and am not afraid of asking questions. Every lecturer I have asked for help has given it and the student counselling service is phenomenal. I get one on one help with my study as well as personal life issues and I feel good when I leave these sessions. Communication is the key.*

Mature aged student

For the CS&H lecturers the blended learning delivery approach is considered worth the effort which is considerable:

*It takes time to develop e-learning materials*

*You need to ensure the technology is working*

*One must be patient with the student and yourself, and the technology if it is not working!*

*High anxiety students (with the technology and/ or the content) need high levels of initial support*

*You need to acknowledge their anxiety that it is real and take a very sensitive and nurturing approach*

*No question is a stupid question. Do not treat them as if they should know.*

*A lot of repetition helps*

*It is about taking bite sized steps, a build-on-build-on approach, asking something new of the student in terms of technology input as they proceed through the course content in order to have them proceed also along their ICT journey.*

*It is about giving help whenever needed*

*I counsel the students to get help rather than fret over a situation if something is not working when they are studying out of class-time.*

*I find the e-learning excites the students. The internet for example opens the world to them and this excites me to help them get to where they can do it all.*

Combined comments of CS&H lecturers

Great satisfaction is also felt by the students in their achievements. The teachers noted the following characteristics of mature aged learners (compared to younger students) that make their achievements heart felt.

*They are more motivated, are making great sacrifices to be here.*

*They really want to learn*

*Are more challenged*

*Want to do it right*

*Worry about passing/ failing*

*Try harder*

Combined comments of CS&H lecturers

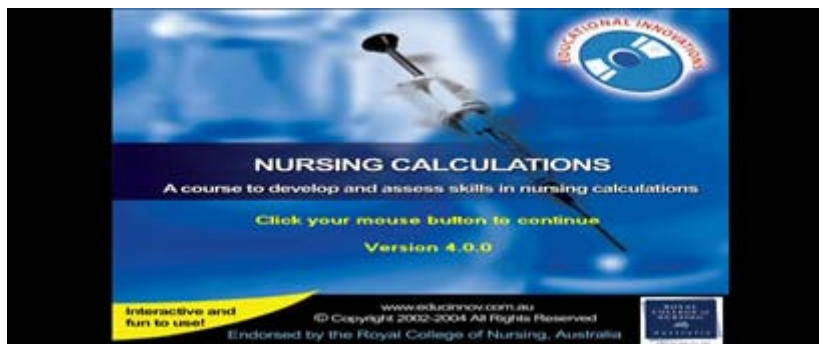
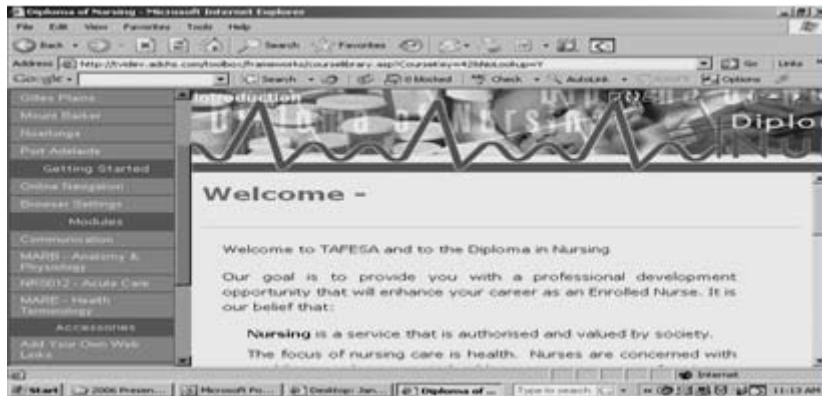
The mature aged students interviewed were all glad that they were learning computer and other digital skills as part of their CH&S course even though it had not been without some pain. Two had lost their work early on by not saving it. One was frustrated by not having internet access at home. Another thought that for him it might have been better if he had done a basic typing /computing course before setting out on the CS&H course proper.

## ***What is in the blend? Some course based examples***

E-learning covers a wide set of applications and processes involving the utilisation of electronic media to increase student access to course materials, to support different styles of learning and to expand choice on when and where the student learns, in the classroom, workplace or at home.

E-learning examples blended with face-to-face teaching in CS&H programs covered in this case study of enrolled nursing, aged care, youth and community work include the use of online, CD-ROM and computer-based learning materials and online summative assessment materials; while the use of podcasting (audio) is the focus of current research and pilot tests. Exploration of new innovative technologies for inclusion in the delivery blend is continuous in the CS&H programs at Gilles Plains campus of TAFESA.

*Enrolled Nursing* –There are about 18 competencies in the course of 49 weeks, one day per week, plus 300 hours of work placement. E-learning is commonly used in four of the competency modules where it suits the subject matter: in health care terminology, acute health care, anatomy and physiology, and medication calculations.



**Computer programs allow mature aged enrolled nurses to learn anytime, anywhere at their own place**

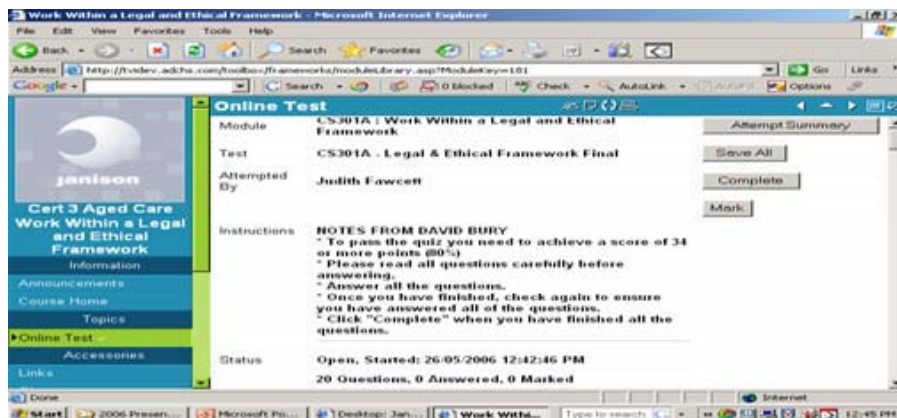
*Certificate III in Aged Care* – The course includes the use of a CD-ROM containing a simulated aged care environment 'Beronia village' that includes audio and video to enable the student to 'work' with staff and a patient. The opening screen is similar to

the one below for the virtual child care centre Cybertots that is Flexible Learning Toolbox<sup>1</sup> used in Children Services courses.



### Virtual work place CD-ROMs enable students to learn in real life situations

CS&H Gilles Plains has also developed an online summative assessment option in several aged care subjects including law and ethics. The lecturer found over time that more students are opting to do the summative assessment online rather than hard copy in the classroom. All of the students in his most recent class took the online option.



### Learning assessments can be undertaken anywhere via the web

*Certificate II in Youth and community work* - During my site visit the students were trialling a new online program, the first version of which had just been completed. Student feedback was to be used to further develop the product and make it more interactive in future.

### ***The journey - How has blended learning been achieved by CS&H Gilles Plains?***

The above examples are but a few of the e-learning options being used at CS&H Gilles Plains Campus TAFESA in Adelaide North. All CS&H lecturers have at least one e-learning component in one of their subjects with many containing considerably

<sup>1</sup> Flexible Learning Toolboxes are high quality resources featuring scenarios, images and interactive activities that simulate real life <http://www.flexiblelearning.net.au/toolbox>

more. The current level of e-learning engagement required an organisational shift. Support for the inclusion of e-learning is provided from all aspects of the delivery staff, from the grassroots to the top levels. E-learning is built into plans at all levels of the organisation. To reach this level of saturation has taken seven years, and the journey is not over.

CS&H Gilles Plains commenced its flexible learning journey in 2000, specifically to introduce e-learning alongside face-to-face delivery in order to achieve a blended learning approach. The large size of the CS&H program at Gilles Plains enabled enough staffing flexibility for one staff member, Judith (Judy) Fawcett, to reduce education and training duties to take on the role of Coordinator of Flexible Delivery .

In 2000 CS&H had few computers for teaching purposes but Judy noticed that other parts of the campus had computers that were not being used. She secured them and made a start.

Judy has energy and is focused delivering high quality adult education and training. She possesses a *Masters in Adult Education* (on the topic of mature aged and learning), a *Graduate Certificate in E-learning* and a TAA Certificate and has taught in all education sectors – high schools, community education, TAFE and university.

Judy 'talked up' e-learning with her colleagues as good educational practice to provide quality teaching and learning, and higher quality graduates with technology skills as well as occupation content knowledge and skills. Those colleagues who showed interest were helped to develop an e-learning tool/resource according to their suggestions and interests. And slowly it snowballed.

Judy used the Framework's LearnScope<sup>2</sup> program to skill herself and to train her colleagues. She has been a participant twice and has facilitated two teams of her peers to undertake projects. LearnScope offered the ability to take people offline from teaching and give them the opportunity to gain new skills and create e-learning resources and trial them in their classrooms. The students knowingly trial new e-learning tools and resources and offer suggestions for improvement that are acted upon to build up product utility and quality. One of the resources the author viewed being used was in its sixth iteration, another was being tested for the first time.

Management has aided the e-learning journey by building a rational into all levels of the organisational structure.

Innovation in teaching and learning is priority one in the TAFESA Strategic Plan. Flexible learning and e-learning is built into Mission Statements, Program Team and Individual Plans related to the CS&H program Gilles Plains Campus. There now is up-to-date IT structures and staff support in place. Judith retains the role of co-ordinator and undertakes new product development work with the various CS&H lecturing staff for whom the time component can be a problem. All available support staff is involved, including Library Assistant's and services like Smart Media.

CS&H Gilles Plains campus see no end to what they can do with technology for learning purposes. The plan is to continue to introduce e-learning into as many components of CS&H courses as possible. The e-learning journey has not ended. They operate a continuous improvement model to enable learning in many different ways while providing support for their students, many of whom are mature aged.

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<sup>2</sup> LearnScope provided teachers and trainers with the skills they need to use technology in the delivery of vocational education and training programs <http://www.flexiblelearning.net.au/learnscope>

Podcasting is the current new interest at CS&H Gilles Plains campus<sup>3</sup>. Podcasting is being trialled at CS&H Gilles Plains campus because it is considered that not enough time is devoted to reflection and podcasting will enable students to develop a reflective journal and share their learning with each other. The lecturers are also interested in podcasting because they have noticed that many mature aged students like learning via audio.

### ***A key issue - What might hinder progress in e-learning?***

From a management perspective there are constant fiscal pressures. Efficiency targets are ever present. As staff costs are the single largest teaching expense, the efficiency focus is on achieving productivity gains (greater numbers of students per teacher or \$ input).

E-learning is being used in CS&H programs at Gilles Plains largely for reasons of effectiveness, that is, to achieve quality outcomes, a work ready graduate able to use technology in the workplace and for continuous learning purposes.

Simplistic input-output cost benefit analyses of e-learning can lead managers to not support e-learning. The e-learning resources being developed in CS&H Gilles Plains are available to all in TAFESA. There are gains from their work beyond their immediate program that need to be acknowledged. There are also potential future gains, for example the ability to increase fee-for-service activity among CS&H enterprises with workers able to undertake e-learning options as a result of their earlier entry level training at CS&H Gilles Plains. In short, assessing the costs and benefits of e-learning is not a straight forward task.

### ***Lessons***

CS&H programs at Gilles Plains campus of TAFESA Adelaide North provide examples of flexible teaching and learning through the use of a blended delivery approach - a complimentary mix of traditional face- to-face education and training techniques and new, e-learning methodology. The need for such an approach is compelling. Technology is here to stay and CS&H workers need to be literate in its use.

The e-learning components in the delivery blend also enables lecturers to cater for different learning styles and to accommodate mature age students need to learn when and where it is convenient given their busy lives. Further, the author notes there is evidence that e-learning in combination with classroom based teaching is a cost effective option. It is all about how technology is used<sup>4</sup>.

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<sup>3</sup> Podcasting is a term used to describe a collection of technologies for automatically distributing audio programs over the Internet using a publisher/subscriber model. It differs from earlier online delivery of audio or video because it automatically transfers the digital media files to the user's computer for later use... Podcasting's essence is about creating content (audio or video) for an audience that wants to listen when they want, where they want, and how they want. Wikipedia, retrieved 23 December 2005 from <http://en.wikipedia.org/w/index.php?title=Podcasting&oldid=32434511>

<sup>4</sup> In relation to classroom-based mixed-mode delivery, where there is low interactivity and heavy reliance on content, courses tend to be high in cost compared with traditional classroom instruction and low on effectiveness in terms of student satisfaction. On the other hand, where there are high levels of interactivity using the internet and the use of pre-existing web-based resources, the costs are often lower or at least not greater than traditional classroom instruction. In the latter instances, students rate effectiveness more highly

The critical success factors for mature age student achievement through e-learning include; a respectful approach, the use of an induction program, followed by reinforcing ICT skills during of building course knowledge, in the classroom, under lecturer supervision; and the ready availability of support at other times.

The case study also, and importantly, offers a good practice example of how to embed innovative e-learning practice within a VET context. It involves

- an effective change agent
- an early adopter approach
- promoting early successes to encourage full participation
- adopting a continuous improvement approach of developing, and testing new products with real clients and acting on the feedback.
- promoting the innovations to management to gain their support, and
- integrating the e-learning concept into all aspects of the organisation.

Embedding e-learning in VET is a key strategic initiative of the Framework from 2008 that will build on the research report of Jasinski in 2006 *Innovate and Integrate: Embedding innovative practices* and the follow up practical strategy development project managed by Carole McCulloch (refer <http://www.flexiblelearning.au>).

I thank all of the people I spoke with:

<b>CS&amp;H staff</b>	<b>Mature aged students</b>
Pat Alexander Judith Fawcett Rhonda Rowe David Bury Sue Baldock Des (well program) Kate Berganasco Sonia Rita	Grace and Sue and (enrolled nursing) aged care Shane Cert III youth work

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compared with conventionally taught courses. (Curtain, 2002, Online delivery in the vocational education and training sector: improving cost effectiveness, NCVET, Adelaide, p 6)

## **Certificate III in Aged Care - Barrier Reef Institute of TAFE**

*The application of blended distributive delivery to students in a network of small communities*

**by Peter Kearns**

The *Certificate III in Aged Care* delivered by the Barrier Reef Institute of TAFE to a network of six communities in the region provides a best practice example of a program that harnesses e-learning to cater for the particular needs of mature aged workers, particularly older women returning to the workforce in an occupation with persistent skill shortages.

The *Certificate III in Aged Care* course illustrates the application of blended distributed delivery (BDD) to meet the needs of students in small rural communities. Most students were mature age learners returning to the workforce. Barrier Reef Institute of TAFE is the joint lead agency (with Brisbane North Institute of TAFE) for BDD in the Queensland TAFE system so that the institute has a particular interest in how this approach is adopted in meeting the learning and skill needs of the region.

The program is being delivered in 2007 to 83 students located in Ingham (15), Bowen (22), Charters Towers (3), Cannonvale (5), and Townsville (19). The program has been conducted for five years and has evolved during this time as experience has been gained in the application of BDD to a network of rural and regional communities.

A key feature of the approach is the team method adopted so that the program is provided through a team of aged care staff, literacy support teachers, and tutors located in the communities where the students are drawn from. A teacher from the Barrier Reef Institute of TAFE with a strong educational background coordinates the program. The teachers and tutors working with students in the six communities are registered nurses so that the program bridges communities, services and health and brings cross-sectoral perspectives.

Videoconferencing is a significant feature of the approach adopted which enables interaction between teachers, tutors, and students involved in the program to drive the quality of learning outcomes. In this way, the development of the program has suggested action learning with the whole team, including students, contributing to the on-going improvement of the program. Technology is seen as a tool for learning in interactive strategies that enhance the learning outcomes.

In these ways, BDD is being used to meet the particular needs of mature aged students, especially women returning to the workforce in an occupation with skill shortages and a growing demand for skilled workers.

In undertaking this study, I visited the Ingham campus of the institute for discussions with the program coordinators and for video-conference discussions with students and teachers located in Bowen, Townsville, Charters Towers and Burdekin.

I am most grateful for the valuable assistance provided by teachers and students from the Barrier Reef Institute of TAFE. I would like to thank, in particular, Kerry Russo and Terrie Paterson from the institute, and Wayne Knack, formerly Director of the Learning Futures Department in the Institute and now Director, Innovation in the

Brisbane North Institute of TAFE for his insights into the broader innovation and development process that lead to this exciting innovation.

### ***The need***

With an ageing population and increasing longevity, aged care has become a key area for innovation in meeting the learning and skill needs of the community.

In a regional context, such as the Townsville region with a large number of small and medium communities, providing specialist teachers in fields such as aged care is a particular challenge. Before this program commenced, it was not feasible to provide qualified teachers in aged care to all the communities in the region where this demand existed. The BDD approach enables the expertise among TAFE teachers in the region to be optimised and made available to students in a network of communities through the BDD approach adopted. The team network approach moreover has the advantage of serving communities with small numbers of students which could not be served as thin markets under traditional classroom campus methods.

### ***The students***

A significant proportion of the 83 students in the program are mature aged women returning to the workforce. Many are farmer's wives who have been out of the workforce for a considerable period, in some case without vocational or school leaving qualifications.

For these reasons, a common feature reported by teachers and students alike was an initial lack of confidence in their capacity to undertake the course, and in some cases accompanied by low levels of self esteem. Consequently, a particular feature of the program was a strong emphasis on orientation and induction at the start of the program with guidance and tutorial support provided. Students reported that this enabled a return to learning to be navigated through a series of easy steps.

### ***The role of technology***

Technology is seen as a tool in the BDD approach. A broad spectrum of technologies is used with videoconferencing especially important in the program.

While the program has evolved over the past five years, the blend of learning strategies is typically along the following lines.

Videoconferencing	22%	Tutorials	10%
llearn and Videostreaming	20%	Chatrooms and webboards	8%
Industry placement	22%	Email and phone support	10%
Home study	10%		

While in Ingham, I was able to participate in videoconferences with students and teachers in Charters Towers, Bowen, Burdekin and Townsville and to gain insights into the views of students and teachers on the e-learning approach adopted. There was a strong endorsement from students and teachers alike of the value of the BDD approach.



**Videoconference connects students, teachers and tutors in the six rural communities for learning.**

### ***The leadership role***

A key feature of Certificate III is the leadership role performed by the coordinator of this program and by the Education Futures department of the institute. The coordinator, Kerry Russo, is the Regional Education Leader in Blended Distributed Delivery and Community Services. In this role, she serves as a champion for e-learning and its application in the field of community services.

Kerry has a background in community work and is currently completing a Master of Education, majoring in learning technologies. We found this interest in acquiring post-graduate qualifications common among the leaders in e-learning that we consulted in the consultation phase of this study, and this has clearly been a factor in raising the bar in innovative applications of e-learning.

Kerry brings a strong interest in the role of new learning technologies in facilitating access and educational opportunities in rural and remote areas, combined with an interest in the pedagogical parameters of BDD. These interests have stimulated innovation in the applications of e-learning in this program over the past five years.

## ***The development process: organising for innovation***

A further aspect of this Aged Care program of particular interest is the development process that led to the program, including the way in which the Barrier Reef Institute organised to encourage and facilitate innovation, and the role of the institute's Learning Futures Department in this process.

This process was initiated by concern at how to address the issues of providing access in smaller rural communities to the range of VET programs available in larger centres. Market research conducted by the Institute confirmed that students in these communities wanted more course options.

It was evident that new learning design approaches were needed involving the use of technology. This recognition led to a NetLearn<sup>5</sup> initiative as a change program in which a guiding coalition developed a framework to bring about the kind of outcomes now evident in the *Certificate III in Aged Care*.

A 'Learning Futures Department' was established to guide this initiative, with the initial Director, Wayne Knack, active in the development process. Involving teachers in the development process was seen as important and was described by Wayne in the following terms:

*In the same way as the program recognises learners bring experience with them, NetLearn did the same for its teachers – they bring teaching skill, knowledge of their teaching area, industry knowledge, local knowledge, and an understanding of the profile of their learners.*

This perspective was carried over into the *Certificate III in Aged Care* and the other institute programs that arose from NetLearn. This development process is important in illustrating how the role of e-learning in catering for mature-aged workers benefits from a broader philosophical and conceptual framework, such as NetLearn provided, which connects the e-learning role to broader assumptions about learning, innovation, creativity and organisational development.

## ***The learning strategy***

While technology is regarded as an important tool, development of the course over five years has been driven by strong learner-centred philosophy. This is reflected in a number of aspects of the course, including the roles of teachers and students, the work of the literacy support unit, and the constructivist educational philosophy that underpins the program.

I found in discussion with students and teachers, a number of views expressed that supported the learner-centred philosophy of the program. These views included:

- The notion that the BDD team approach enabled students and teachers to learn together so that there was a sense of new insights and knowledge being formed from this process.
- The ways in which the programs built on students existing skills and knowledge.
- The value of the learner support provided through the integrated literacy support group.

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<sup>5</sup> The NetLearn Community : Blended, Distributed, Collaborative – A Success Story, Flexible Learning Repository, TAFE Queensland

This approach seemed particularly relevant to the needs of mature age students with substantial life skills and experience, but with limited vocational qualifications and experience with work and formal learning.

This general approach is also encapsulated in the *Strategic Plan 2005-2008* of the Barrier Reef Institute of TAFE where the following aspiration is included:

*Our vocational education is customised and blended, centred on learners needs, and reflects a constructivist educational philosophy. Our products and services are continually regenerated with new replacing the obsolete.*

This approach fits easily with a philosophy of lifelong learning, and I found in discussion with students and teachers a common interest in continuing to learn beyond the confines of the course. The interactive 'learning together' approach of the course also meant that the network across six communities served as a learning community (community of practice) for ongoing learning and improvement.

A further key attribute of the team approach adopted, and the strategic philosophy of the Institute, is that it went along with an action learning approach to the development and refinement of the program. The program has evolved significantly since it was inaugurated five years ago, with regular assessments from students and teachers on key features. The role of action learning could be developed further building in insights gained by students in practical industry placements, and taken further in building new knowledge through the learning strategies of the program.

### ***Integrated learning support***

A key aspect of the learning strategy adopted for the *Certificate III in Aged Care* has been the learning support provided for participants through the role of the Learning Support Team. This support is particularly important for mature-aged students returning to the workforce who have been away from education and training for some time and who may need both motivation and confidence-building and practical support in areas such as literacy, study skills and oral communication.

The head of the team in the institute, Terrie Paterson, described this role in the following terms:

*The Learning Support Team identify the reading, writing, numeracy and oral communication demands of the training, the way it is delivered and assessed, and those requirements to function as a student in a VET environment - make these explicit and use them as a catalyst to develop rapport with the whole class in a bid to form relationships that allow us to nurture lifelong learning skills and to supply the literacy, learning, and moral support each individual needs to fully harvest the knowledge and skills development encountered, and to enjoy their TAFE experience along the way.*

This broad concept of learning support is particularly relevant to the needs of mature-aged students, especially those who have been away from education, training and the workforce for some time. The team approach is fundamental with the vocational teachers and learning support team collaborating in identifying the literacy and other requirements of the training and assessment, and in devising strategies to address these.

This role has evolved in line with the experience from the BDD programs. An initial skills audit is undertaken by students, and while initially the learning support team was present at every video-conference, a more flexible approach is now used with the regional campuses in the network adopting an hour tutorial prior to each videoconference to prepare students for the particular learning requirements of the following videoconference. The dropping of attendance at these tutorials by the

second semester suggests that increased student confidence and autonomy has diminished this need.

The important role of the Learning Support Team in this program also points to the significance of the orientation phase of such programs for mature-aged learners. This was a clear message from the national consultations we undertook in this study, with a careful orientation process widely seen as important in building confidence and self esteem in students and a belief that the student can succeed in the course. The role of the Learning Support Team is significant in addressing this psychological requirement as well as the practical support provided for literacy, communication and other generic skills.

The experience of the institute with this program suggests that learning support in ways that integrate vocational learning and learning support requirements is a key aspect of the success of this program with longer term benefits in fostering the motivation and skills of students for lifelong learning.



**Former students serve as tutors and mentors for the students in the program, which includes work experience in aged care centres.**

## ***Lessons***

The *Certificate III in Aged Care* provides a good practice example of e-learning being mobilised to meet the particular needs of mature age students, especially women, returning to the workforce.

The value lies in the blend, in the ways in which technology has been harnessed to drive a learner-centred approach which is characterised by a team strategy. This is both highly relevant to meeting the needs of learners in small rural and regional communities, and to building an educational philosophy that is particularly relevant to meeting the needs of mature age students returning to the workforce.

While learning has been customised and individualised to a considerable extent, much will be gained by further innovation within the BDD framework towards individualised provision in a personalised learning approach.

Through the focus on building on learners existing skills and knowledge, the programs also has value in responding to the need, in an ageing population and workforce, to finding more holistic approaches to maintaining the skills and employability of an ageing workforce. This is also a key area for further research and development building on the insights gained from this program. The team approach,

facilitated by video conferencing across a network of six communities, also means that the development of the network as a learning community has very considerable benefits for building a learning and innovation culture in the region, and producing a workforce of motivated and capable lifelong learners. The wider benefits from the BDD model are important and merit further development in rural and regional areas in particular.

The role of videoconferencing is particularly important in this Aged Care program with this technology being used to link the network of students, teachers and tutors in small rural communities. In this way, access to this training in small rural communities is facilitated. It is seen that this model could have a wider relevance in addressing the issue of thin markets in smaller rural communities.

Linked to the role of video-conferencing is the key role of the Education Futures Department in the Barrier Reef Institute. This role provides an example of a TAFE institute organising to encourage innovation in learning strategies and recognising the major role of modern learning technologies in adapting VET provision to the needs of the future, including those of small rural communities. The role of such an effective 'ginger group' in a TAFE institute as a catalyst for innovation and change is a significant lesson of this case study.

The conceptual elements that underpin the Barrier Reef Institute of TAFE approach to aged care have a wider relevance and application than this particular sector of the workforce. The Barrier Reef model illustrates good practice in the interactive application of technology for learning within a learner-centred framework supported by a constructivist educational philosophy, and by collaboration and team work. This approach, reflected in the application of action learning and the ongoing refinement of the model, builds identity, social and human capital and enables provision to be customised to a diverse range of needs to a considerable extent. This model appears particularly relevant to the needs of mature age learners. How this model could be applied more widely in vocational education and training is well worthy of further study.

# The Queensland Ambulance Service

## *E-learning as a tool to providing ongoing education and training to a dispersed workforce*

by Peter Kearns

The Queensland Ambulance Service (QAS) faces the challenge of providing education and training to staff and volunteers in 277 Ambulance response locations across Queensland; including over 150 rural, remote and isolated locations including those serving predominantly Aboriginal and Torres Strait Islander communities.

This challenge is sharpened by rapid advances in medical science and clinical practices requiring a commitment to ongoing learning and performance enhancement so that in-service education and training is seen as a vital tool in keeping the QAS at the cutting edge of developments in clinical practice.

In the past five years e-learning has had a growing role in the QAS's response to this challenge with the QAS developing a strategic and systemic approach to meeting its diverse education and training needs.

*Developments in medical science and clinical practice have led to considerable change in the QAS over the past decade, it is further recognised that change will be an ongoing process in to the future so that there is a commitment to developing the QAS as a learning organisation with QAS Education serving as a cultural change agent (QAS 2006, p.5).*

This approach means that QAS staff are encouraged to invest in their continual development as lifelong learners with QAS Education serving to support staff accessing your pathway to lifelong learning in the QAS (QAS 2006, p.5).

The ways in which e-learning serves as a tool to advance these objectives in an organisation with a substantial proportion of mature age staff is the focus of this study.

The QAS recognises that this is a journey as yet incomplete, so that further development of the e-learning role in the next few years may be expected. However, the vision of excellence and innovation which guides the education and training role provides a framework for ongoing development and innovation.

In the preparation of this study, visits were made to the School of Ambulance and Paramedic Studies of the Queensland Combined Emergency Services Academy (QCESA) in Brisbane, with follow up visits to Ambulance Stations in the Townsville and Cairns regions for discussions. These visits involved the Ingham and Black River Stations (Townsville region) and Smithfield and Gordonvale Stations (Cairns region). Smithfield and Black River serve as the base for Staff Development Units for the respective regions. I am grateful for the ready cooperation received in each of these visits.

## ***The QAS and its training effort***

QAS in 2006 comprised over 3,000 staff and volunteers located at 277 response locations across Queensland. An impressive 2,666 staff accessed education and training in 2006, 80% of operational staff (QAS 2007, p.8).

This training effort involved the groups in the table overleaf.

<b>Operation Employee Group</b>	<b>Number of employees</b>	<b>Number who accessed training in 2006</b>
Senior Executive Managers	10	10
Ambulance Managers	74	21
Station Officers	275	254
Communications Staff	312	248
Paramedics	1,497	1,308
Honorary Paramedics	294	207
Student Paramedics	472	472
Patient Transport Officers	181	146
<b>Total</b>	<b>3,115</b>	<b>2,666</b>

In the seven regions of QAS a further 64 regional staff development officers provide educational support and regionally specific learning opportunities.

### ***The QAS Education role***

The major education and training role across the QAS is given focus through QAS Education which incorporates:

- the central role of the School of Ambulance and Paramedic Studies located in Brisbane
- the Education Online resource developed for the QAS to support education and training across the state
- the roles of the Regional State Development Units located in the seven regions of the QAS.

The role of e-learning in meeting the education and training needs of the QAS should be viewed in this context as a key component of an evolving system that blends a number of parts to support education and training.

### ***School of Ambulance and Paramedic Studies***

The School of Ambulance and Paramedic Studies provided leadership and coordinates the development of QAS Education. This role incorporates the provision of courses and materials, including online materials for Education Online, evaluation of desirable future directions, and overall promotion of the strategic development of education and training in the QAS.

The role extends across student paramedics who are undertaking the *Diploma in Paramedic Science* while employed in the QAS, those undertaking Certificate courses, and the continuing education role for all QAS staff – a role seen as being increasingly significant:

*In the next few years, the biggest challenge for QAS Education will be developing and delivering in-service continuing education for all QAS staff.*

(QAS 2006, p.5)

The key role of in-service continuing education is given status through the mandatory requirements of the In-Service Continuing Education Program (ISCEP). It is

mandated that all operational staff must have completed a specified set of programs, such as *Child Protection Package, Mental Health Act 2000 Orientation, Pandemic Influenza Training, Safe Lift Manual Handling, Volatile Substance Misuse Program* (QAS 2006, p.17).

The work of the in-service team in the school extends across the three levels of paramedic work and development: basic, advanced care and intensive care. Progressing through these levels provides incentives for Paramedics to extend their professional skill and competence.

## ***Education Online***

The QAS has developed an educational portal, Education Online, which provides comprehensive information and guidance together educational material for the range of QAS courses.

This intranet is accessed by QAS staff through the Department of Emergency Services' portal. It provides an overview of the range of educational units at the School of Ambulance and Paramedics.

Education Online provides:

- a broad range of educational material
- self-directed learning that is supported by QAS Education both centrally and regionally
- enhanced access to education and training through station computers
- using the intranet for access at home
- support for QAS staff in their continuing education and professional development
- a range of learning resources through links to other organisations and institutions via the internet. (QAS 2006, pp18-19).

Management of the QAS education and training system is facilitated through the On-line Campus (OLC) which functions as a learning management system for state-wide administration of education and training. The OLC enables all staff to access their learning transcript, which lists all the courses and programs undertaken by staff. Some self-paced courses are also available on the system.

Staff of QAS have a personal development plan which is accessed online so that staff are challenged to reflect on their ongoing personal development in a strategic way. The personal development plan is supported by a Training Needs Analysis. In these ways, Education Online is facilitating the objective of QAS as a learning organisation committed to continuous improvement.

## ***The Regional Staff Development role***

Adapting QAS education provision to the distinctive need of stations across Queensland in a range of contexts involves the role of Regional Staff Development units in each of the seven regions of the state. These units provide educational support to the staff in the regions, as well as promoting regionally specific learning opportunities.

These units have the opportunity to innovate in progressing these objectives. For example, the Central Queensland Regional Staff Development Unit has designed and piloted a course for their educators called 'Career Management'. This will enable

regional educators to develop further insights into self directed learning in building a learning culture and capability in the regions of QAS.

It is likely that the further development of e-learning in the QAS will involve innovations taken by Regional Staff Development units.

### ***Staff in rural and remote areas***

A particular issue identified in the development of e-learning for the QAS has been the question of how to meet the particular needs of staff in various contexts, especially mature age staff located in small ambulance stations in rural, remote and isolated areas of the state. It was recognised that access to staff development opportunities by such staff was a particular issue that needed to be addressed.

This issue was taken up in a research study funded under the Australian Flexible Learning Framework (Framework) in 2004 (Roberts 2004), directed at establishing the features of a blended learning model that would meet the needs of rural and remote staff in the 'over 45' age group.

This study concluded that learner engagement was the critical issue to be addressed. The study showed that older staff in these contexts were eager to learn, but in their own preferred ways. These preferences involved:

- provision at the low end of the technological continuum, such as face-to-face and personal contact
- technologies such as CD-ROMS, email notes, email PowerPoints, and video-conferencing should be used in ways that fitted the timeframes and pace of learning of these staff
- assessment strategies that recognised prior learning more fully. (Roberts 2004, p.3)

Aspects of this study included trials with video-conferencing which identified conditions for effective use of this technology. The recommendations of this study included a range of principles and specific actions geared to the needs and preferences of mature age staff in rural and remote areas. The findings of this study have had a general influence on the approach of QAS to applying e-learning in their education strategies.



The QAS learner-centred provision model emerging from this study was seen to be mirroring the organisational model for patient care that had been developed by the QAS. The learner-centred provision model would contribute much to the work of the service in patient care as it is embedded in the culture and arrangements of the QAS.

The QAS is now responding to the needs of staff in rural and remote locations through its Rural and Remote Practitioner Program. Staff in such locations may undertake a *Graduate Certificate in Rural and Remote Paramedic Practice* at James Cook University which includes mixed modality training including face-to-face learning, in-hospital clinical placements, mentor arrangements, chart audits and use of technology through the James Cook University portal.

### **QAS as a learning organisation**

*QAS is committed to developing as a learning organisation able to adapt to changing conditions and challenges confronting the QAS (QAS 2007 p5). The key role of QAS Education as a catalyst for initiating and managing change is discussed above. The*

changing nature of clinical practice means that building a culture of on-going learning and continuous improvement is a core requirement for the QAS.

Development as a learning organisation is facilitated by the Flexible Learning Organisation Initiative Model which serves as an instrument to focus the work of QAS on high quality service for the patient.

Learning technologies have an important role in this approach with videoconferencing, virtual classroom, podcasting, and the Simulator Lab and Team Board in the classroom specified as tools along with face-to-face methods. In these ways, e-learning serves as a tool in the on-going development of QAS as a flexible and responsive learning organisation.

The e-learning role goes along with a commitment to innovation in the work of the QAS (QAS 2006, p4). Various examples may be given of innovations implemented in recent years. These include:

- the Rural and Remote Paramedic Program included in 2006
- an Indigenous learners program designed to strengthen participation by Indigenous Australians in the QAS
- implementation state-wide of the electronic Ambulance Report Form which collects patient care records on ruggedised laptop computers
- a program to assist staff with lower levels of literacy and numeracy
- learning strategies for older staff.

A number of these innovations have been piloted in particular regions of the QAS, so that development of QAS as an innovative learning organisation involves interactions between regional and central components of the QAS in the on-going search for the best approach to ensuring a high quality Ambulance service for Queensland.

### ***The approach to learning technologies***

The QAS has adopted a careful approach to harnessing learning technologies to suit the particular needs of the QAS. The key roles of the QAS Education portal and On-line Campus is discussed above. Other technologies have been introduced when research and consultations have demonstrated a need for new approaches.

This approach has gone along with action research into the needs and preferences of learners, particularly the needs and preferences of rural and remote mature-age learners. This research has shown that learning at the low end of the continuum was preferred, along with real-time learning opportunities and immediate feedback (QAS 2007, p12)

These findings have led to further research on best practice for in-service delivery. This has resulted in an on-going transformation of in-service training through gradually introducing and expanding the range of technologies (QAS 2007, p12)

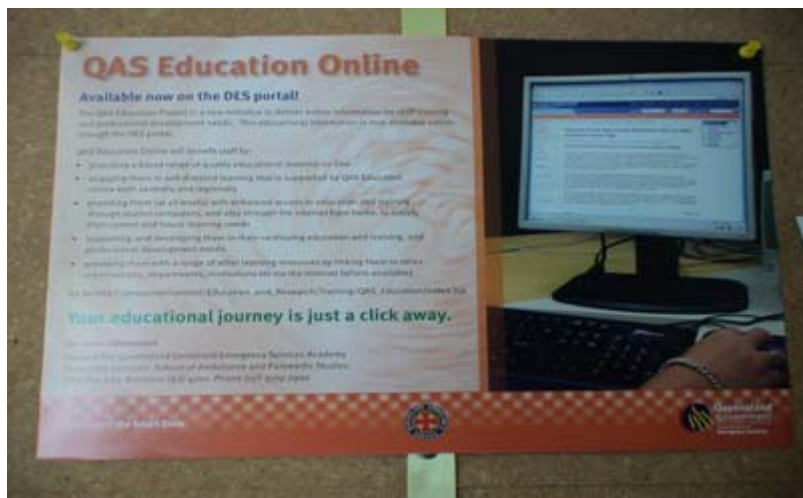
Some examples of learning technologies are:

- a virtual classroom conferencing facility (Elluminate Live!) has been used for meetings, interviews, classroom and tutorial functions
- a simulator lab has been developed for the Lutwyche campus to simulate the patient/paramedic relationship to enable immediate feedback and critical analysis
- a simulated communications room environment has been established at the Lutwyche campus to enable student communications officers access to

telephone, computer-aided dispatch and radio technology in a simulated environment

- videoconferencing is used to a fairly limited extent in somewhat similar ways to Elluminate Live!
- Team Board is used in the classroom enabling visual material to be used effectively.

The introduction and roles of these technologies illustrates the careful evolutionary approach that has been adopted to the role of e-learning. The preferences of the many mature aged staff in the QAS have been respected in an initial orientation towards the low end of the technology continuum. This orientation may be expected to change as technology in all forms is more deeply embodied in the culture and habits of the QAS. The exciting opportunities that new learning technologies offer will then contribute further to the development of QAS as a dynamic learning organisation committed to on-going improvement.



Education Online provides flexible and convenient access to learning 'just a click away'.



A range of learning technologies are used, with ongoing refinement.

### ***The development process***

The development process in harnessing e-learning for the purposes of the QAS is of interest in illustrating how innovation occurs in a state-wide service organisation.

This process was initiated in 2004 when the present Learning Support Officer E-learning, Marie Weatherford, obtained a place in the Framework's Flexible Learning Leaders Project <sup>6</sup> and the QAS also achieved three grants under the Framework's LearnScope, as well as a Reframing the Future grant.

These initiatives gave a considerable stimulus to the process of considering the role of e-learning in QAS, leading to implementation action. In order to drive this process, an e-learning Leaders Group was established with membership across the state. A Multi-Media Group was also established to consider technology aspects of development.

This process illustrates the important role of champions and the catalytic effect that projects under LearnScope and Reframing the Future can have when there is careful follow-up in the organisation. The concurrent strategic strengthening of the education and training role in QAS for the reasons mentioned in this study, and the commitment to developing the QAS as a learning organisation came together to drive the development discussed in this study.

### **General comment and lessons**

The QAS illustrates an evolving system in the use of e-learning as an important component in a strategic approach to the education and training of *the "Virtual work place CD-ROMs enable students to learn in real life situations"*

This systemic approach supports strategies to harness education and training as catalysts for driving and managing change in the QAS, subject to important developments in its role, changes in clinical practice and community expectations.

The e-learning role for mature age staff should be seen in the context of related education and training strategies adopted by QAS including the commitment to building QAS as a learning organisation. The Flexible Learning Organisation Initiative provides a framework and concepts for on-going learning and continuous improvement in the work of the QAS so that e-learning as a tool of this objective fits into an appropriate framework that encourages on-going interaction between technology as a tool, the concept of a learning organisation committed to continuous improvement, and strategies that give effect to these objectives. The preferences of mature age staff are given careful attention in the pace and directions of change. These interactions of tools, concepts, and strategies should ensure on-going progress as QAS continues to adapt to changes in its environment and role.

The QAS case is particularly interesting in the way e-learning has been harnessed as a tool in a broader educational strategy directed at cultural change and adapting the QAS to the demands of its 21st Century context. The many mature age staff in the QAS have been given opportunities to upgrade, update and broaden their knowledge and skills in ways that have not been seen as threatening.

In my visit to the Ingham Ambulance Station, I was impressed by the team spirit that imbued the work of the station, so that the experience of older staff was respected as an important contribution to the work of the station, along with the theoretical insights and knowledge that the younger staff brought. This culture of collaboration across age groups stood out as an important pillar in achieving an effective use of e-learning for mature age workers.

Achieving systemic change in a state-wide organisation is a complex process that requires supporting frameworks, effective strategies and careful management of

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<sup>6</sup> <http://www.flexiblelearning.net.au/leaders>

change. The experience of the QAS illustrates these attributes and the role that e-learning can play as an instrument for innovation and widening opportunities for mature age staff.

*“Virtual work place CD-ROMs enable students to learn in real life situations”*

The key lesson emerging from this case study is that e-learning for mature age workers (and other workers) is most effective when there is a supporting strategic framework.

- Such a framework connects e-learning to the overall strategic objectives and philosophy of the organisation.
- In the QAS, this framework is provided by the commitment of QAS to develop as a learning organisation committed to continuous improvement.
- This enables the role of e-learning to evolve and deepen in line with the strategic development of QAS as an innovative learning organisation

The case study suggests that connecting the role of e-learning to the development of an overall strategic framework for the organisation is a key requirement for e-learning sustainability

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## **Adult and community education (ACE) providers**

*The role of ACE providers in using e-learning in outreach programs for mature age workers returning to learning and vocational pathways*

by **Kaye Bowman**

In this case study we detail aspects of the activities of four ACE providers that were included in our national consultations and demonstrated good practices in drawing the mature aged back into education and training through e-learning. Firstly however, we overview the common elements of the approach adopted by the four ACE providers.

### ***Common elements of the four ACE providers approach***

ACE providers increase participation of the mature aged in e-learning through their strong community connections and use of adult learning principles and support networks.

All four ACE providers illustrated the important role they play in helping adults to make a first step back into the world of organised learning. After time away from study and/or unhappy formal learning experiences in the past, many adults like the customised approach taken by these providers to learning provision; an informal, social, non-intimidating, at ease, highly supportive and respectful approach.

To draw in the mature aged, ACE providers go out into the community. Those interviewed spoke of letterbox drops, newsletters, word of mouth, one-on-one encouragement discussions and engagement through social activities, for example a weekly open day lunch over which learning needs are informally discussed.

The ACE providers interviewed spoke of their 'just in time', 'just enough', 'just what they want' approach to initial engagement. They invariably saw their role as to create spaces where the mature aged will feel at home and to respond immediately to the need that they articulate when they come into their centres (eg "I want to learn the email to keep in touch with family") and then to encourage them to return to do more e-learning.

Successful engagement also involved taking time to induct the learner about e-learning and providing considerable support. They use a blended delivery approach. For example, supervisors and mentors are made available for face-to-face tuition at set times, many of whom are volunteers that have been trained in e-learning facilitation by the ACE provider. The mature aged learners come together regularly to discuss issues of common interest and engage in peer learning.

The commitment of ACE providers to encouraging lifelong learning among the mature aged was also illustrated. The case study ACE providers knew how their learning programs map into accredited VET courses and were seeking to create pathways into these courses for those mature aged who wish to achieve credentials associated with their learning. They had or were developing partnerships with VET organisations and TAFEs in particular to extend formal learning opportunities through e-learning to their rural base adult clientele with the ACE provider providing back up face-to-face support locally to achieve a blended delivery approach.

## **Showcase activities**

Below we describe briefly the work of *Yackadandah and Beechworth community education centres* in north eastern Victoria and their use of digital storytelling as an effective initial e-learning engagement strategy for mature aged farming families and men.

The *Tasmanian Access Centres* provide a good practice example of effective support provision for the unemployed over 45 years and among single parents undertaking e-learning, including in accredited VET programs run by their TAFE partner.

Finally the *Milang Old School House Community Centre, SA* is used to illustrate what a community education provider can achieve in e-learning for the mature aged in two to three years, starting from a position of 'no e-learning capability'.

### **Yackadandah and Beechworth community education centres, VIC**

#### *Drawing in the mature aged through digital storytelling*

These two ACE providers are located in the same region of Victoria and have used e-learning as a key strategy for addressing the learning needs of mature aged adults in their local rural areas. They both started using e-learning about two years ago.

The centres were two of five local ACE providers involved in a Harnessing Rural Skills<sup>7</sup> project funded by the Framework's Community Engagement Project. Through this project they built an understanding of several e-learning methodologies.

Their use of digital storytelling<sup>8</sup> is of particular note as an effective initial engagement strategy, for men and their farming families in particular.

They held a workshop with Barry Golding whose extensive research on the learning styles of men led them to decide that any moves to e-learning with this group would need to be blended with a strong component of practical hands on activity. This formed the basis of their choice of product, as did the need to keep it simple and incorporate fairly modest technologies that did not require huge amounts of band width which they did not have.

Digital storytelling was used to effectively engage some men to develop land care learning resources that were made available on an interactive landcare site. The men were enthused and they have gone on to do more digital storytelling and/or to encourage others to give it ago.

With the drought affecting farmer morale digital story telling has been used as a means of taking minds off their worries. Over two days, several groups of farmers and their families have been gathered into local community halls and helped to develop life stories using digital story telling. Not only have the farming families been 'gobsmacked' by what can be done with technology, they have also learnt more about each other and deepened their friendships and connections with the local community. Many of the participants and the wives in particular have also taken the next step of asking the centres for more training in technologies that will improve their opportunities to gain off farm paid work.

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<sup>7</sup> [Harnessing Rural Skills case study](#)

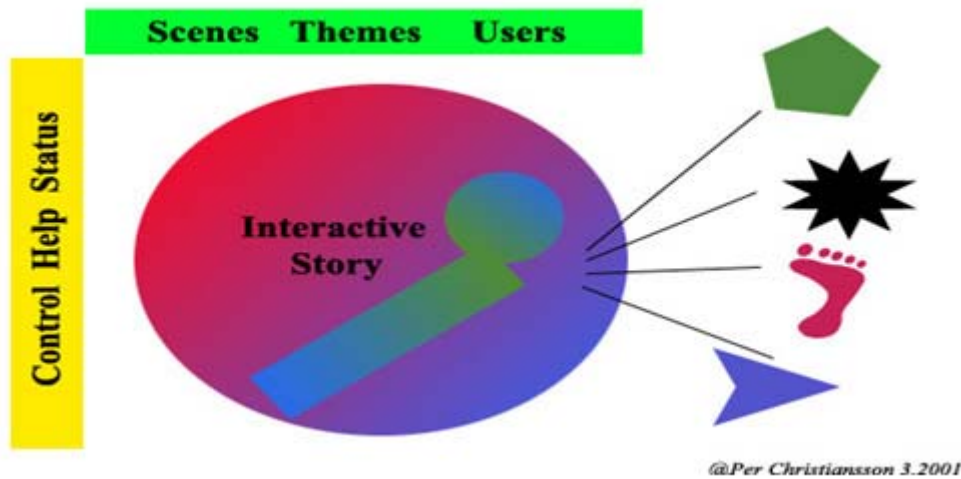
<sup>8</sup> Digital stories combine a narrated text (or voice over) with images (still or video), often music or sound effects, and sometimes captions to create a short mini-movie.

Both the Yackandandah and Beechworth neighbourhood houses have many other adult education courses that are delivered using technology. They receive ongoing professional development support from their regional ACE support centre. The ACE sector in Victoria also has an AccessACE research project underway that is investigating the role of ICT enabled learning delivery. Yackandandah is one of the recipients of funds to target young mothers and mature age women in their community (go to <http://accessacetrials.wikispaces.com>).



Yackandandah Community Education Network

*Set your course for the future !!*



Digital storytelling diagram

## Tasmania Access Centres, TAS

*Providing effective learner support and acting as outreach tentacles of VET*

The *Tasmanian Communities Online Network* provides a good example of an ACE provider that is promoting and supporting lifelong learning for adults in rural areas through e-learning. There are 66 Online Access Centres in the network supported by a centre support unit an education department unit, and three regional facilitators that provide field support and a technical help desk. The network has established strong links with TAFE Tasmania.

The network has undertaken action research on how to provide effective e-learning support strategies for the unemployed over 45 years and among single parents seeking to upskill to return to work.

In 2005 the network participated in the Community Engagement Project of the Framework. They used the project to action research local study circles to assist the mature aged to complete a *Certificate II in Business*. A sample e-learning design model based on the successful Tasmanian pilot is reproduced here in Figure 2 and the story behind it can be heard on the Framework's Designing e-learning website at [http://designing.flexiblelearning.net.au/learning\\_design/sequences/TAS/index.htm](http://designing.flexiblelearning.net.au/learning_design/sequences/TAS/index.htm).

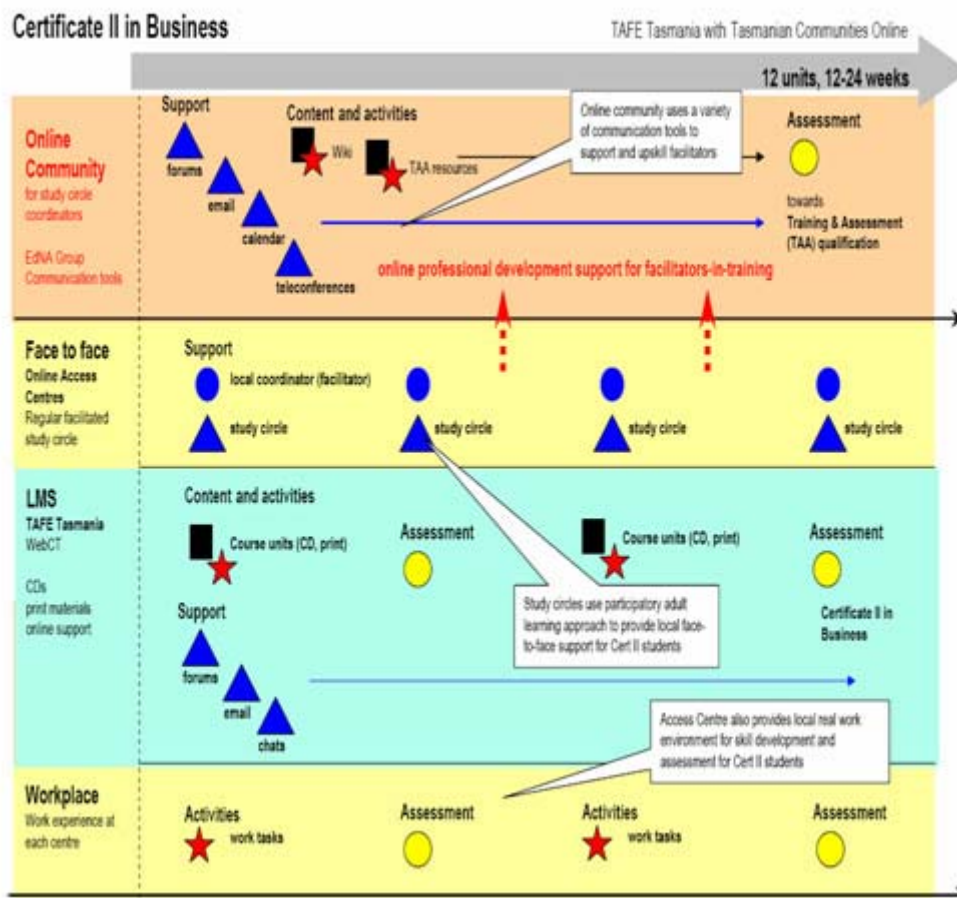
The network is currently extending its adult e-learning local support or study circles model to all of its Access Centres and is building its capacity to support accredited VET in the process. Coordinators of the centres in the network are among the participants to enable them to provide support to e-learners within their local communities. The coordinators are enrolling in *Certificate IV in Training and Assessment* using e-learning in the process. The plan is to help build capacity in each of the 66 Access Centres so that other accredited VET courses can be assessed locally through e-learning and supported by local face-to-face peer learning.

*Our role is to build the basic skills in computer technology and build confidence and then to point them (the mature aged) to TAFE or university.*

The network has built an arrangement with TAFE Tasmania whereby locals can enrol in VET online, be inducted in e-learning locally, receive instruction from an online TAFE teacher and be supported locally through study circles. Web 2.0 technologies are being explored by the network to build online learning communities and add value to face-to-face peer study.

The network is considering offering their mature aged clients assistance to develop their own learning pathway plan, as is policy now in relation to young people about to leave school. They have over 3,000 coming to the centre on an annual basis.

The network plans to develop its own ongoing professional development programs in e-learning facilitation and support for its staff and volunteers to embed the new practices.



**A blended delivery model using face-to-face study circles through Tasmania Access Centres to provide local support to rural learners enrolled in TAFE Tasmania's online course *Certificate II in Business*.**

## The Milang Old School House Community Centre, SA

### *Building e-learning capability as client needs arise*

At the beginning of 2005, the Milang Old School House Community Centre had no e-learning facilitation capability and was not involved in nationally accredited VET. Today, three years later, they have their own 'Byte-on e-learning' site and are pro-actively developing a partnership with TAFESA to offer accredited child care, aged care, and teaching and assessment courses.

The centre targets the mature aged and other adults in the Alexandrina Council region, south east of Adelaide, who are disadvantaged through isolation (little or no public transport), low incomes and lack of childcare facilities.

*"We ask 'what can we do' for this person or group of people to give them what they want and build the program around them, extending ourselves as need be as we go".*

The client centred 'can do' attitude of the Milang Old School House Community Centre has a lot to do with its development as a provider of e-learning and their social engagement strategy is what brings in the mature aged, to a friendly atmosphere where they initially can discuss their learning needs over a meal.

The centre became involved in e-learning through the Framework's Community Engagement Project. This project aimed to:

- integrate e-learning in existing community based and regional development initiatives
- foster strong and creative local community partnerships supporting e-learning
- build local capability to facilitate e-learning
- have the local capability applied to increase participation of targeted disadvantaged groups in education, and
- achieve sustainable e-learning in the funded communities beyond the initial pilots.

The centre was a 2005 participant in the Community Engagement Project seeking to meet the local need for accessible adult learning opportunities.

The centre started from scratch, needing to and building e-learning infrastructure (platforms and computer banks) and people with e-learning facilitation skills at the same time as engaging their targeted adult learner groups. Their partners for the pilot included the local council and neighbouring progress associations. The nearest TAFE was involved to a limited extent.

In seven months, to December 2005, the centre:

- built a 'byte-on.org.au' e-learning platform
- trained a staff member in e-learning facilitation
- engaged 47 adult learners in e-learning, some using purchased Framework Toolboxes
- matched several volunteer tutors to learners, by areas of interest, who were trained to provide mentoring support
- raised community awareness that e-learning is an option, and
- gained credibility for the e-learning option.

It was e-learning development at a galloping pace for the centre that since has not abated.

Since the end of 2005, more notable outcomes achieved by the centre in relation to learning include:

- the local IT person became a LearnScope leader in 2006, contributing to their professional development and local e-learning capability
- in May 2007, the centre received the Community ICT Award presented at the Connecting Up 2007 conference for best innovative use of open source software in non profit settings
- over 100 people now use 'byte-on' on a regular basis
- The centre has identified local adults with an interest in working in child care, aged care and youth work and in running their own business and is negotiating a partnership with TAFESA whereby the centre can be the location for VET courses
- The centre is developing a tool for identifying existing skills (recognition of prior learning),
- The centre is interested in developing more formal learner circles to aid peer learning, and
- helping adults produce employment portfolios using digital stories is another current interest of the centre.

*"The ripples in the pond are spreading"*

*"We are building on, building on our capabilities"*



**A vibrant community learning together**

## ***Lessons and conclusion***

Research confirms that ACE providers enable many adults to make the transition back into learning and attain basic skills for work: literacy, numeracy, communication, computing and other 'employability' skills; and to get a job – through their employment advocacy and career advice services and their own VET provision or by referring them to other VET providers (see Bowman, 2006).

This case study shows that ACE providers are developing their e-learning capabilities as a key strategy for addressing the learning needs of mature aged adults in rural areas and developing community connectivity.

All community based organisations either are recognised VET providers or have links to these providers and are familiar with national accredited competencies and qualifications and how their learning programs map to these so that they can encourage lifelong learning.

The Framework has played a key role in assisting the four ACE providers to build their e-learning capabilities. For more examples see the Framework's Community Engagement Project<sup>9</sup> and the Review of this project recently conducted (Bowman, 2007).

Nationally, VET should consider investing more in community education and training providers given their proven potential to increase the number of adults participating in learning involving the use of technology for personal and volunteering purposes as well as for paid work opportunities.

I thank all of the people I spoke with for helping to demonstrate the importance of ACE providers to a lifelong learning agenda.

## ***References***

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Bowman, K, 2007, *Community Engagement building creative e-learning partnerships-Strategic review of the Community Engagement project 2005-2007*.Commonwealth of Australia, Canberra

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<sup>9</sup> <http://www.flexiblelearning.net.au/communitypartnerships>

## For more information

### **Benchmarking and Research business activity**

Annie Fergusson

Phone: (08) 8204 0809

Email: [fergusson.annie@saugov.sa.gov.au](mailto:fergusson.annie@saugov.sa.gov.au)

Website: <http://www.flexiblelearning.net.au/flx/go/home/op/edit/pid/492>

### **Australian Flexible Learning Framework**

Phone: (07) 3307 4700

Fax: (07) 3259 4371

Email: [enquiries@flexiblelearning.net.au](mailto:enquiries@flexiblelearning.net.au)

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

GPO Box 1326

Brisbane QLD 4001