

# E-business and E-learning Coalescence: Opportunities and Challenges

## Abstract

During 2004-2005 a project conducted in Tasmania, Australia, examined e-learning adoption from the perspective of registered training organisations (RTOs) and enterprises in five industry sectors.

The project focussed on five industries areas and within these industries, detailed interviews were conducted with selected enterprises and industry representatives. An online survey of all Tasmanian RTOs' e-learning readiness was conducted, followed by in-depth interviews with RTOs providing training to the five industries. From these interviews, opportunities for RTOs and enterprises to work together to develop information and communications technology (ICT)-based solutions to training needs were identified.

Findings of the report give useful insight into the tensions that exist for both training and industry, caused by the maturing adoption of information and communication technology (ICT) to support learning and business. It contends that there are continuums of adoption of ICT in enterprises and of e-learning readiness in RTOs that create tension as e-learning and e-business begin to coalesce.

It suggests that this coalescence creates both opportunities to be capitalised on and challenges to be met. A key feature of this coalescence is the increased demands it places on VTE practitioners, especially for successful work-based training. It will become increasingly important for RTOs to see themselves as part of a business problem solving team, and to understand the business needs of fully ICT-integrated enterprises.

## Coalescence not convergence

Developments in e-business and e-learning are more usefully analysed in conjunction with information and communication technology (ICT) developments, particularly when discussing their convergence or coalescence. ICT has provided the infrastructure, systems and products that are causing a major change worldwide in how a myriad of activities are carried out: from major systems such as health, education, and banking, to small, everyday tasks and processes. Commentators (von Tunzelmann 2001; Smith 2001; Feldman 2004; Iammarino, Jona-Lasinio & Mantegazza 2004) have drawn the analogy to the industrial revolution in terms of the impact that widespread adoption of ICT is having on our lives.

E-learning and e-business have grown and matured because of the increasingly rich ICT environment that enables their development. We are in the middle of a major journey of transformation: the 'e' has been necessary to delineate the changes. The dropping of the 'e' will mark the end of this journey. Already this is happening – 'e-business' for many organisations is now just 'doing business'. The ICT infrastructure and uses of that infrastructure are now fast approaching the point where the 'e' has become redundant. (Dessau no date; Shim 2000).

A definition of coalescence is '...the act or state of growing together, as similar parts; the act of uniting by natural affinity or attraction; the state of being united; union; concretion' (Webster Dictionary 1913). For e-business and e-learning the term coalescence captures

the dynamic of what is happening better than convergence, which is more about the intersection of two or more separate entities or coming together from different directions (American Dictionary of the English Language, fourth edition 2000).

In early 2006, the tension caused by the coalescence of e-business and e-learning is due to the varying levels of adoption of ICT by both registered training organisations (RTOs) and enterprises. Opportunities and challenges flow from this tension. Central to this is how services provided by RTOs and the demands and uses by industry of training, are adapting in this new environment to meet the changed needs and to support industry development.

## The *Catalyst* Project

The results of a project conducted by the Office of Post-Compulsory Education and Training (OPCET) of the State Training Authority of Tasmania, (a State of Australia), in late 2004/early 2005, throw these issues into sharp focus and raise useful questions for further investigation. The Project was titled *Catalyst: facilitating the synthesis of businesses, their training needs, RTOs and e-learning*. It was commissioned to lay the ground work for, and give direction on, how to ensure that the work achieved by initiatives of the Australian Flexible Learning Framework (AFLF) with RTOs, had an equal impact on their enterprise clients, and that the use of ICT for learning in enterprises became the norm, rather than an interesting experiment.

The *Catalyst* Project developed two analysis tools that bring some form to the inchoate world of e-learning and e-business, providing reference points for assessing where an RTO or enterprise might be, and the needs it might have. These tools consist of two continuums and the matrix that can be developed from them. The continuums cover enterprise ICT integration and RTO e-learning readiness which can then form a matrix which creates four quadrants to use for market analysis.

The Project focussed on the enterprise level of industry, and this is the term used throughout the paper to refer to what might loosely be called industry or business. When referring to RTOs, this includes enterprise RTOs. Identifying enterprise (business) needs allows a more complete understanding of broader industry needs. In discussing the training market it is important to identify the different market segments and their sub-segments (often called niche markets) in relation to particular industries and the enterprises that comprise them. Further, within these niche markets are the micro markets that often focus on the particular skill sets required by an enterprise in an industry area.

This Project also contributed to another OPCET initiative, the IT Smarter Small to Medium Enterprise (SME) Project, which involved two rural local government areas of Tasmania, researching how they could integrate ICT into enterprises, and how this could support business development. This participation provided deeper insight into issues for enterprises, including the various levels of ICT integration and the impact of that on productivity.

Tasmania provides an excellent microcosm of Australia for such research, as it is small enough to be grasped whole, yet not so small that it does not provide useful or meaningful data. Relevant Tasmanian demographic and resource statistics are provided in Appendix A. The results are most relevant to micro- and SMEs (the Australian Bureau

of Statistics defines a micro business as having five or fewer full-time employees (FTEs); a small business as having six – twenty FTEs; and a medium sized business as having 21 – 200 FTEs). It is in these small to medium sized organisations (both RTOs and enterprises) that the tensions have most impact. Large enterprises have the size and resources to allow a more ready transition to ICT enabled business, for example the Australia New Zealand (ANZ) Bank and Qantas airways - the national carrier.

Given the nature of the Project, the focus of this article is on RTOs and how e-business impacts on them and on client enterprises in meeting their training needs. It also investigates how ICT integration is impacting on enterprises.

## Methodology

The Catalyst Project provided:

- an overview of the readiness of enterprises and industry sectors to adopt e-learning as a method of skills development and training
- an indication of Registered Training Organisations' (RTOs') readiness to supply e-learning services to those enterprises and industry sectors, and
- where possible the identification and facilitation of potential e-learning initiatives that will stimulate the demand for e-learning in Tasmania.

Five industries were selected:

- local government
- food/non-food agriculture
- forestry
- tourism and related industry areas, and
- electro-technology and some engineering firms.

The project was conducted in four stages:

- literature search to establish a comparative national benchmark
- an online survey of RTOs
- interviews with selected enterprises, industry representatives and RTOs, and
- facilitation of potential e-learning initiatives including the IT Smarter SMEs project.

Interview questions focussed on supply and demand for e-learning, and ICT infrastructure and use. Enterprise demand for e-learning services was considered regardless of whether it was for accredited training or corporate non-accredited training. The questions are included at Appendix B.

Any discussion of the vocational education and training market normally revolves around a discussion of supply and demand for student places in vocational and technical education (VTE) courses or programs. In this context, system dialogue is about the supply by RTOs of training places in courses or programs that are offered within the Australian Qualifications Framework (AQF) and the demand by industry or individuals for places in those courses or programs. For this project, the VTE market was considered to be any education and training undertaken by industry participants, regardless of its status under the AQF. This approach was adopted to gain as full a picture as possible of how e-learning was being used in training in industry and enterprises. A characteristic of e-learning is that it is an ideal vehicle (especially in its online manifestation) for the 'any

time, any where and just for me' training, often provided in small chunks which, for that reason, fall outside the AQF. This is an important issue the sector is in the process of addressing. This finding was based on enterprises' requirements, such as a very specific business need or the requirement for a speedy training response.

## Key findings

Information and communication technology (ICT) is having a marked impact on the training environment. While some RTOs and a number of enterprises are making use of ICT in their businesses, e-learning has not yet reached the critical mass to take on a momentum of its own. There is still a clear role for government in stimulating the market in the use of ICT to facilitate skills formation that supports business development and labour market needs.

The project identified key indicators of e-learning readiness for enterprises and RTOs. In the industries examined there was a broad spectrum of levels of readiness, with a rapidly increasing number of enterprises moving to integrate the use of ICT into their daily business operations. At this high end of the spectrum there was no longer a distinction between e-business and business: it was just doing business. Generally, a correlation between the level of use of ICT and e-learning was present.

RTOs were found to be less ICT focussed. To a degree this was a function of size, with most RTOs being SMEs. In addition, most RTOs do not seem to understand how e-learning fits into the bigger picture for an enterprise, namely that it is one aspect of its business and must serve its business outcomes. This is a critical dissonance. There is a real opportunity for RTOs to promote e-learning in enterprises by making the business case for e-learning: however, they can only do this if they understand the business drivers and needs. This project identified the key drivers from the demand side.

Within the industry sectors that were examined, a number of areas of developing demand for training delivered by e-learning were identified. A critical finding was the changes in enterprise/industry and individual learning behaviour facilitated by the adoption of ICT on both sides of the training equation. This has strong implications for the future of the VTE sector. In particular, enterprises and their employees, in their dealings with the training sector, are displaying consumer characteristics, particularly in relation to e-learning. They are shopping around on the Internet until they find exactly what they want, offered in a manner that suits them. From the sectors that are the subject of this report, it appears this is already leading to market loss for Tasmanian RTOs.

The often taken view by the VTE system and the education sector in general, that e-learning is something special, appears to have resulted in assumptions about how enterprises utilise ICT in the broader concept of e-business. For example, there are a number of Internet sites which have been specifically developed by the VTE sector to provide access to and information about the services and support that is available to existing and potential customers. However, they do not appear to reflect how business often uses the Internet to discover products and services. In addition many SMEs did not have the skills to use the Internet successfully to promote their services. Google was found to be the most commonly used search engine. This highlights a weakness within the VTE system's use of the Internet to promote itself, through using Search Engine Marketing (SEM) and Search Engine Optimisation (SEO) strategies.

A prominent characteristic of e-learning is that it is an ideal vehicle (especially in its online manifestation) for the 'just in time, just for me' training. Therefore it is important that the VET system address the issue of sub-competency e-learning objects that can be put together to meet the requirements of a competency. This model would be more in tune with enterprise behaviour in a fully integrated ICT business environment. At present, potentiated by ICT and e-learning developments, enterprises and individuals are displaying the characteristics of the retail consumer. This is becoming evident, for example, in the use of the Internet to find training providers and training that meets an enterprise's specific needs, at the best price. This places them firmly outside the current modelling of the VTE system.

## Continuums of Integration and Readiness

While the major focus of the Project was e-learning it became very apparent in the early stages that enterprises were not focused on e-learning as a separate agenda from learning support for people in their organisations. However, the following can be said in relation to e-learning.

For RTOs, their level of e-learning readiness is dependent on:

- size and client orientation
- available technology infrastructure
- skill level of teachers and trainers
- integration of e-learning into business plans
- access to learning materials.

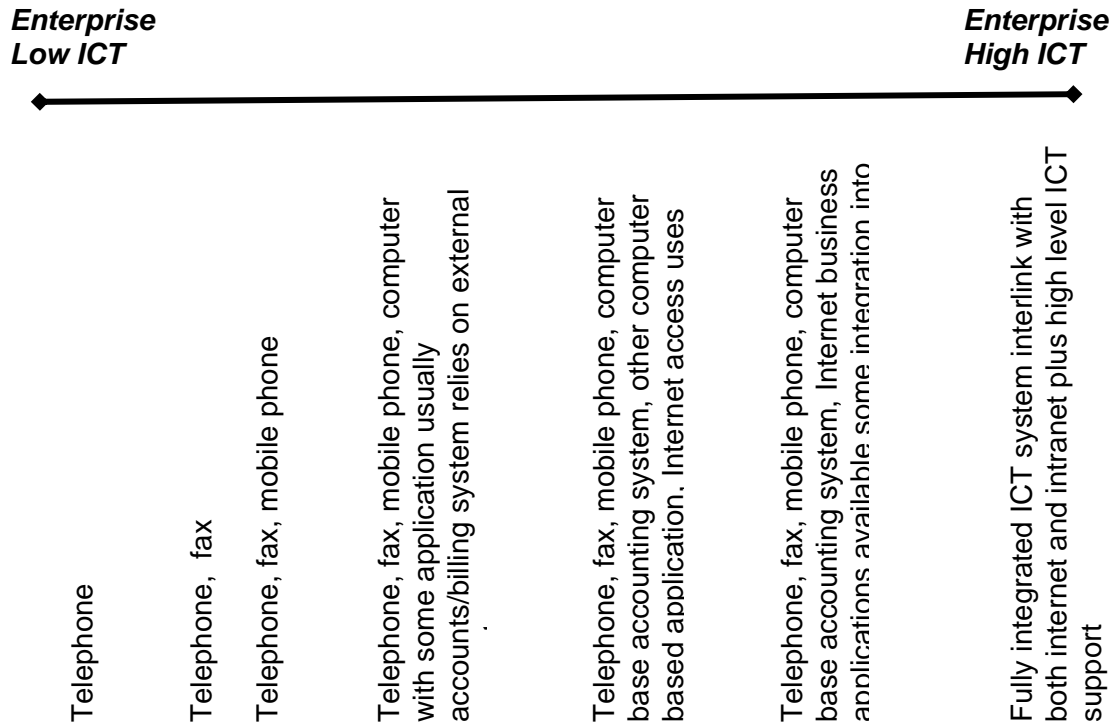
For enterprises, the demand for the provision of e-learning is dependent on:

- the level of integration of ICT and business processes
- priority given to skills development in the business development process
- generic and technical skill level of workforce
- access to learning opportunities
- knowledge of vocational education and training
- knowledge of e-learning products
- a relationship with vocational education and training supplier(s).

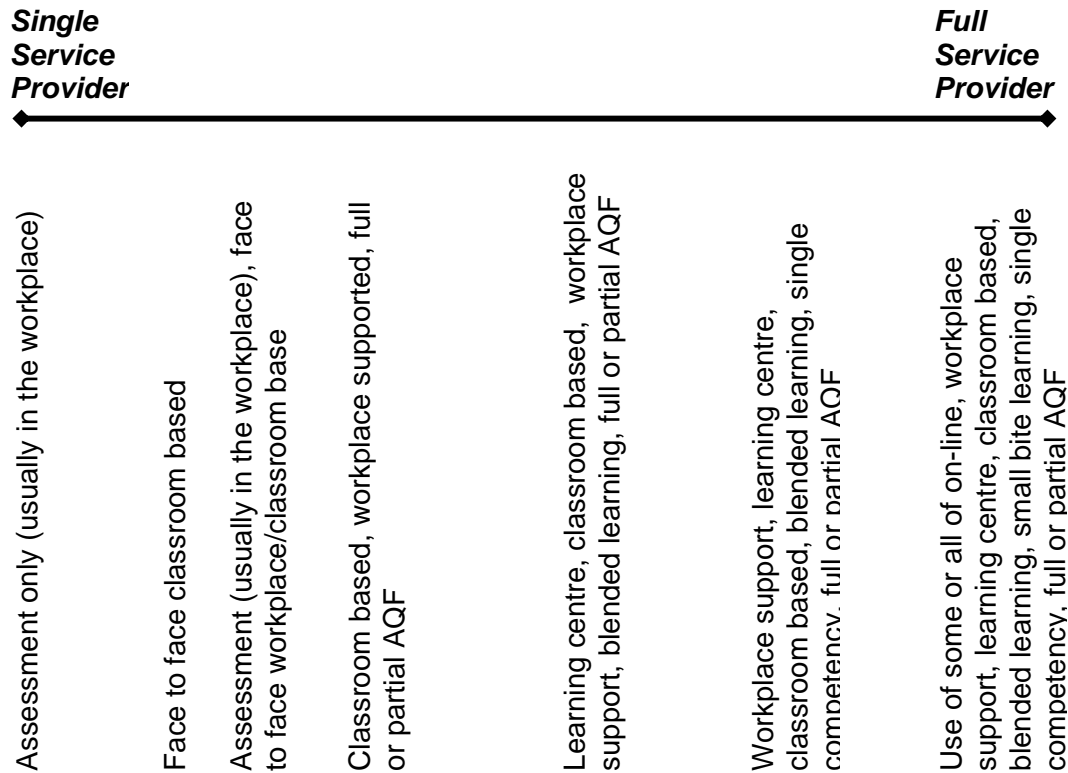
Both RTOs and enterprises identified as critical, the need for sufficient ICT infrastructure to support e-learning initiatives. While many RTOs are working to develop their e-learning strategies there seems to be a lack of clarity about how enterprises are using ICT as part of their daily business. There are those organisations where little or no ICT capability exists where the conduct of e-business is minimal compared to those who have such a high level of integrated ICT usage in the business operation that the term e-business has no separate meaning. For these organisations it is 'just doing business'. In fact both enterprises' and RTOs' readiness to provide e-learning can be demonstrated by two business continuums. While this article might appear to assume there is an end-point to ICT integration, this is not so. The focus of this article is on the current (early 2006) tension between the lowest and highest ends of the ICT integration continuum. Given the rapid nature of the change within ICT it is envisaged there will always be some degree of tension.

The Smarter SME business analysis tool further reinforced the appropriateness of the continuum in that businesses in the rural local government areas indicated that it is possible to place enterprises along continuums for each business activity, if required.

***Enterprise continuum of ICT integration***



**RTO continuum**



While these continuums are only indicative of the business operations of enterprises and RTOs, they serve to show the scope of the environment, on one hand, which enterprises face in choosing a vocational education and training provider and on the other hand, the issues faced by those RTOs wishing to develop and market an e-learning product. It is not known conclusively how many providers there are to the more sophisticated end of the RTO continuum, but indications are that there are possibly five providers in Tasmania who have started to develop significant business systems that will move them towards Full Service Provider status in the continuum. The extent of their product development at this stage however is only within specific niche markets.

Outside of the neat sweep of the continuum, fall exceptions, such as a very small but very ICT competent RTO, or an assessment only RTO using ICT in a really effective way to do that job.

In the interviews there was general agreement from enterprise participants that business was moving more rapidly towards ICT business solutions and that within three years there would be more businesses towards the Enterprise High ICT end of the enterprise continuum than at the present time. An example of this is in the forest industry where they are moving to utilising personal digital assistants (PDAs) to manage logging operations. It is likely that this is the start of a system that tracks timber usage electronically from harvesting to end user.

There are examples where enterprises are building systems that integrate/extend their human resource management requirements to include training and performance management, and these enterprises indicated that e-learning and its support systems

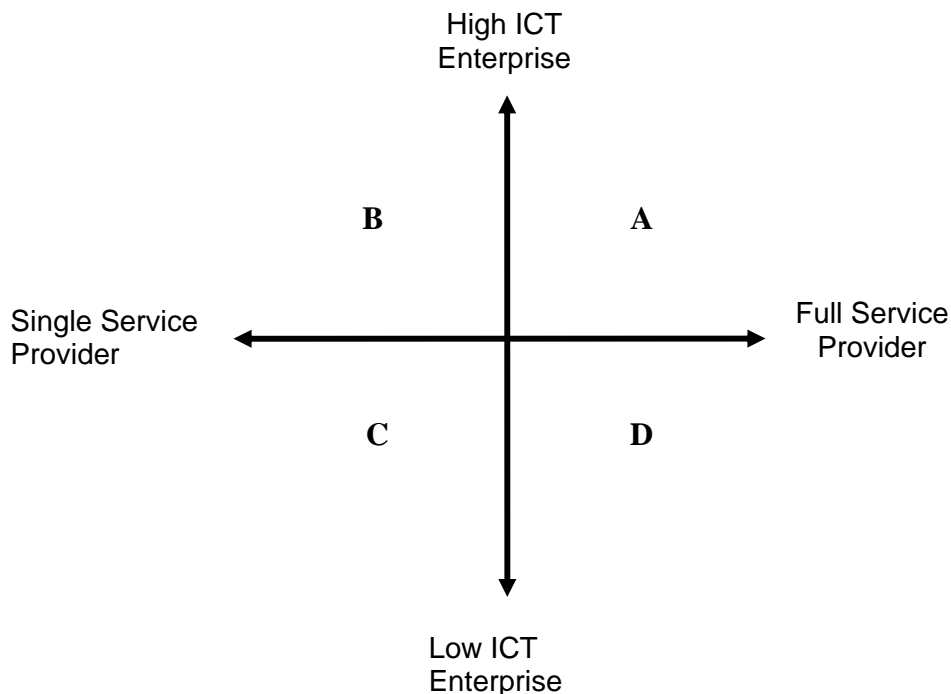
would become a critical issue in the future. Some have started to address their succession planning issues as part of this process.

## Market Matrix

The VTE market is complex and is often simplified to discussions about supply and demand for student places in VTE courses or programs. In this context, the VTE system talks about the supply by RTOs of training places in courses or programs that are offered within the Australian Qualifications Training Framework (AQTF) and the demand by industry or individuals for places in those courses or programs.

However, as previously discussed there appears to be evidence that both enterprises and individuals are displaying consumer characteristics when considering their education and training needs. Indications are that there is a need to expand the view that the VTE system has a set of clients (users of services) to a view, where the VTE market has clients that include consumers who will shop, become a buyer, purchase and consume VTE products and services to meet their needs. This change in perception not only applies to the RTOs, it also includes government purchasing systems.

The diagram below based on the two business continuums described previously, provides one view of the present and future markets. There is considerable evidence provided by the *Catalyst* Project to suggest there is a need to focus future resources, over the next three years, on providing training in *Quadrant A* of the following diagram, to match the needs of enterprises with considerable ICT business operations with RTOs that reflect their capability.



RTOs along the full length of the service provision continuum will provide sufficient supply to meet the needs of those enterprises which have requirements in *Quadrants C and D* through traditional training modes and purchasing arrangements. At the present time there are a number of providers in *Quadrant B* to provide training service to enterprises who have high levels of ICT usage, many of these RTOs have long standing relationships based on specialist training provision, for compliance regulatory requirements and demand for some of these services will remain regardless of e-learning availability. However, RTOs meeting the training needs of enterprises in *Quadrant B* will need to move towards the full service provider end of the continuum, if they are to meet future enterprise demands outside that specialist training.

There appears to be little work being done on the development of the VTE market in *Quadrant A* which could be described as being closely associated with an ICT enabled learning market in Tasmania. Moving towards *Quadrant A* will be challenging for micro and small RTOs, particularly if they attempt to do too much and as a result do it poorly due to lack of resources. For such organisations it may be better to consider a smaller scope and high quality products.

Bersin's (2005) four stage model of maturity provides a useful reference point for RTOs to see where they are and how they might proceed, even though it is based on North American data where there are larger organisations, which are further advanced in the integration of learning and business.

## Opportunities & Challenges

In the Australian VTE system there has been a perennial tension between the needs of the three major participants in training, particularly work-based training. The three participants are the employer, employee, and trainer. The employers' main aim is to have employees taught the skills needed to do the work required of them, fast and well. Employees want to learn the skills to do the job, but equally important is recognition in the form of a qualification (no matter how small the component). Trainers want to meet the needs of both their clients, while also ensuring that the requirements of the Australian Qualifications Training Framework (AQTF) are met. (The AQTF provides the basis for Australia's nationally consistent, high quality vocational education and training system through mandating standards for RTOs and accrediting bodies.)

The coalescence of e-learning and e-business increases this tension, as it is now possible for smaller and smaller chunks of training to be delivered in non-traditional ways that meet the immediate needs of an enterprise, but do not meet the needs of the employee in terms of a 'qualification' or the trainer in terms of the AQTF. RTOs are the lynchpin of the training system and it will fall to them, in large part, to ameliorate these.

For many RTOs, the first challenge is to ensure that they are adequately resourced and skilled to capitalise on the ICT environment. This can be difficult for SMEs. Failing to grapple with this challenge can be costly, and will become increasingly so as more and more enterprises move toward the High ICT end of the integration continuum.

Mitchell (2003) concluded that there were both benefits and barriers facing RTOs, but on balance it was likely to be beneficial to pursue the convergence of e-business and e-learning. He also provided practical steps for integration e-business and online learning.

The findings from the *Catalyst* Project indicate that many enterprises are continuing to move along the ICT integration continuum using e-business, which for a number is now seen as 'just doing business' without including training in their planning. For example, two aspects of e-business were identified as important and already losing clients for RTOs: the ability for clients to pay online and the poor discoverability of many RTOs' products on the Internet. This was combined with the finding that many possible clients were now using the Internet to find training offerings, and behaving as a customer shopping, for example for roofing tiles. The longer this pattern continues, the worse another tension will become: between the needs and wants of IT managers for security of their systems and the educational need for portability and open systems (Blackall 2005; Farmer 2005; Parkin 2005).

The critical re-orientation for RTOs is to see themselves as part of the business problem solving team (Ellis 2005). This, again, is both a challenge and an opportunity. There are a number of ways RTOs can 'value add' to business, such as:

- assisting companies to develop business strategies for e-learning
- facilitating professional development for workplace trainers
- providing input regarding Infrastructure and software needs
- undertaking ICT skills audits of the workforce and develop ICT training plans,
- undertaking general skills audits of the workforce and develop training plans, and
- customising learning into 'chunks' of learning.

A major challenge to RTOs is the additional skills and knowledge needed to understand the enterprises they are serving and their business needs. The needs of enterprises will vary depending on where they are on the ICT integration continuum and on their size. Many SMEs have poor business skills and for a trainer to be effective he/she needs to be able to assess the business needs of an enterprise, before a training plan can be developed. Research has shown that VTE middle managers in Technical and Further Education Institutes (TAFEs) are now required to have at least twice the number of skills and different attitudes than ten years ago (Mitchell 2004). This is shown in tabular form in Appendix C. Mitchell's work shows that a knowledge and use of contemporary business concepts, such as corporate vision, performance agreements, service quality, sustainable competitive advantage, business partnerships, market share and liaising with industry are now required. The demands being placed on VTE practitioners are becoming unsustainable. For micro, small and even medium sized RTOs, it may mean that partnerships are necessary, so that an enterprise can be provided with the full range of business development and learning services to meet its business needs.

The other side of this equation is that enterprises need to appreciate that e-learning is a business strategy, to see it as an essential tool and infrastructure as they move to understanding the importance of knowledge management in an ICT enabled environment. They can seek assistance to do this through the 2006 Australian Flexible Learning Framework (2006 Framework), a national initiative to support the uptake of e-learning within the vocational education and training system. (See Useful Links for details.)

## Conclusion

Australia still has some way to go on the journey to ICT integration and the end for the need for the 'e-' to distinguish two different types of activity. At 31 March 2005 almost six million subscribers for Internet services (ABS 2005). Enterprises, however, are well ahead of households in this bald measure of ICT readiness with the use of computers at 80% and the Internet at 70% (NOIE, 2003). As shown in the *Catalyst* Project, a number of enterprises are no longer seeing a distinction between business and e-business. It is vital that the VTE sector understand this trend, follow it, and capitalise on it.

Also, while this article might appear to assume there is an end-point to ICT integration, this is not so. The focus of this article is on the current (early 2006) tension between the lowest and highest ends of the ICT integration continuum. Given the rapid nature of the change within ICT it is envisaged there will always be some degree of tension. More than any other major building block of our society, education/learning is and will continue to be, arguably, the most challenged and changed (NOIE, 2000). The coalescence of e-business and e-learning, particularly in the workplace, is a point of systemic tension that demonstrates this observation strongly. It is a challenging time for RTOs and the VTE system but, if the dynamics are understood and worked with, there are substantial opportunities for new and exciting learning and business development to occur.

## Useful Links

The 2006 Australian Flexible Learning Framework (2006 Framework) is a national initiative to support the uptake of e-learning within the vocational education and training system. It is an AUD\$15million strategy collaboratively funded by the Australian Government and all States and Territories. A key strategy of the Framework in 2005 and 2006 is to address this issue and to assist industry to make full use of e-learning to support its business needs. Further information can be found at <http://www.flexiblelearning.net.au/industry/>

## Acknowledgements

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## Appendix A

### Tasmania Statistics

Tasmania  is a state of Australia and is roughly the size of West Virginia or Ireland. The capital city, with about half the state's population, is [Hobart](#). Other major regional cities are [Launceston](#), [Burnie](#) and [Devonport](#).

Tasmania has very affordable housing, low work travel times, ready access to beaches, accessible mountains close to city centres, excellent public and private schooling and a top ranking [University](#).

#### Some facts and figures about Tasmania:

- **Language:** English
- **Population:** Around 480,000 as at September 2003. (Source: [Australian Bureau of Statistics](#))
- **Money:** Australian Dollar, see [exchange rate](#)
- **Climate:** Temperate maritime
  - Average daily minimum temperature 9.4°C
  - Average daily maximum temperature 17.9°C
- **Education:** Over 250 schools catering for over 80,000 primary and secondary students, University of Tasmania (around 13,000 students) with three campuses (Hobart, Launceston and Burnie)
- **Annual Export Earnings:** AUD\$2.45 billion for 2002-2003 (see [ABS](#) information)
- **Banking:** All major banks are found around Tasmania. Most banks open 9.30 am to 4 pm, Monday to Friday
- **ATM/EFTPOS Facilities:** Widely available
- **Transport:** Well-developed internal [transport](#) systems, and reliable air and sea links with the rest of the world. An extensive, well-maintained road and rail network provides efficient internal transportation
- **Electricity Supply:** Reliable, statewide [hydro](#) electricity grid, supplemented by [natural gas](#) generation, at 230/240 volts (50 hertz)
- **Telecommunications:** Efficient, advanced [telecommunications](#) network
- **Water Supply:** Many clean, reliable fresh [water sources](#), with good distribution systems

More information about Tasmania is available at IRIS, a research tool providing integrated current information about Tasmania, Australia. You'll find that Tasmania has world-class facilities and a proven commitment to expand infrastructure to foster business success <http://www.iris.tas.gov.au/>.

## Appendix B

### Questions Addressed in *Catalyst* Project

To what extent is there demand by industry and/or enterprises for e-learning?

To what extent are RTOs ready to provide e-learning opportunities to enterprises, as distinct from individual students enrolling of their own initiative?

What is the minimum infrastructure required by enterprises to be ready to undertake e-learning?

What is the level and type of training already undertaken by the enterprises contacted by the project?

In what industry areas does e-learning readily fit with business development?

What is the geographical location of industries that are likely to demand the learning?

What is the view of individual Tasmanian enterprises of e-learning?

What is the level of readiness of industry and enterprise to be involved in e-learning?

What are the barriers to involving enterprises in e-learning?

Is there an e-learning market in Tasmania?

What opportunities can be identified that may act to stimulate the demand for e-learning?

## Appendix C

### Tables from Mitchell 2004.

Table 3.6 The knowledge and skills required of VTE managers to manage flexible learning identified by Peoples and others (1997) compared with the knowledge and skills identified in this dissertation

<b>Peoples and others 1997</b>	<b>Additional items identified in this dissertation</b>
<p><b>Knowledge</b></p> <p>Knowledge of models and underpinning theories of flexible delivery and flexible learning</p> <p>Knowledge of models of work based learning</p> <p>Knowledge of the changes to the training system and the requirements imposed by Training Packages</p> <p>Knowledge and theories underpinning recognition of prior learning</p> <p>Knowledge of models and theories of online delivery of training</p>	<p><b>Strategic knowledge</b></p> <p>Developing a corporate vision that includes flexible learning</p> <p>Understanding the organisational impacts of flexible learning</p> <p>Understanding the policy requirements of flexible learning</p> <p>Undertaking policy development around flexible learning</p> <p>Meeting performance agreements involving flexible learning</p> <p>Understanding service quality issues for flexible learning</p> <p>An understanding of a range of business models that incorporate flexible learning within the organisation</p> <p><b>Operational knowledge</b></p> <p>Determining staff workloads</p> <p>Understanding the teaching issues raised by flexible learning</p> <p>Understanding learning styles in relation to flexible learning</p>
<p><b>Skills</b></p> <p>Selecting appropriate courses for flexible learning, especially online delivery</p> <p>Delivering strategic plans for the organisation that include flexible delivery and flexible learning</p> <p>Identifying programs/courses and students best suited for alternate forms of delivery</p> <p>Using computer/Internet skills</p>	<p><b>Strategic skills</b></p> <p>An ability to stimulate innovation to support flexible learning</p> <p>An ability to design and develop organisational capability to support flexible learning</p> <p>Providing leadership for flexible learning</p> <p>Undertaking strategic planning that includes flexible learning</p> <p>Identifying sustainable competitive</p>

<p>Planning for whole of organisation to become flexible</p> <p>Planning, managing and organising flexible delivery and flexible learning</p> <p>Working in teams</p> <p>Liaising and negotiating with internal and external clients</p> <p>Applying change management skills</p> <p>Evaluating flexible delivery and flexible learning processes and outcomes</p> <p>Developing flexible enrolling, recording, certifying systems</p> <p>Marketing flexible delivery and flexible learning</p> <p>Networking with external clients</p>	<p>advantage with regard to flexible learning</p> <p>Managing change related to flexible learning</p> <p>Forming business partnerships for flexible learning</p> <p>Increasing market share with flexible learning</p> <p>Identifying the cost benefits of flexible learning</p> <p><b>Operational skills</b></p> <p>Developing technology skills</p> <p>Providing flexible enrolment systems</p> <p>Developing student support issues</p> <p>Delivering in the workplace</p> <p>Marketing flexible learning</p> <p>Costing flexible learning</p> <p>Providing appropriate technology</p> <p>Developing learning resources</p> <p>Costing flexible learning options</p> <p>Managing sessional staff involved in flexible learning</p> <p>Liaising with industry about flexible learning</p> <p>Providing increased access through learning</p>
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**Table 3.7: The attitudes required of VET managers to manage flexible learning and identified by Peoples and others (1997) compared with the attitudes identified by this dissertation**

<b>Attitudes identified by Peoples and others 1997</b>	<b>Additional attitudes identified in this dissertation</b>
<p>Acceptance of and commitment to flexible delivery/learning</p> <p>Strong customer focus</p> <p>Open-mindedness and willingness to change/risk taking</p> <p>Willingness to devolve power</p> <p>Commitment to staff development and learning organisation</p>	<p>Committed to meeting customer expectations regarding speed, convenience, personalised service, competitive price</p> <p>Demand-driven not supply-driven</p> <p>Market-driven not technology driven</p> <p>Driven by the value proposition for the customer</p> <p>Meets customer expectations by</p>

Leading and motivating	enhancing service quality and/or reducing prices and/or improving products Delights the customer, starting with the customer's first contact with the organisation, to enrolling, to receiving services, to after-sales service Seeks repeat business from the customer; retains customers by offering holistic, integrated, personalised service Values the life-long relationship with the customer
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