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AUSTRALIAN ***FLEXIBLE LEARNING*** FRAMEWORK

Managed by the Flexible Learning Advisory Group on behalf of all States and Territories in conjunction with ANTA

The Changing Australian Market for VET Online

6 December 2001

Australian National Training Authority

Project to provide research and develop tools and models to support the growth of VET online products and services in the Australian marketplace

An initiative within the *Australian Flexible Learning Framework for the National Vocational Education and Training System 2000 – 2004*.

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Forward

Background

In August 1999, the Australian National Training Authority Chief Executive Officers (ANTA CEOs) endorsed the *Australian Flexible Learning Framework for the National Vocation Education and Training System 2000 - 2004 (AFL Framework)*. The AFL Framework has been developed by the Flexible Learning Advisory Group (FLAG) and represents a strategic plan for the five- year National Project allocation for flexible learning. It is designed to support both accelerated take-up of flexible learning modes and to position Australian Vocational Education and Training (VET) as a world leader in applying new technologies to vocational education products and services.

The AFL Framework is supported by an annual implementation plan, and the plan for 2001, *Strategy 2001*, was endorsed by the ANTA CEOs in October 2000. It identifies specific initiatives and allocates resources within each of the five Goals identified in the *Framework*.

Role of the Flexible Learning Advisory Group

In broad terms, FLAG is a strategically-focused group of senior VET personnel advising ANTA CEOs, the ANTA Board, the Department of Education Training and Youth Affairs (DETYA) the Australian Information and Communication Technology Education Committee (AICTEC - formerly known as the EdNA Reference Committee), on national issues relating to the directions and priorities for flexible learning in VET, with particular reference to online technologies.1[1]

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[1] The New Economy Index, Progressive Policy Institute, URL: www.dicppi.org

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28 November 2001

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Executive Summary

Significant changes are occurring in the market for online products and services in the vocational education and training (VET) sector in Australia. The market is changing from one dominated by Government-funded initiatives to one influenced by normal market forces, such as competition between vendors. Competition is evident in the range of different brands of online content now available in the Australian market; the range of different providers who can develop customised material; and the numbers of different providers of online learning technology.

This report analyses the changing market and identifies new market trends and target markets. In particular, the report provides a description of the characteristics of the two major market segments, working adult students and corporations.

John Mitchell from John Mitchell & Associates in Sydney undertook this consultancy from July-November 2001 for the Flexible Learning Advisory Group (FLAG), in liaison with TAFEBiz SA, from TAFE South Australia.

Brief and methodology

The aim of the project is to provide research and to develop tools and models to support the growth of VET online products and services in the Australian marketplace. The specific objectives are to:

- Undertake research to identify Australian markets for VET online products and services
- Develop resources that will assist registered training organisations (RTOs) and the Australian National Training Authority (ANTA) to maintain and grow Australian markets for VET online products and services.

The project brief specified nine deliverables, as outlined in Appendix 1. This report provides four of the deliverables:

- Detailed profile of selected Australian markets for online products and services
- Access strategies for selected markets identified through the research
- Good practice models of successful VET providers in the online national marketplace
- Recommendations for further development of tools and models and online training products and services.

This report is one of seven documents generated by the project consultant. All seven documents are available on the FLAG website at http://flexiblelearning.net.au/national/np_news.htm

Methodology

The methodology for this project is outlined in Appendix 2 and included a literature review, surveys, interviews, the development and field-testing of marketing tools, the production of a database of providers and the conducting of briefing sessions. Names of personnel and organisations contacted during the project are contained in Appendix 3. The interview questions are set out in Appendix 4 and definitions of key terms are set out in Appendix 5. Survey details and findings are set out in Appendices 6-8.

Major findings

Significant changes have occurred over the last twelve months in the market for VET online products and services. In particular, commercial providers, as opposed to Government-funded organisations, are exerting an increasing influence in the market. The commercial providers are using multiple and flexible business models to cater for new market opportunities. While Government activities dominate in terms of the funds expended, competition from and within the private sector is modifying the landscape of the online market.

Eleven market trends

The top five market trends in the field of VET online products and services identified in the desk research undertaken for this project in July 2001, are as follows:

- the emergence of the demand-driven model for e-learning;
- the growth of the corporate market interest in e-learning;
- the awareness of students' need for support when studying online;
- the preference for e-learning and flexible learning, not just online learning;
- the rising profile of commercial providers in the e-learning market.

The interviews for this project, conducted from August-November 2001, enabled the identification of the following six additional trends:

- the move towards a more integrated approach to online learning, offering not just online content, but support systems, learning management systems and other technologies and administrative mechanisms;
- the development of an holistic approach to the provision of student services, not just e-learning services but other services such as online enrolment, online information and online payment systems;
- the increasing tendency towards customisation of online products and services, to suit individual learning styles;
- the personalisation of online products and services, based on providing personal web pages for each student;
- a renewed focus on learning outcomes from online learning, not just enrolments;
- an increasing awareness of the pitfalls of poor instructional design for online learning.

Key debates and mindsets

As an indication of the changing nature of the market, there is considerable debate and disagreement within the Australian VET community about the future of online learning, around the following topics:

- the value of customisable generic content versus truly customised material;
- developing fully-rounded customised content versus developing learning objects (briefly defined as small chunks of e-learning content, normally based around a learning objective, accompanied by learning activities and resources);
- for and against the 'Toolboxes'(a FLAG project that promotes the development of high quality online courseware and other online products to support VET programs and services);
- online content versus learning management systems;
- education (quality, support) versus product (accessible, affordable).

The interviews revealed a range of different mindsets among the providers of online products and services, summarised as follows: a product-centric mindset; technology-centric; sales-centric; market-centric; student-centric; instructional design-centric; accreditation-centric; and politically-centric. Unfortunately, research for this project suggests that market-centric personnel are in the minority in VET.

Public providers interviewed for this study expressed some tension about conflicting pressures and trends in online learning. For instance, some see content as the most important issue, while others are now focusing on services, such as providing overall management of online learning. Some are focused on the mass market of individuals undertaking courses leading to certification, while others are more interested in targeting whatever online courses are desired in the local market. Active, public debate of these concerns may lead to a more productive future for VET online products and services.

New provider capabilities required

The market is becoming more demanding, so that developers of VET online products and services need more than instructional design skills and student support services. New capabilities required of developers of VET online products and services include:

- advanced project management skills
- quality management systems
- the ability to be 'fast, flexible, fluid'
- a mix of technical, educational and organisational skills
- the ability to develop learning systems that can cope with increasing scales of production
- skills in outsourcing development.

Deliverers of VET online products and services need skills in relationship marketing, Customer Relationship Management, facilitation and teaching, partnership and alliance management, an understanding of enterprise's business goal, after sales service and long-term maintenance of product.

While the demands of the market for quality products and services are rising, providers are finding it hard to meet market requirements. The survey of twenty five VET providers found that they are restricted in their response to the market by the costs involved and the time and expertise required, as discussed below.

Profile of market for individuals

From the survey of 234 VET students, it is noteworthy that:

- 54.5% describe themselves as self-directed learners, which is a substantial increase from Warner et al's (1998) finding that only 28% of VET students were ready for flexible delivery and online learning.
- On the other hand, 72.5% prefer to learn through hands-on practice, while online learning rarely provides even simulated work tasks.

On the basis of this survey, VET providers can be encouraged to continue to provide online learning opportunities, balanced by providing students with opportunities for hands-on practice.

The survey also found that 26.8% of the students' employers support online learning and 26% of employers provide access to online facilities at work. VET providers can stimulate the growth of online learning by encouraging the development of self-directed learning and by encouraging employers to make available Internet access in the workplace.

Based on the research for this project, the profile of the **individual** VET learner market for online products and services includes the following broad characteristics:

- working adult students, not apprentices, trainees, unemployed students or students who have just left school,
- positive about the benefits of learning,
- self-directed learners,
- verbal learners,
- who prefer to use online learning in conjunction with other delivery strategies,
- who also like to learn through hands-on practice,

- appreciate extra support in online courses such as face-to-face or telephone contact with a teacher,
- believe that online learning saves them time and helps them do their job better,
- use the Internet at home for around two hours per day,
- sometimes have employers who support online learning and provide access to online facilities at work,
- will take advantage of online learning for both short courses and accredited courses,
- often would use it to study IT courses but could use the medium to study a wide range of different VET courses,
- and would study more online courses if they were made aware of them.

Profile of enterprise and government markets

Based on the research for this project, the market profile of **enterprises** who might be attracted to VET online products and services include:

- employers who value training to meet business needs,
- organisations that currently use or plan to use online learning as part of a package of e-learning strategies,
- organisations from a wide cross-section of industries,
- organisatons that provide staff with access to online learning at work,
- organisations that are sometimes undergoing significant organisational change,
- organisations that may have branches spread over a large geographical area,
- organisations that sometimes have a high staff turnover,
- organisations that often require regulatory/compliance training,
- organisations that often require induction training,
- organisations that require services and the technology tools needed to manage online learning,
- and need to instruct their staff in the use of technology or equipment for online learning.

The profile of government agencies interested in online products and services is similar to the above profile of enterprises.

Access strategies

To gain access to different online markets requires much more than simply constructing a website and placing learning materials on it, hoping students will enrol. Winning access to different VET online learning market segments requires a combination of resources, market research, marketing planning and management, technology, organisational capability, staff expertise, student support systems, reputation and perseverance.

Of the VET providers of online learning surveyed for this study, 84% consider that both costs and time restraints are restricting their access to the market. Other factors limiting their access are staff inexperience (76%); organisational inexperience (41.66%); overseas competitors (39%); student support systems (33.3%); and lack of a brand name (26%). Other key statistics are:

- 41.67% of providers surveyed believe that their organisation's access to the online market is restricted by the limited applications of online learning in a competency-based training system
- 65.2% of VET providers surveyed consider their access to the market for individuals is limited by some students' learning styles not suiting online learning
- 50% believe that students' access to the online learning market is restricted by the students' lack of necessary technology.

These survey results, particularly the providers' lack of time, funds and expertise, indicate that many providers might be wise to concentrate on providing just some, not all, online services and products and not attempt to be a one-stop shop.

Good practice models

Clever VET organisations are using skills and marketing insights to satisfy slices of the market for online products and services. The report outlines good practice models of successful VET providers in the online national marketplace in areas such as market segmentation, target marketing, product development, pricing strategies, sales strategies, online marketing, online communities, online taster courses, online newsletters, outsourcing, Customer Relationship Management, alliances and publications.

Recommendations

The following recommendations are based on the research for this project. The research shows that, without adequate market research and marketing planning and management, it is a high-risk, speculative activity to develop online products and services.

A discussion of each of the following recommendations is provided in Chapter 5 of this report.

The term e-learning is used in the recommendations instead of online learning, reflecting the market's preference for the term e-learning.

Tools and Models

1. It is recommended that additional tools be added to the current set developed for this project, to cover the following topics within market research: 1. Establish the need for marketing research; 2. Define the problem; 3. Establish research objectives; 4. Determine research design; 5. Identify information types and sources; 6. Determine methods of accessing data; 7. Design data collection forms; 8. Determine sample plan and size.

2. It is recommended that additional tools be added to the current set, to cover the following topics within marketing planning and management: project managing the customisation of existing content; designing marketing communications; relationship marketing; developing and managing brands; sales promotion and selling techniques.

3. It is recommended that, to assist small providers of e-learning products and services to be able to scale up their operations to serve growing markets, a study be undertaken of alternative business models available to small providers.

4. It is recommended that a study be undertaken of the applicability of e-learning to Training Packages.

Online training products and services

5. It is recommended that research be conducted into the following variables of the e-learning market for individuals: geographic data (e.g. regional variations); demographic data (e.g. age group 25-35); psychographic data (e.g. young adult 'renters' with active lifestyles); behavioural data (e.g. usage rate).

6. It is recommended that research be conducted into the following variables of corporate market and government markets for e-learning: demographic data (e.g. which size companies); operating variables (e.g. heavy/light users of online training); purchasing approaches (e.g. companies seeking good service or high quality or low cost); situation factors (e.g. companies with an urgent need; large or small orders); personal characteristics (e.g. risk takers).

7. It is recommended that research be conducted into the importance of and ways to stimulate self-directed learning among VET students, to enable them to take advantage of e-learning.

8. It is recommended that the percentage of VET students who describe themselves as self-directed learners be monitored.

9. It is recommended that research be conducted into the advantages and limitations of 'low budget' e-learning products and services, utilising standard 28-56kbit modem transmission.

10. It is recommended that research be conducted into the national VET market for reusable learning objects.

11. It is recommended that research be conducted into effective marketing strategies for Government-funded online products.

1. Description of the national market

The following description of the national market is taken from a number of sources, including the review of existing literature and media reports, but predominantly from the interviews conducted for this study.

The names of the twenty-three VET personnel interviewed are listed in Appendix 3. The interviewees are from three categories: VET providers of online learning; commercial providers of VET online learning; and organisational customers of VET online learning. The organisations represented include: Selfcert, NETg, SmartForce, Catalyst Interactive, Corskill, NetSpot, TAFE Online NSW, TAFE QLD Online, TAFE frontiers, Northern Territory University, WestOne, Canberra Institute of Technology, Hunter Institute, Rebel Sport, Sabre Pacific, Oracle Corporation, Centrelink Virtual College, Icon Training and Reskilling and Appcon Learning Solutions.

Summary

The major finding from the research is that significant changes have occurred over the last twelve months in the field of VET online learning, in both practices and attitudes. In particular, commercial providers, as opposed to Government-funded organisations, are exerting an increasing influence in the market. The commercial providers are using multiple and flexible business models to cater for the many market opportunities. While Government activities dominate in terms of the funds expended, competition from and within the private sector is modifying the landscape of the online market.

Current activity

Interviewees were asked what current activity are you aware of in the development, delivery or use of online products and services in Australia? Their wide-ranging comments capture a market in transition from being dominated by Government-funded activity, to a slightly more mature market influenced by normal competitive pressures. Competition is evident in the range of different brands of online content now available in the Australian market; the range of different providers who can develop customised material; and the numbers of different providers of online learning technology. One result of the changing attitudes in the VET online market is that Government organisations are beginning to develop more flexible arrangements and partnerships with the private sector to provide online learning.

Competitive pressures are obvious in various segments of the market: for example, a normal, healthy commercial battle is taking place between different suppliers of learning management systems in Australia, dominated by WebCT, Blackboard and Janison Solutions and similar companies. Scores of VET organisations in Australia are using the WebCT platform. However, some organisations such as TAFE Queensland Online that do not use WebCT would like to access materials developed elsewhere, but find it is not economic to try to convert online materials developed for WebCT.

New players in the market are using different business models to offer new services. An example of a newly registered training organisation (RTO) that predominantly uses an online learning platform, not a bricks-and-mortar physical location, is the Adelaide-based JPM Asia Pacific Institute, at e-training.com.au, which targets corporate clients and provides Certificate-level courses, from business and computing studies to aged care. Sydney-based SelfCert, which specialises in telemarketing, provides another new business model in the field of online learning, selling over the phone to IT workers off-the-shelf content provided by international e-learning companies.

Despite these new developments, one interviewee from the private sector felt that most of the activity in online products and services was still in the government sector, particularly with its $100m Collaborative Framework Project, which is three years through its first five-year cycle.

Most State and Territory TAFE Departments have a central unit focused on online learning, some with substantial funding for development. The arrangements vary from one jurisdiction to the next: in some States and Territories, a central TAFE unit has a significant say over developments; in others, the central unit is the servant of the TAFE Institutes. One interviewee from the Government sector, from a State where the central unit is a servant to the Institutes, expressed concern that TAFE Institutes do not understand the commercial practices needed to bring about a return on investment in online learning.

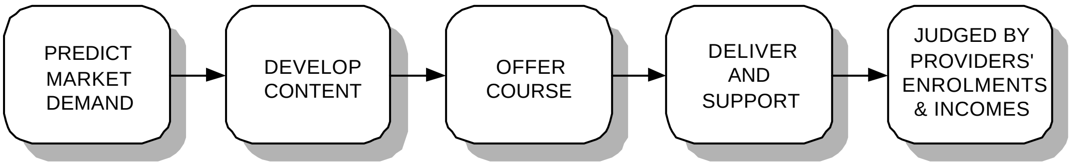
Five market trends identified in July 2001

The top five market trends in the field of VET online products and services identified in the desk research undertaken for this project in July 2001, are as follows.

1. The emergence of the demand-driven model

The research shows that to stimulate the market for VET online products and services, a demand-driven approach to the market is required (Mitchell, 2000c; IDP, 2001). The research indicates that currently the most common approach to marketing online learning, particularly in the public sector, is based on a supply driven model that targets mass markets of individuals (Day, 2000). Diagram 1 provides a simple summary of the supply-driven approach to online learning.

Diagram 1: A supply-driven approach to mass-market online learning



As VET organisations are discovering, the demand for mass-market online products and services is low, amongst individual Australian learners (Day, 2000).

However, the research suggests that there is demand for VET providers to develop customised e-learning solutions for some Australian enterprises (TAFE frontiers, 2001) and for target segments of learners, such as the 'working adult student' (Mitchell, 2000c). In a business environment characterised by increasing global competition, rapid technological change and the need for a skilled workforce, research by TAFE frontiers (2001) suggests that some Australian enterprises will seek comprehensive training solutions – which may or may not include online learning, depending on the context – that will increase their productivity, performance and competitive advantage.

Diagram 2 depicts the main steps in a customer-centric, demand-driven approach to e- learning, as supported by the literature (e.g. Harper et al, 2000; Mitchell et al, 2001; Brennan, 2001).

Diagram 2: A demand-driven approach to providing customised, niche-market e-learning solutions to business

The challenge is for VET sector organisations to develop a demand-driven approach to the provision of e-learning products and services that meets business needs (Mitchell, 2000c; IDP, 2001). To be successful, VET providers require a range of skills including skills in consulting with industry and in designing appropriate pedagogy and support systems (Harper et al, 2000; Brennan, 2001).

2. The growth of corporate market interest. This trend is demonstrated by the following findings:

- TAFE frontiers (2001) found that 30% of organisations surveyed were using the Intranet and 14.6% of organisations were using the Internet to deliver training. The number planning to use intranets or Internet is set to double over the next three years.
- TAFE frontiers (2001) found that organisations would seek customised online learning products; online learning would be assisted by classroom training and mentoring; and TAFE was not likely to be asked for assistance.
- SMH (June 2001) found that the business benefits of e-learning were more accepted, e.g. human capital development; improved access and equity; enhanced revenue.

3. The awareness of students' need for support. Online learning with no other support or learning opportunities is rarely successful. For example:

- Misko (2000) identified the types of support and guidance students need in any form of learning (e.g. teacher support; timely feedback; opportunities to discuss problems with teachers and peers).
- Brennan (2001) identified preconditions for improved learning outcomes for students in an online environment (e.g. catering for different learning styles; preparing teachers to use new technologies; focus on the communicative and interactive dimensions of the new environments).

4. The preference for e-learning and flexible learning, not just online learning. Purely online learning is generally unpopular, but flexible learning and e-learning (involving a number of technologies and support systems) are more popular. Misko (2000) found that flexible learning, offering a range of learning and administrative options for students, fits with busy lifestyles and is more convenient than the traditional delivery. E-learning, suggesting the use of a range of learning technologies, is more popular than simply online learning, using the web. It is noteworthy that the trend in the USA, among e-learning companies, is to promote 'blended learning'.

5. The rising profile of commercial providers. For example, the Sydney Morning Herald identified the following categories of commercial providers and examples in June 2001:

- Content generation, e.g. Authorware, Macromedia
- Content provision, e.g. SmartForce, NETg, SkillSoft
- Learning management systems, e.g Southrock, WebCT
- Technical integration, e.g. Knowledge Path, Angus Knight
- Collaboration systems, e.g. Interwise, Centra.

Six emerging trends identified in late 2001

The above five market trends were supported and added to by the interviews for this project, conducted from August-November 2001. Interviewees were asked what are the emerging trends in the development, delivery or use of VET online products and services in Australia? Their answers enabled the identification of the following six additional trends:

1. The move towards a more integrated approach to online learning. A number of interviewees felt there was a trend away from promoting online content on its own, to promoting an integrated learning system consisting of content, support systems, learning management systems and other technologies and administrative mechanisms. One interviewee commented:

> The dichotomy between external studies and online learning is disappearing. We are now looking at blended models: the best fit of face-to-face and technology-assisted learning to suit the individual.

2. The development of an holistic approach to the provision of student services, not just e-learning services but other services such as online enrolment, online information and online payment systems. There is a growing tendency to link learning management systems to other electronic services such as student records, as part of an e-business approach to education, in an attempt to link electronically to the student, long after graduation.

3. The increasing tendency towards the customisation of online products and services There is a growing awareness of the value of customisation of learning material to suit individual learning styles. Many e-learning companies in Australia now offer the service of customising existing content to suit specific clients.

4. Personalisation of online products and services, based on web pages for each student. There is an increasing trend towards personalisation of web-based online learning technology, within an acceptable cost structure. Online learning systems can now provide personalised web pages for the individual, where the student can review his or her enrolment and results; link to their current online learning program; and pay bills and find out information from the educational organisation.

5. A renewed focus on learning outcomes from online learning. According to a number of interviewees, a shift has occurred over the last year, from focusing on the technology to focusing on the needs of the end-user. For example, more providers are catering for the many VET students who prefer online learning to be provided in metaphors, simulations and case studies. One interviewee commented:

> We are still in a juvenile stage of development and we have a way to go before solid trends come out. People in VET are starting to realise that the literature that influenced the early days of online learning was applicable to universities, who just wanted clumps of content, but not to VET. Now the focus is on how will I have an impact on student learning? What sort of learning model do I need? For example, you can create simulated companies to learn how to manage IT.

6. An increasing awareness of the pitfalls of poor instructional design, particularly pasting unmodified print-based text into websites. After some large failures in the online arena in Australia, such as one cohort of 250 TAFE lecturers undertaking an 'abysmal' staff development program in online learning that was based on paper-based materials simply being used online, there is now much more understanding in the VET sector of the different instructional design needed for effective online learning.

Key debates

There is considerable debate and disagreement within Australian VET about the future of online learning, around the following topics.

Customisable generic content versus truly customised material. For corporate or large-scale clients, some interviewees felt strongly that the key to the future was to make customised changes to existing online content, while others felt that the only way forward was to build one-off materials for each specific client.

Customised content versus learning objects. Some interviewees considered the best approach is to develop fully-rounded customised courses for clients, while others are in favour of providing the client with a library of learning objects. There is no agreed definition of learning objects, but generally they are viewed as a small chunk of online learning material, commonly a learning objective with accompanying information and exercises. For example, one interviewee commented:

> We don't agree with the national learning objects project in Schools. I can't imagine how VET teachers could search out and cobble together a course based on learning objects. You need instructional design skills to pull it all together, which is the real work. Learning objects are still only a collection of resources.

In contrast, another interviewee commented:

> I think industry and students want little chunks of information they can customize themselves-learning objects-catalogued to form a product. The days of a four-year course are gone, but we're unfortunately sticking with it.

For and against the 'Toolboxes'. The 'Toolbox' debate is raging in the VET community and many interviewees were critical of the Toolbox products. For example, one commented that the Toolboxes are 'content-focused and instructional design-focused and have to be generic, but it is more important that content is responsive to each student group'. One commented that the Toolboxes were meant to be designed so they were easily modified by a non-technical person, but 'they lost the plot'. A number of interviewees felt that the third series of Toolboxes was an improvement on the first two series.

Content Versus Learning Management Systems. One interviewee commented*: '*The focus needs to be on content, not learning management systems. A lot of learning management systems are just a front door.' In contrast, another commented: 'Two years ago we were courseware focused, but there was no way to make money out of it. Our market is just emerging for scalable learning management systems.'

Education (quality, support) Versus Product (accessible, affordable). Significant effort is currently directed at understanding and improving the quality of online products and services in VET. A contrary push within VET is to provide online products that are easily accessed and delivered quickly, at an affordable level, for each market segment. One interviewee commented:

> Accessibility, simplicity and maintainability are the keys. The content must be kept simple and be easily accessible anywhere, from students with a disability to anyone using a standard browser and operating at 28-56 kbit modems. The content must be developed so the VET client can customise it in-house, easily.

Eight different mindsets of providers

The interviews revealed a range of different mindsets among the providers of online products and services, summarised as follows:

- Product-centric mindset (e.g. 'We promote our platform for managing learning, which should precede online content.')
- Technology-centric (e.g. 'Everyone is so obsessed with their own learning management system. Blackboard is streeting WebCT at the moment.')
- Sales-centric (e.g. "Lots of Institutes thought 'I am going to make a $1m out of online learning'. But it has to be approached slowly, methodically, with a long-term commitment. There is no way you can get a return on investment in the first few years.")
- Market-centric (e.g. 'There needs to be a change of attitude of online deliverers. Students' needs should be more important.')
- Student-centric (e.g. 'Students have to feel they are in control.')
- ID-centric (e.g. 'We carefully design online content in conjunction with industry.')
- Accreditation-centric (e.g. 'Students want online learning for certification purposes.')
- Politically-centric (e.g. 'Most of the decision-makers at the top in my State understand that online learning is a vote winner.')

Unfortunately, market-centric personnel are in the minority in VET.

Tensions in the public providers

The following comments relate solely to public providers of VET, the majority group in VET. Public providers interviewed for this study expressed some tension about conflicting pressures and trends in online learning:

- Some see content as the most important issue, while others are now focusing on services, such as providing overall management of online learning.

- Some are focused on the mass market of individuals undertaking courses leading to certification, while others are more interested in targeting whatever online courses are desired in the local market.
- Some are interested in a national, collaborative approach to content development, while others focus on developing materials for the neighbourhood industries and the local population.
- Some are passionately committed to one or other learning management system.
- Some see online learning as separate to and sometimes better than face-to-face delivery, while others envisage a future where the focus is on total flexibility in responding to student needs, not different delivery options.
- Some see the availability of more bandwidth in students' homes as the key to the future of online learning, while others see virtue in accepting limited bandwidth and living with low-budget online learning options.
- Some see overseas content providers as the enemy, while others are seeking partnerships with them.

Active, public debate of these tensions may lead to a more productive future for VET online products and services. The challenge for the decision-makers in VET organisations is to allow these tensions to be aired, even if policy is pointing in specific directions. More informed policy, more effective practice and increased options for VET consumers may result from this public discussion.

Needs of the markets

Interviewees were asked what are the needs of Australian markets for VET online products and services? Responses indicated that the market particularly needs online products and services for uniformity of training across dispersed branches of organisations, particularly to meet compliance requirements or induction needs or when new systems are introduced, e.g. after corporate takeovers occur. Online products and services are also required for highly specific industry needs, for example in new industries such as aquaculture.

One interviewee commented on the need for learning management:

> Companies need someone to manage their training. I don't know if the overseas content providers will take off. Content is not the main game. Industry customers want someone to manage their training. Public providers can provide physical support: content developers can't.

The features of online learning that appeal to organisations include:

- It suits desk-bound staff who have access to a PC
- It can be delivered in a Just-in-Time fashion, in the workplace
- It caters for distributed organisations
- It caters for outreach or access
- It can be relevant, accessible and affordable.

One interviewee from the retail sector commented that his organisation had eight different needs from the online medium:

> Occupational health and safety. Product knowledge. Induction. Internal newsletter. FAQ. Communication. Email from the managing director. Maps of stores.

Additional comments about the needs of the individual and corporate markets are set out in Chapter 2.

Different markets

Interviewees were asked what are the different markets for VET online products and services in Australia? There was general agreement that the main market segments are individuals, enterprises/corporates and government bodies. The corporate market could be further sub-divided into large corporations such as Qantas, ANZ, Coles Myer, NAB and similar-sized companies on the one hand, and small to medium-size businesses on the other.

One interviewee from a remote location saw a different mix: a local market, a national market for anyone in VET to pursue and an Indigenous market.

Additional comments about different markets are set out in Chapter 2.

Priority target markets

Interviewees were asked what priority target markets (in contrast to mass markets) exist or are emerging for VET online products and services in Australia? Suggestions included:

- Business, IT, engineering, workplace training and assessment
- E-business
- Occupational health and safety
- Privacy
- IT literacy
- Call centre training
- E-commerce training
- Management and leadership
- Finance and Accounting
- Re-training, starting with IT literacy
- Manufacturing and service industries.

This topic is discussed more fully in the next chapter.

Developers' capabilities

Interviewees were asked what capabilities do developers of VET online products and services in Australia need, to satisfy these target markets? The responses included:

- Developers need more than instructional design and student support services.
- Developers need excellent project management skills
- Developers need quality management systems
- Developers need to be quick to start projects: 'fast, flexible, fluid'
- Developers need a mix of technical, educational and organisational skills
- Developers need to develop learning systems that can cope with increasing scales of production
- Developers need skills in outsourcing and insourcing of development.

One interviewee commented:

> You need quality. You need to deliver on time. Processes need to be in place for client communication. You need to manage the relationship and there must be a single point of contact for the client. Can't have someone take three weeks leave and expect corporations to take you seriously.

One interviewee felt that there were more opportunities available than could be serviced by the existing providers, so there was an incentive for private providers and TAFE Institutes to co-operate. Another put the emphasis on partnerships between providers and content developers:

> I think they need to select partners in the industry which can help them deliver content, technology and services, partners who have the same visions, resources and commitment that they have.

Deliverers' capabilities

Interviewees were asked what capabilities do deliverers of VET online products and services in Australia need, to satisfy these target markets? Responses included:

- Relationship marketing
- Customer relationship management
- Facilitation and teaching skills
- Partnership/alliance management
- Understanding of enterprise's business goals
- After sales service
- Maintenance mechanisms.

A person with long-standing experience in the field of online learning commented:

> It is hard to define the capabilities for online developers and deliverers. It is a profession all of its own, at 180 degrees to the normal classroom. You need an understanding of systems, education and technology.

New products needed

Interviewees were asked what new online products and services are needed in the target markets? Responses included:

> More learning objects. Training Packages suit learning objects.

> We need high-bandwidth, two-way interactive satellite facilities.

> We need voice and vision over IP.

> There needs to be a good integration mechanism for products and services.

> We need Artificial Intelligence-driven counselling services, so students can make good choices about selecting courses and careers.

> We should be services-driven, but currently we are product-driven.

> Easily customised and deployed online content

> Flexible, low-end, short shelf-life products: a constant stream of products.

Factors stimulating and/or hindering

Interviewees were asked what factors are stimulating and/or hindering the further development and delivery of VET online products and services in Australia? Their responses included:

> Corporate clients will only make a change when there is a benefit for them: when it will give them more money. So the educational offerings need to be flexible and more convenient.

There is not just an online market. Some training needs to be online and some needs to be face-to-face: a mix is needed.

Some organisations cannot cope with the increase in enrolments made possible by online learning.

It is easy to build an online product; it is harder to go out and ask industry whether it wants it.

To stimulate the market, we need entrepreneurialism. Staff need performance targets and bonuses. Hunger is needed to close the deal.

Change management is needed to marry online learning with the whole organisation. Organisations need to see training as an ongoing process, not as an event. The providers need to show organisational clients the benefits.

Our company used to provide online training around a product. Now we talk about training and fit our product to the corporate need.

It is difficult to stimulate, rejuvenate or renew online learning materials. VET is pouring money into content development but not into maintenance.

The Australian dollar is down but costs are up. A VET sector organisation can't compete with huge corporations developing content overseas. The Army can afford to spend 400 hours developing each hour of content, but VET works on 7-10 hours per hour of online learning content.

Online learning is currently stimulated by smoke and mirrors and lots of money. VET is pouring lots of money into online learning but it is not where the customers are. We need a more integrated approach.

There has to be an incentive to go online in TAFE. Profile funding and student contact hours are a disincentive.

The general comments that come from the training departments of the deliverers is that they are in need of very good IT systems, hardware, server and Internet access to be able to deliver in Australia to satisfy the market. Generally, these facilities are very under-resourced and inadequate to provide on-line learning services. Every TAFE Institute and most Universities have major work to do to provide this service effectively.

The cost effectiveness of online learning is improving, with lower costs for technology platforms.

Conclusion

The market for VET online products and services is being influenced by a range of new market drivers such as the trends towards customisation and personalisation; the emergence of new corporate markets; increasing competition between rival technology providers; and new liaisons between public and private content developers. There are indications that the beneficiaries of this more open market competition will be the consumers.

2. Profile of selected markets

This section provides a profile of selected Australian markets for online products and services.

Summary

This section profiles the priority markets identified in the research:

- Individuals, particularly working adult students
- Enterprises, who value training to meet business needs and currently use or plan to use online learning as part of a package of e-learning strategies
- Government agencies, who value training to meet corporate needs and currently use or plan to use online learning as part of a package of e-learning strategies.

The profile is based on research in mid-2001 by Mitchell & Wood (2001), Mitchell (2001a, 2001b) and subsequent field research, including a survey of providers and users and interviews with providers and other stakeholders.

Each of these markets is discussed in turn below.

The market for individuals: results from the survey of students

A survey was conducted in late 2001 of current VET students' attitudes to online learning. As shown in Appendix 6, a total of 234 students responded to the survey, from 8 different VET organisations across South Australia, Queensland, the ACT and Western Australia, two of which organisations were in rural or regional areas. The students ranged across Certificate 11 to Advanced Diploma level. Course areas included dental assisting, hospitality, engineering, business studies, IT, electronics Aged Care, Community Services, Design, Accounting, Applied Science, Hair and Beauty and other fields. Hence, this is considered to be a broad cross section of VET students.

The broad profile of the students surveyed includes the following factors:

- 72% are female
- 73% were born in Australia
- 73.5% completed year 12
- 62.6% are currently employed
- 88.4% do not have an undergraduate degree
- 82.5% work in the metropolitan area
- 36.6% use the Internet at work, which is a surprisingly high level
- 71% use the Internet at home, which provides VET providers with incentives to provide online learning
- on average, the respondents use the Internet for 2 hours per day, which also is a surprisingly high level
- the respondents work in 41 different sectors, from hospitality, to taxation, manufacturing, health care, leisure, retail and boating.

In relation to online learning:

- 31.6% of the survey respondents had studied online before

- 82.4% of these students found the online course satisfactory for their needs
- 63.8% of the overall cohort was positive, enthusiastic or interested in online learning, a quarter indifferent and less than 10% negative.
- 54.5% of the overall cohort described themselves as self-directed learners
- 72.5% prefer to learn through hands-on practice, rather than reading and listening
- 42.2% of those who had studied online previously were supported by face-to-face contact or telephone contact with the teacher
- 97% considered this extra support valuable
- 51% find online learning appealing because they have limited study time
- of those employed, 47.7% find online learning appealing because what they learn may help them do their job better.

In relation to employers' attitudes:

- 26.8% of employers support online learning
- employers like the following aspects of online learning: time away from work is minimised; cheap, done in the office; flexibility; geographical advantages; no travelling costs; fast and efficient
- 26% of employers provide access to online facilities at work.

In relation to future intentions:

- 86% of those who have studied online before would do so again.
- 80% would use online learning for some of their future study
- 50% of the respondents would use online learning for most of their study, although only 26% of the respondents answered this question.
- 66.7% would use it to study short courses that did not lead to a full certificate
- 62.5% would use it to study IT-related courses
- 54.2% would study online more often if they were aware of more online courses.

It is noteworthy that:

- 54.5% describe themselves as self-directed learners, which is a substantial increase from Warner et al's (1998) finding that only 28% of VET students were ready for flexible learning.
- On the other hand, 72.5% prefer to learn through hands-on practice, while online learning rarely provides even simulated work tasks.

On the basis of this survey, VET providers can be encouraged to continue to provide online learning opportunities, balanced by the opportunities for hands-on practice.

VET providers can stimulate the growth of online learning by:

- encouraging the development of self-directed learning
- encouraging employers to make available Internet access in the workplace.

The market for individuals: results from the survey of providers

A survey was conducted of VET providers' attitudes to online learning. As shown in Appendix 3, twenty five provider organisations responded, including 15 TAFE Institutes, 6 private providers and suppliers, 3 TAFE divisions of universities and one Government project. Nine of the organisations are based in regional or rural areas and 96% of the VET organisations surveyed deliver online learning. This could be considered to be a wide cross-section of organisations involved in VET.

In relation to profiling the online market for individuals, key findings from the survey of VET providers conducted for this project include:

- 95.5% of the individuals who might study or do study online with these VET organisations prefer to use online learning in conjunction with other delivery strategies.
- 81% of the individuals who might study or do study online with these VET organisations are mostly working adults.
- 27% of the individuals who might study or do study online with these VET organisations mostly study Information Technology topics.
- 45.5% of the individuals who might study or do study online with these VET organisations are mostly self-directed learners, i.e. they require minimal guidance from teachers.
- 55.6% of the individuals who might study or do study online with these VET organisations are mostly verbal learners, i.e. they prefer to access the written or spoken word.
- 13.3% of the individuals who might study or do study online with these VET organisations prefer to use online learning to study short courses that do not lead to accreditation. (This result contrasts with the figure of 66.7% of respondents to the student survey.)
- The percentage of the students who might study or do study online with these VET organisations that work in government bodies varies from less than 10% to 50%.

The market for individuals: results from the interviews

According to the interviewees for this project, the profile of the target market for individuals includes:

- Individuals who need to develop IT competencies
- Individuals with a need for certification
- People at work who access online learning through the employer
- Part-time students
- Life-long learners
- Self-directed learners ('Online learning suits experienced and dedicated learners and lots aren't.')
- The professional who is looking to obtain quick skills in a prescribed area
- The professional who is looking to make a career move
- Older learners who are seeking to learn new skills in a wide variety of areas.

Summary profile of the individual VET learner market

The profile of the market for individual VET online learners, as summarised by our earlier research in July 2001, was as follows:

> working adult students such as IT contractors, who are positive about the benefits of learning, are self-directed and verbal learners, and want to study IT courses, such as application development tools, application software and system infrastructure software, using online learning together with other technology-based delivery modes.

Based on the research for this project, the above July 2001 description can now be amended. The profile of the individual VET learner market for online learning includes the following broad characteristics:

- working adult students,
- positive about the benefits of learning and are self-directed and verbal learners,

- who prefer to use online learning in conjunction with other delivery strategies and also like to learn through hands-on practice,
- appreciate extra support in online courses such as face-to-face or telephone contact with a teacher,
- believe that online learning saves them time and helps them do their job better,
- often use the Internet at home for around two hours per day,
- sometimes have employers who support online learning and provide access to online facilities at work,
- will take advantage of online learning for both short courses and accredited courses,
- often would use it to study IT courses but could use the medium to study a wide range of different VET courses,
- and would study more online courses if they were made aware of them.

The market for enterprises: results from the survey of providers

The following profile of the enterprise/corporate market was provided by a survey and from interviews. The survey revealed that:

- Industries likely to employ students who study online with these VET providers include the following: IT-based industries; Retail; Education and Community Services; Financial Services; Multi-media training; Hairdressing; Electronics; Dental; Business; Hospitality; Child Studies; Nursing; Horticulture; Engineering; Quarrying; Rural sector.
- 85.7% of the companies or government bodies who are customers of these VET providers, and are interested in online learning, value online learning for the benefits it brings to their business.
- 95.2% of the companies or government bodies who are customers of these VET providers and are interested in online learning have branches spread over large geographical areas.
- 42.9% of the companies or government bodies who are customers of these VET providers and are interested in online learning have a high staff turnover.
- 82.35% of the companies or government bodies who are customers of these VET providers and are interested in online learning require regulatory training.
- 95.65% of the companies or government bodies who are customers of these VET providers and are interested in online learning require induction training.
- 62% of the companies or government bodies who are customers of these VET providers and are interested in online learning require the software tools needed to manage online learning.
- 75% of the companies or government bodies who are customers of these VET providers and are interested in online learning need to instruct their staff in the use of technology or equipment for online learning.

The market for enterprises: results from the interviews

According to the interviewees for this project, the profile of the corporate or government target markets often consists of:

- Companies with a distributed workforce (e.g. ambulance services)
- Industries undergoing significant change, where new skills are needed quickly (e.g. financial services)

- Employers who are scheduling online learning during work time. (‘The priority is the business market where the company schedules online learning. TAFE is not in it: as a sector we are missing out. This is a grave concern. TAFE is seen as for apprentices and traineeships.’)
- Employers committed to staff training (‘High dollar spend on training.’)

Summary profile of the enterprise market

The profile of the enterprise market for online learning, as summarised by our earlier research in July 2001, was as follows:

> Enterprises who value training to meet business needs and currently use or plan to use online learning as part of a package of e-learning strategies, in industries such as health and community services, construction, wholesale trade or financial services, who may be spread over a large geographical area, have a high staff turnover or require regulatory training or who require services and the technology tools needed to manage online learning.

Based on the research for this project, the above description can now be amended to read as follows. The most likely enterprises to be attracted to online learning, on average,

- value training to meet business needs,
- currently use or plan to use online learning as part of a package of e-learning strategies,
- come from a wide cross-section of industries,
- provide staff with access to online learning at work,
- are sometimes undergoing significant organisational change,
- may have branches spread over a large geographical area,
- sometimes have a high staff turnover,
- often require regulatory/compliance or induction training,
- require services and the technology tools needed to manage online learning
- and need to instruct their staff in the use of technology or equipment for online learning.

Profile of the Government market

The profile of the government market, as summarised by our earlier research in July 2001, was similar to the ‘enterprise’ profile, as follows:

> Government agencies who value training to meet business needs and currently use or plan to use online learning as part of a package of e-learning strategies, who may be spread over a large geographical area, have a high staff turnover or require regulatory training or who require services and the technology tools needed to manage online learning.

Based on the research for this project, the above description can now be amended to read as follows:

> The most likely government agencies to be attracted to online learning value training to meet business needs and currently use or plan to use online learning as part of a package of e-learning strategies, operate in a wide cross-section of industries, provide staff with access to online learning at work, are sometimes undergoing significant change, may have branches spread over a large geographical area, sometimes have a high staff turnover but often require regulatory/compliance or induction training, require services and the technology tools needed to manage online learning and need to instruct their staff in the use of technology or equipment for online learning.

Business opportunities in the targeted market segments

The above analysis of the target markets enable some comments to be made about the needs of these target markets, taking into account types of products needed and usage levels. For the individuals' market, products needed include online courses supplemented by other learning and support systems, including some face-to-face contact with teachers and, where appropriate, hands-on practice. The individuals' market can use more online products, for both short courses and accredited courses, but individuals need to be made aware of what is available.

For the enterprise and government agency markets, products needed include customised content in relation to induction and compliance; the technology tools needed to manage online learning; and assistance in instructing their staff in the use of technology or equipment for online learning. The enterprise and government agency markets can use more online learning products and services that provide these organisations with business benefits.

3. Access strategies for selected markets

Access to markets is often affected by constraints such as the time, money and other resources required for success. This section highlights 'access' challenges and strategies for selected VET online markets, as identified through the research for this project.

Summary

Winning access to different VET online learning market segments requires a combination of resources, planning, technology, organisational capability, staff expertise, student support systems, reputation and perseverance.

84% of VET providers of online learning surveyed for this study consider that both costs and time restraints are restricting their access to the market. Other factors limiting their access are staff inexperience (76%); organisational inexperience (41.66%); overseas competitors (39%); student support systems (33.3%); and lack of a brand name (26%). 41.67% believe that their organisation's access is restricted by the limited applications of online learning in a competency-based training system. 65.2% of VET providers consider their access to the market for individuals is limited by some students' learning styles not suiting online learning and 50% believe that students' access to the online learning market is restricted by the students' lack of necessary technology.

Access challenges and strategies identified through interviews

One interviewee summed up the challenges to accessing different markets as follows:

> The challenges are costs; appropriateness of the learning material; access to technology, including bandwidth. While 50% of Australians are online, perhaps the ones who need it most are not online.

Chastened after the failure of an online product provided to remote area local government, one interviewee noted that VET deliverers of online learning need to ensure they have both the software and hardware required for remote delivery.

Access strategies suggested by one interviewee included:

> Initially you need an understanding of the market. Then try and pick up a leading company in that market and do some work at a discount. Get to understand their needs clearly and find a service that can add value.

To meet the challenge of serving the needs of the widely distributed Australian community of small to medium size enterprises, one interviewee suggested that strategic alliances are needed with Austar, the cable TV company in regional Australia and with the larger communication suppliers.

Another commented:

> I think careful marketing plans to each target market is critical. All too often we see the investment in marketing program as a very small percentage of the overall budget set aside to deliver an online program.

Access strategies and challenges identified through the provider survey

Costs and time are the two largest access issues in the online market for VET providers. In the provider survey, 84% of VET providers indicated that their access to the online learning market is restricted by the **costs** of producing and customising online material. Comments in the survey included:

> Developing good online material is time and resource consuming. Education dollars are short.
>
> Much of the product has been developed by employees working beyond their job descriptions and expectations.
>
> But, certainly, there are limitations on the availability staff to produce or repurpose content and projects need to be prioritised.;

Providers are looking for ways to remove the cost barrier:

> Our Institute is moving from producing our own materials to customising or franchising or purchasing quality off the shelf products and putting emphasis on good moderating.
>
> We offer low-cost content development services to remove this barrier.
>
> The approach taken is to find the market first, then access funds to be able to develop/customise materials. If we can't access funds then it is difficult to develop the market.

Time is another significant access issue: 84% of VET providers indicated that their access to the online learning market is restricted by the time required to develop online learning material. A typical response was:

> Staff need extensive training and support to enable them to implement effective instructional design and to develop effective online resources.

The availability of generic online material assists providers to overcome the time barrier:

> We are in this respect advantaged by having access to the TAFE Virtual Campus, which has a large database of training products already developed.

Staff inexperience is the third major access issue for VET providers: 76% of VET providers considered that their access to the online learning market is restricted by the lack of their staff's experience in delivering and assessing online:

> This is the main issue. Staff include all levels i.e. managers as well.
>
> Most teachers would not be comfortable in this environment.

On the other hand, providers are attempting to remove staff inexperience as a barrier:

> Our Institute is investing considerable PD$ to develop lecturer e-moderating skills across all programs.
>
> As we move into a relatively high level of staff training and exposure, this problem is less one of know-how than opportunity, time and ongoing support within departments.
>
> Prior to 2001, staff have in a number of cases experienced difficulty in accessing sufficient computer time and training. The rollout of 195 laptop computers and training in their use has dramatically lifted our ability to deliver and assess online.
>
> Yes, but as we have a culture of adopting flexible delivery methodology this is not the main barrier and we have a project team training staff.
>
> It is something that is improving on a continuous basis.
>
> Being addressed progressively through Staff Development.

Organisational inexperience is a barrier for some providers: 41.66% of VET providers consider that their organisation's access to the online learning market students is restricted by their organisation's lack of experience with online learning.

> And not just the delivery side: the management and business development experience is also lacking.
>
> While we are making large strides we need time to consolidate so that we can more confidently approach the market.
>
> More by the fact that it's not seen as a core strategy or priority.
>
> No – working in a Flexible Learning Network has been pivotal in gaining this experience;
>
> Partially – areas of extensive expertise and others of high ignorance.

For some providers, organisational inexperience is less of an issue than costs:

> Yes but we are willing to learn and see the barriers of cost and time as more applicable.
>
> More about infrastructure and investment in physical resources.

Student support needs to be provided: 33.3% of VET providers consider that their organisation's access to the online learning market restricted by the need to provide student support in addition to online material.

> The organisation has yet to fully evaluate the costs in terms of staff workloads that are required to fully and effectively support online learning.
>
> Getting started as teachers, getting started as students: both require a lot of time and support to ensure confidence and persistence.
>
> Library staff are being continually trained in computer systems and platforms so that they are able to assist students. They have been involved in LearnScope and other Professional Development programs. Teacher support for online students is a necessary part of any online program. We do not believe that students can be enrolled, provided with online material, then left. Such support is provided through using profile funds for delivery, that provide for teachers supporting the learning effort.
>
> As with any methodology we develop strategies for learning support as required by learners.
>
> But this is not a negative as research would indicate that this is strong basis for successful completion.Without student support you don't have a learning environment.

A **brand name** is a barrier for some providers: 26% of VET providers consider that their organisation's access to the online learning market is restricted by their organisation's low-profile brand name in the online arena.

> We could do a lot better, particularly internationally, if we were associated with an Australian online consortium;
>
> Needs improving.
>
> A higher profile would always be better.
>
> As a high profile user and sponsor of the TAFE Virtual Campus, our Institute has a reasonable profile.
>
> Yes and no! Our Institute seems to have a reasonable profile nationally as modelling best practice in flexible learning options.
>
> Haven't put this as a priority in marketing so can't comment. However, suspect that our strategy of having online support (which is available now) will enhance our business. We will build on our reputation of leaders in flexible delivery.

Overseas competitors are becoming more significant: 39% of VET providers consider that their organisation's access to the online learning market is restricted by competition in the market from international online learning companies.

> We won't try to compete with expert online learning companies. It isn't our niche market.
>
> We have not even explored this as it's not a mainstream delivery strategy at the Institute.

However, providers have alternative strategies:

> Probably not yet, but we can't be complacent! We are working hard on competing effectively through strategic partnerships.
>
> We have a national and growing international market based on our focus on the individual learner, our creativity and our ability to develop partnerships with learners.

Competency-based training not always fitting with the online medium is an issue: 41.67% of providers consider that their organisation's access to the online learning market is restricted by the limited applications of online learning in a competency-based training system. Views were mixed on this topic:

> There are good resources around if you know where to look.
>
> Online learning provides us with opportunities for holistic and integrated learning. The competency-based system does not encourage the development of a constructivist approach to learning.
>
> Not really – online learning can be developed that meets the criteria for competency based training, and can be used in a mix of training methods and materials.
>
> More by our markets and the ability to apply technology to them.
>
> Simulations, scenario and metaphorical learning are very appropriate but expensive.

Access strategies for the individual VET learner market identified through the provider survey

Students' learning styles are a significant barrier to opening up the market for online learning: 65.2% of providers indicated that their organisation's access to the online learning market was restricted by some students' learning styles not suiting online learning.

> This could change as the teacher methodology changes.
>
> As mentioned above, online learning is only one training direction. There are many ways to successfully train.
>
> We jumped in here and said yes, but the reality is this is based on research data from elsewhere, and our experience with learning styles and preferences outside online. We need to look further at student preferences and styles over time, when it is not just an issue of lack of familiarity.
>
> We support a blended approach to online learning where programs utilise a range of modes of delivery appealing to a range of learning styles.
>
> Good online learning should cater to all learning styles!
>
> No one strategy has any across the board client suitability, including online.
>
> Need to cater for various learning styles even online - mixed mode.
>
> We would only offer this as an option; not the only learning methodology.
>
> Yes there are definitely large gaps in this area.

> But, classroom based learning is not well suited to some learners either. I don't think learning styles preclude the use of online – we just need to get better at the way we use it.
>
> The technology can always be fitted to learner and task needs.

Students' access to technology is a barrier for half the providers: 50% of providers consider that their organisation's access to the online learning market is restricted by the students' lack of necessary technology. However, for some providers, this is not an issue.

> Our courses are designed for low technology needs.
>
> Especially lack of client technology.
>
> And the evidence is very clear that this is (a) truer of the TAFE market than higher ed. and corporate PD, and (b) the digital divide is considerably greater in regional areas of Australia.
>
> We have 98% online access from our customers.
>
> Some students do not have access at home to computers. The institute is providing a range of alternatives such as facilities in the library, open access rooms etc.
>
> While there is a good deal of computing equipment available in classrooms and libraries, many of our students do not have access at home to up to date equipment that can handle the applications being used in delivery. While they may have access at work, this is not an answer since they need to complete their work.
>
> Again yes and no! Student surveys relating to online learning suggest this is becoming less of an issue. Our LRCs and Technology Common also provide extended access.
>
> A big problem in some regional areas.
>
> Facilities are available on campus for student use - courses also provided on CD Rom;
> Many of our students and communities are now able to access higher level technology than we have in TAFE.
>
> Particularly the issue of bandwidth in rural and remote areas.
>
> Probably to an extent. A survey of RMIT students in 1999 or 2000 established that about 10% of student do not have (and never will have) their own computer at home. But this also means that the majority of students do have access to necessary technology. In addition, all RMIT students have access to technology on-campus.
>
> This is neither yes or no. Certainly some learners have neither the technology nor the IT literacy to be able to learn online. But just as many (more in fact) are well equipped.

Access strategies for the corporate market

One interviewee felt that it was becoming increasingly difficult for small providers of online learning to enter the market, as larger providers offered the client their experienced staff and their credibility. He gave the example of how his large company had just commenced the development of 180 hours of online content over an 18-month period, producing 2.5 hours per week and involving two staff full time. He wondered whether a TAFE Institute could scale up and meet this demand. He believed that the only future for small companies was to become involved in teaming arrangements, as the industry was beginning to consolidate.

Others commented:

> We need to know a huge amount about needs and expectations about target markets. Corporations don't know enough about TAFE and vice versa.
>
> We need to practise relationship marketing. We need to work on the network of contacts that we already have: most consulting business is done through relationship marketing.

Potential growth

The survey revealed that **increased output** is possible for almost all providers: 96% of provider organisation could deliver more of its existing products and services using online learning, if barriers could be removed.

> We need time and money to develop innovative online programs.
>
> We will deliver more and more as our staff become better equipped and trained and as we grow our market.
>
> Definitely – the barriers of cost and time are our only restrictions.
>
> The programs developed to date can be used as templates for other areas and in many cases the generic learning resources can be adapted for other applications. And we are continually building more and more of our courses to include online components.

4. Good practice models

This section outlines good practice models of successful VET providers in the online national marketplace. A number of the examples are taken from the companion document, ‘Marketing Tools and Models for VET Online’. The following are samples only and not an exhaustive list of all good practice in the online field in VET. It was not possible to include some examples of good practice from the private sector, as this would have breached commercial confidentiality.

Market segmentation

A market segment consists of large identifiable groups within a market. Segmenting the market, before conducting field research, will lead to the development of more useful data.

In the TAFE NSW market research study (2001), survey returns were received from 339 people from the following ten, targeted market segments: school leavers; career builders; career changers; people returning to work; TAFE students; small to medium businesses; medium to large businesses; TAFE teachers and advisors; secondary school career advisors; and professionals unlikely to attend TAFE. This is a useful example of market segmentation.

Target marketing of niche markets

Target marketing involves identifying the major market segments, targeting one or more of these segments, and developing products and services and marketing programs suited to each of the segments.

Market segments are large identifiable groups within a market, e.g. ‘working adult students’ in the VET market. Niche markets are a sub-segment: e.g. ‘registered nurses’ among ‘working adult students’. Examples of effective target marketing of niche markets for online products and services in VET include:

- Illawarra Institute’s Julie Collereda who has effectively marketed an online course on Wound Management as a Graduate Certificate for Nurses around NSW.
- Illawarra Institute’s ‘Extractive Industries, Quarry Management Diploma Online’, a finalist in the 2001 ANTA Training Awards, is an instance of a VET provider targeting the mining industry market and satisfying a niche within that target market.
- Northern Territory University developed and delivers online to very remote areas seven modules from the Certificate 11 in Sport and Recreation.

Product development

The Hotel School at Regency Institute of TAFE in South Australia began developing online courses for its students in the mid-late 1990s, but then took the opportunity to provide a whole degree online for its international students.

Catalyst Interactive developed a web-based safety orientation course for Sydney Water, which uses humour and animation. A feature of the course is that the client can make changes and maintain the product in-house, without recalling the designer, which is important as the topic is prone to change, due to updated legislation.

Pricing strategies

NetOnline is a flexible learning network in Victoria, involving cooperatives of education providers working together to provide TAFE and ACE programs that are accessible via the Internet. NetOnline provides a range of online services at reasonable prices that reflect the community-building objective of the network. For instance, online networks can be set up for companies for $150 per person per year, providing facilities such as email, group conferencing and uploading files; but the charges for associations and community groups is $50 per person per year. See http://online.nmit.vic.edu.au/fln/concept/htm

Sales strategies

Provider of online IT courses, SelfCert in Sydney sells most of its online courses using telemarketing and a small percentage via its website at www.selfcert.com.

Online marketing

Websites are often used effectively as marketing tools by organisations providing online training, such as www.monster.com, www. SmartForce.com.au, www.netg.com.au, www.cbts.com.au, and www.qantm.com.au.

Online communities

Online learning providers sometimes create a sense of community with their websites, offering users access to new research, encouraging users to communicate with other users via bulletin boards, providing free courses and profiling satisfied customers via testimonials. See, for example, www.etraining.com.au.

Online taster courses

Western Australia's WestOne http://www.westone.wa.gov.au/intotheinternet/ is an exponent of offering free 'taster' courses online. Its 'Into the Internet' range of free online tutorials help people get what they want out of the Internet. Similarly, Victoria's Virtual Campus http://www.tafevc.com.au/samplecourse.html offers a number of free online courses, such as Life Online, Psychology and Australian Sport, to provide an insight into the effectiveness of online learning.

Online newsletters

Many organisations have distributed online newsletters, in effect providing libraries of content. The trend now is to send the reader back to the author's website, enabling the author to progressively build up the website. See, for example, EdNA News & Views Email Alert http://www.edna.edu.au/.

Outsourcing

An example of outsourcing is as follows: in 2000-2001 TAFE frontiers in Victoria engaged Online Learning Australia to conduct a mail-out survey of the take-up and use of online learning strategies and systems in corporate Australia. Roy Morgan Research then conducted the research on behalf of these two parties. See the report at www.tafefrontiers.com.au

Customer Relationship Management

Educational organisations are becoming increasingly interested in Customer Relationship Management (CRM). The Securities Institute of Australia introduced CRM in the organisation in 2001, as profiled in a forthcoming study for NOIE on 'E-business in Australian Education' (Mitchell, 2001c).

Alliances

In July 2001 it was announced that the 'RMIT consortium' of RMIT University, RMIT International, the Global University Alliance and NextEd had been awarded the tender to develop a public-sector corporate university online, to deliver business education and training. Initially it will service Austrade's 1,000 staff worldwide.

VET marketing publications

A number of VET publications in relation to VET online products and services are available:

Australian National Training Authority's work on market segmentation. Access it at www.anta.gov.au

FLAG Flexible Delivery Business Planning Tool, available at

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

Mitchell, J.G, Latchem, C., Bates, A. & Smith, P. (2001), *Critical Issues in Flexible learning for VET Managers, TAFE frontiers*, Melbourne (see Section 3.7) http://www.tafefrontiers.com.au/content/MoreNewsPage.html

Mitchell, J. G. (2000a) *International e-VET Market Research Report, a report on international market research for Australian VET online products and services,* EVAG. http://flexiblelearning.net.au/evetmarketing/docs/intlmark.rtf

Reid, C. (2001), *Flexible Learning in VET: Market Research, 2001* (forthcoming. www.tafefrontiers.com.au)

TAFE frontiers and Online Learning Australia (2001), *The Current Status of Online Learning in Australia* *http://* www.tafefrontiers.com.au

Phillips, M. (1999), *Successful Internet Marketing: A Guide for TAFE Providers,* OTFE, Melbourne

http://www.otfe.vic.gov.au/learningtechnologies/marketing/stage5.htm

Phillips, M. (1999) *Successful Internet Marketing: Project Report*, OTFE, Melbourne http://www.otfe.vic.gov.au/learningtechnologies/marketing/stage4.htm

5. Recommendations

This section sets out recommendations for the further development of tools and models and online training products and services.

Tools and models

The set of marketing tools developed for this project and set out in the document 'Marketing Tools and Models for VET Online' does not cover the full range of market research activities.

> 1. It is recommended that additional tools be added to the current set, to cover the following topics within the field of market research: 1. Establish the need for marketing research; 2. Define the problem; 3. Establish research objectives; 4. Determine research design; 5. Identify information types and sources; 6. Determine methods of accessing data; 7. Design data collection forms; and 8. Determine sample plan and size.

The current set of marketing tools, set out in the document 'Marketing Tools and Models for VET Online', does not cover the full range of marketing planning activities.

> 2. It is recommended that additional tools be added to the current set, to cover the following topics within the field of marketing planning and management: project managing the customisation of existing content; designing marketing communications; relationship marketing; developing and managing brands; and sales promotion and selling techniques.

Many small providers of online learning products and services are unable to respond to clients who seek a significant increase in output.

> 3. It is recommended that, to assist small providers of online products and services to be able to scale up their operations to serve growing markets, a study be undertaken of alternative business models available to small providers. Alternatives may include forming partnerships, seeking investor funds or buying other complementary businesses.

The relationship between online learning, e-learning and the Training Packages is of interest to providers and deserves further investigation.

> 4. It is recommended that a study be undertaken of the applicability of e-learning to Training Packages.

Online training products and services

Research for this project highlights gaps in the national research data on the market for individuals.

> 5. It is recommended that research be conducted into the following variables of the e-learning market for individuals: geographic data (e.g. regional variations); demographic data (e.g. age group 25-35); psychographic data (e.g. young adult 'renters' with active lifestyles); behavioural data (e.g. usage rate).

Research for this project highlights gaps in the national research data on corporate and government markets.

6. It is recommended that research be conducted into the following variables of corporate market and government markets for e-learning: demographic data (e.g. which size companies); operating variables (e.g. heavy/light users of online training); purchasing approaches (e.g. companies seeking good service or high quality or low cost); situation factors (e.g. companies with an urgent need; large or small orders); personal characteristics (e.g. risk takers).

Connections between self-directed learning and the adoption of online learning would seem to be close.

7. It is recommended that research be conducted into the importance of and ways to stimulate self-directed learning among VET students, to enable them to take advantage of e-learning.

An increase in the number of VET students who see themselves as self-directed may have a larger influence on the future of online learning than technological improvements:

8. It is recommended that the percentage of VET students who describe themselves as self-directed learners be monitored.

While some VET practitioners believe that the lack of universal access to broadband transmission services is preventing the growth of online market in Australia, there is some support in the VET community for making the best of the limited Internet access in some areas of Australia.

9. It is recommended that research be conducted into the advantages and limitations of 'low budget' e-learning products and services, that utilise standard 28-56kbit modem transmission.

Learning objects is a most popular new topic in VET online learning circles. Some caution is advisable, as this new approach, which enables both teachers and students to construct new learning pathways, may not suit all learners and markets.

10. It is recommended that Research be conducted into the national VET market for learning objects.

Some observers believe that Government-funded projects often are thwarted by the lack of funds committed to marketing the products of those projects.

11. It is recommended that research be conducted into effective marketing strategies for Government-funded VET online products.

Appendix 1. Project outputs

The brief for this project required the consultant to provide nine products or outcomes, as outlined in the table below. In producing these nine deliverables, the consultant produced six written reports and one presentation that are now available on the Flexible Learning Advisory Group web site at http://flexiblelearning.net.au/national/np_news.htm

Table A.1: Consultant's tasks and products

Consultant's Tasks	Product
1. A summary of existing market research into VET online products and services	Completed 24 July 2001: Mitchell, J.G. & Wood, S. (2001), *Scan of the literature on market research into VET online products and services in Australia*, FLAG, http://flexiblelearning.net.au/national/np_news.htm Mitchell, J.G. (2001b), *Summary of Existing Market Research into VET Online Products and Services in Australia*, FLAG, http://flexiblelearning.net.au/national/np_news.htm
2. A list of selected priority national markets	Initial target markets study completed 24 July 2001: Mitchell, J.G. (2001a), *Initial Target Markets for VET Online Products and Services in Australia*, FLAG, http://flexiblelearning.net.au/national/np_news.htm
3. Detailed profile of selected Australian markets for online products and services	See Chapter 2 of this report
4. Access strategies for selected markets identified through the research	See Chapter 3 of this report
5. Tools and models for market research that will assist RTOs to enter, maintain and grow national markets for online products and services.	Completed November 2001. Available at http://flexiblelearning.net.au/national/np_news.htm
6. A database of agencies, organisations, individuals and information to support VET marketing of products and services	Completed November 2001. Available at http://flexiblelearning.net.au/national/np_news.htm
7. Good practice models of successful VET providers in the online national marketplace.	See Chapter 4 of this report.
8. Recommendations for further development of tools and models, online training products and services	See Chapter 5 of this report.
9. Briefing sessions and reports tailored to the needs of key	Conducted in Sydney and Adelaide on 20-21 November 2001. PowerPoint report available at

stakeholders	http://flexiblelearning.net.au/national/np_news.htm

Limits of this study

The funding for this study covered the nine deliverables set out above, using the methodology set out in Appendix 2. The funding did not enable research into a range of additional issues of interest to the Steering Committee, viz:

1. Qualification levels to target
2. Lifestyle versus distance as a factor
3. Regional differences
4. Technology infrastructure
5. Role of reusable learning objects
6. Relationship between the eVET National Marketing project and the Online Product Development project
7. Readiness of markets for state-funded online products
8. Gaps not currently being addressed by the development project
9. Acceptance levels for current products.

The above list indicates the breadth of marketing issues for online products and services, still requiring research in the Australian VET sector.

Appendix 2: Methodology

Below is a summary of the methodology used for this project, following the Specification for the project.

1. **Gather and analyse information from previous and current projects**. A search was conducted of all projects in the VET sector and a literature review prepared. See

   Mitchell, J.G. & Wood, S. (2001), *Scan of the literature on market research into VET online products and services in Australia*, FLAG, http://flexiblelearning.net.au/national/np_news.htm

   Mitchell, J.G. (2001a), *Initial Target Markets for VET Online Products and Services in Australia*, FLAG, http://flexiblelearning.net.au/national/np_news.htm

2. **Analyse data from the 2000 International e-VET Marketing project and identify information relevant to this project**. As we authored this report, we were mindful of the danger of being complacent. We brought a fresh eye and a rigorous approach to this task, based on our work in related fields since completing the above report in September 2000.

3. **Build on past projects and the ANTA Marketing research.** Our findings from this research into other projects are set out in

   Mitchell, J.G. (2001b), *Summary of Existing Market Research into VET Online Products and Services in Australia*, FLAG, http://flexiblelearning.net.au/national/np_news.htm

4. **Identify Australian markets for online products and services**. Building on the research conducted for the three reports cited in (1) and (3) above, the interviews and surveys for this FLAG project were used to identify markets.

5. **Research the needs of Australian markets**. To further research the needs of Australian markets, a survey was conducted of both providers and potential users (students); using a separate survey form for each group and questions that elicted both qualitative and quantitative data. The consultant conducted the survey of providers by email. By arrangement with the FLAG-appointed Project Management Team, the number of organisations approached totalled 45 and the response rate was 56% (N=25). The Project Management Team distributed the student survey form, through a network of VET providers around Australia. The proposed survey sample sizes for users was 200 but 234 were obtained.

6. **Research existing and emerging activity in the development and delivery of VET online products and services relevant to Australian markets.** Interviews were conducted with 23 key players from at least six States and Territories, using a mix of face to face and telephone interviews, as appropriate. The interview questionnaire is set out in Appendix 4.

7. **Recommend on the development of online training products and services.** Based on the research for this project, we developed the recommendations set out in Chapter 5 of this report.

8. **Develop appropriate tools and models that will build online capability.** We developed the nine tools as outlined in the Project Specification. The tools are designed so that the user can easily modify them for their individual context. The tools were field tested by a range of VET personnel from around Australia, as set out in Appendix 3.

9. **Develop a database of agencies, organisations, individuals and information to support VET marketing of products and services**. We developed a database of over seventy key market players.
10. **Conduct and/or contribute to briefing sessions for key stakeholders.** As contracted, we conducted two 3-hour briefing sessions, one in Sydney and one in Adelaide, in November 2001. The objectives of the sessions were to (1) enable participants to apply the findings from the research to their own situations, (2) help participants gain confidence with using the tools developed in the project and (3) to help participants learn how to access the valuable research data identified during the project, subject to the approval of the Project Manager.

Appendix 3: Project contacts

Interviewees

1. Patrick Aylmer, Selfcert, NSW
2. Kathlyn Norman, NETg, NSW,
3. Grant Beevers, SmartForce, QLD
4. Michael Grosser, Catalyst Interactive, ACT
5. John Sayer, Corskill, QLD
6. Allan Christie, NetSpot, SA
7. Tony Brady, TAFE NSW Online, NSW
8. Leura Cathcart, TAFE QLD
9. Sheila Fitzgerald, TAFE frontiers, VIC
10. Antoine Barnaart, NTU
11. Barbara White, NTU
12. Stuart Young and Sue Lapham, WestOne WA
13. Pauline Robinson, Canberra Institute of Technology, ACT
14. Ian Segail, Rebel Sport, NSW
15. Vivienne Peterson, Sabre Pacific, NSW
16. Maria Lowe, Oracle Corporation, NSW
17. Mark Keough, SA
18. Alex Holder, Appcon, NSW
19. Anthony Tyrrell, Centrelink Virtual College, ACT
20. David Little, Icon Training and Reskilling, VIC
21. Jock Grady, Hunter Institute, NSW
22. Alex Holder, Appcon Learning Solutions, NSW
23. Laurel O'Hara, SmartForce, NSW.

VET Provider respondents to the survey

1. Northern Territory University: TAFE Division, NT
2. Brisbane Institute of TAFE, QLD
3. CBTS, VIC
4. Chisholm Institute of TAFE, VIC
5. Canberra Institute of Technology, ACT
6. Central Queensland Institute of Technology, QLD
7. Hunter Institute, NSW
8. Illawarra Institute, NSW

9. Online Learning Australia, VIC
10. Torrens Valley Institute of TAFE, SA
11. Onkaparinga Institute of TAFE, SA
12. Regency Institute of TAFE, SA
13. RMIT, VIC
14. Securities Institute, N SW
15. Sheppard Consulting, SA
16. SmartForce, QLD
17. Southrock, VIC
18. Spencer Institute of TAFE, SA
19. South Western Institute of TAFE, VIC
20. E-learn WA, WA
21. Southern Queensland Institute of TAFE, QLD
22. Douglas Mawson Institute of TAFE, SA
23. Swinburne University-TAFE Division, VIC
24. Wodonga Institute of TAFE, VIC
25. Sunraysia Insitute of TAFE, VIC.

VET personnel invited to field test the marketing tools

1. Warren Finch, IT Teacher, Northern Sydney Institute, NSW
2. Elizabeth Pringle, Learning and Development Manager, ACS Learning Centre, NSW
3. Helen McNamara, Manager, Strategic Planning Services, Swinburne University/TAFE, VIC
4. Marlene Manto, LearnScope Coordinator, SA
5. Anne Dening, Educational Manager, Murray Institute of TAFE, SA
6. Barry Pearson, Business Development Manager, DMIT, SA
7. Wally Knack, IT coordinator, Barrier Reef Institute QLD
8. Claire Brooks, RMIT, VIC
9. Leonie Wheeler, Learning Network Manager, RMIT, VIC
10. Jock Grady, Hunter Institute of TAFE, NSW
11. Peter Newman, Business Development Manager, North Coast Institute of TAFE, NSW
12. Fran Cane, Marketing, Sydney Institute of TAFE, NSW
13. Peter Waterhouse, Managing Director, Workplace Learning Initiative, VIC
14. Ray Tolhurst, Deputy Director, Illawarra Insitute of TAFE, NSW
15. John Sayer, Managing Director, Corskill, QLD
16. Pauline Robinson, Manager, International, CIT, ACT
17. Barbara White, Educational Manager TAFE, NTU, NT
18. Sheila Fitzgerald, Manager, TAFE frontiers, VIC
19. Christine Bateman, LearnScope Coordinator, WA
20. Frank Bate, Elearn WA, WA

Companies providing data for the database, as at 28 November 2001

1. AdelaideiGlobal, SA
2. Adnet Training, VIC
3. Appcon Pty Ltd, NSW
4. Aspire Training and Consulting, VIC
5. Aurora Training and Professional Services, NSW
6. Australian Institute of Fitness, ACT
7. Australian Education International, ACT
8. Barrier Reef Institute of TAFE, QLD
9. Catalyst Interactive, ACT
10. CBTS (Australia) Pty Ltd, VIC
11. Centre for Applied Learning Systems, SA
12. Choice Training and Consulting Services Pty Ltd, NSW
13. Competency Based Trainers Pty Ltd, TAS
14. Cordecom, WA
15. CPM Group, ACT
16. David Wyatt & Associates, SA
17. DeakinPrime, VIC
18. Deborah Nanschild & Associates
19. DRT Network Pty Ltd, QLD
20. Ecoomm.unity Planet Pty Ltd, NSW
21. Eddy Gordon Media Pty Ltd, SA
22. EDU Technologies Pty Ltd, SA
23. Elearn WA, WA
24. Future Learning Systems Pty Ltd, NSW
25. Golden Haired Boy Multimedia, SA
26. Gordon Institute of TAFE, VIC
27. Greenacres Training Services, NSW
28. Hunter Institute, NSW
29. I.C. Media, SA
30. iedex, VIC
31. Impart Corporation Pty Ltd, NSW
32. IPR Systems Pty Ltd, NSW
33. Janison Solutions, NSW
34. Jobs Australia Ltd, VIC
35. John Mitchell & Associates, NSW
36. Kangan Batman Institute of TAFE, VIC
37. Logistics Training International, NSW
38. McLaughlan Consulting Pty Ltd, SA

39. Microcraft Pty Ltd, Vic
40. Neal Headford & Associates Pty Ltd, WA
41. New Hobson Press, NSW
42. North Melbourne Institute of TAFE, VIC
43. North Queensland Executive Training Pty Ltd, QLD
44. Northern Territory University, NT
45. Online Learning Australia, VIC
46. Ochre Information Systems Pty Ltd, QLD
47. OCTEC Incorporated, NSW
48. Open Learning Institute of TAFE, QLD
49. Parasol EMT Pty Ltd, ACT
50. Pearson Education Australia, NSW
51. Quality Automotive Training, SA
52. Safecity Training Academy, NSW
53. SMA (Operations) Pty Ltd, NSW
54. South West Institute of TAFE, VIC
55. Smartmedia, SA
56. Stephen Watt Consulting, SA
57. Department of Rural Industries, Office of Rural Communities, QLD
58. TAFE Connect, NSW
59. T&S Institute of Technology & Management, NSW
60. Techcomm Simulation, NSW
61. The Education Channel International Ltd, QLD
62. The Home Publisher, NSW
63. The Learning Group, NSW
64. Training Online International Pty Ltd, QLD
65. WebCiTe Pty Ltd, SA
66. WebRaven Pty Ltd, QLD
67. Western Pacific Association of Transactional Analysis, WA
68. where-u-learn.com Pty Ltd, SA
69. White Gum Consulting, SA
70. Workforce Management Consulting, NSW

Appendix 4. Interview questions

Interview instrument for VET providers

Thank you for agreeing to be interviewed for the above project, which is funded by the Flexible Learning Advisory Group. Your answers will influence the project's findings and products.

1. Please describe your **current involvement** in the development, delivery or use of VET online products and services.
2. What other **current activity** are you aware of in the development, delivery or use of online products and services in Australia?
3. What are the **emerging trends** in the development, delivery or use of VET online products and services in Australia?
4. What are the **needs** of Australian markets for VET online products and services?
5. What are the **different markets** for VET online products and services in Australia?
6. What **priority target markets** (in contrast to mass markets) exist or are emerging for VET online products and services in Australia?
7. What are the **profiles** of these target markets?
8. What **access strategies** are needed to enter these target markets?
9. What **capabilities** do developers of VET online products and services in Australia need, to satisfy these target markets?
10. What **capabilities** do deliverers of VET online products and services in Australia need, to satisfy these target markets?
11. What **new** online products and services are needed in the target markets?
12. What are some **good practice** examples among the developers and deliverers of VET online products and services in Australia?
13. What **factors** are stimulating and/or hindering the further development and delivery of VET online products and services in Australia?
14. What market research **tools** might help registered training organisations and the Australian National Training Authority to enter, maintain and grow national markets for online products and services in Australia?

Interview instrument for customers of VET

Thank you for agreeing to be interviewed for the above project, which is funded by the Flexible Learning Advisory Group. Your answers will influence the project's findings and products.

1. Please describe your **current use** of VET online products and services.
2. Do you prefer to develop online products **in-house** or to **outsource** their development?
3. What **needs** of your organisation are filled by online products and services?
4. What **capabilities** do developers and deliverers of VET online products and services in Australia need to demonstrate, to satisfy your needs?
5. What **new** types of online products and services are needed by your organisation?
6. What do you see as the **emerging trends** in the development, delivery or use of VET online products and services in Australia?
7. What are the **different markets** for VET online products and services in Australia?
8. What **factors** are stimulating and/or hindering the further development and delivery of VET online products and services in Australia?

Appendix 5: Definitions of key terms

Brief definitions of key terms are set out below.

For the interviews and surveys conducted for this project, **'studying online'** was taken to include any of the following activities: downloading from the Internet information required for the course; using the Internet to communicate with the teacher or other students or the educational organisation; or undertaking on-screen exercises. Sometimes the 'online' aspects may be supported by face-to-face contact with the teacher or the use of technologies other than the Internet, such as CDROMs or videotapes. The previous sentence could also be used as the definition for **e-learning.**

Market segments are large identifiable groups within a market, e.g. 'working adult students' in the VET market.

Niche markets are a sub-segment of market segments.

Target marketing involves identifying the major market segments, targeting one or more of these segments, and developing products and services and marketing programs suited to each of the segments.

Market segmentation involves identifying and profiling distinct groups who might want certain products or services.

Market targeting involves selecting one or more market segments to focus efforts on.

VET online products could include pre-packaged or customisable online courses (web or intranet-based) learning management systems, software for constructing online courses or similar.

VET online services could include administrative, teaching or student support services for online courses, or consulting, research or evaluation services for online learning.

Appendix 6: Details about Student Survey Respondents

Set out below are key details about the student survey respondents.

Organisation	Course Area	Course Level	Responses
1. Southbank Institute of TAFE,/Australian dental Association, QLD	Dental Assisting	Certificate IV	17
	Dental Assisting	Certificate III	9
	Dental Assisting	Certificate II	1
	Health	No Info	2
	No info	No info	8
	Health, Dental Assisting	Certificate III	2
2. Regency Institute of TAFE, SA	Hospitality	Certificate III	11
	Hospitality	Certificate IV	10
	Hospitality	Diploma	2
	Hospitality	Advanced Diploma	12
	Management	Certificate/Diploma	1
	Hotel Management	No info	1
	No Info	No info	1
3. Canberra Institute of Technology, ACT	IT	Diploma	2
	Engineering	Advanced Diploma	3
	No info	No info	2
4. Adelaide Institute of TAFE, SA	WebCT	No info	1
	Business Studies	Certificate IV	26
	Management	Certificate IV	1
	IT	Certificate IV	1
	IT	Diploma	2
	IT	Advanced Diploma	1
	No info	No info	1
	Business	Certificate III	1

5. Torrens Valley Institute of TAFE, SA	IT	Diploma	3
	IT	No info	1
	IT	Certificate IV	1
	Electronics	Diploma	1
	No info	No info	2
	Aged Care	Certificate III	12
	Community Services	Certificate III	2
	No info	Certificate III	2
	Design	Certificate II	1
	Accounting	Certificate III	4
	Accounting	Certificate IV	3
	Applied Design	Certificate III	1
	Applied Science	Certificate III	1
	Applied Science	Diploma	16
	Management	Certificate IV	1
	IVEC	Certificate I	3
	IVEC	Certificate III	1
	Financial Services	Certificate IV	2
6. Murray Institute of TAFE, SA	IT – Programming	Certificate IV	1
7. Central TAFE, W.A.	No info	No info	16
8. Spencer Institute of TAFE, SA	No info	No info	1
	IT	Certificate II	1
	IT	Certificate II & III	1
	IT	Diploma	2
		Short Course	1
	No info	No info	1
No info	Hair and Beauty	Pre vocational	6
No info	Hair and Beauty	Certificate II	1
No info	Hair and Beauty	Certificate III	1
No info	Hair and Beauty	Certificate IV	1
No info	Electronics	Bridging	2
No info	Leisure	Certificate III	1
No info	IT	Certificate III	1
No info	Business Studies	Certificate III - IV	4
No info	Accounting	Advanced Diploma	7
No info	No info	No info	12
TOTAL			**234**

Returns from the University of Technology Sydney could not be used as the students were not studying a VET qualification.

Appendix 7: Results from Student Survey

Set out below are the results from the student survey.

234 students responded to the survey, although not all respondents answered every question.

Question	Yes	No	Comments
1. Have you studied online before?	31.6% (74)	68.4% (160)	**Comment:** ”Not effective” ”It makes things better”
2. If so, was it satisfactory for your needs?	82.4% (61)	17.56% (13)	1 x “both” **Comment:** “No one on one contact” “sometimes” ”To be faster” “Sometimes good, sometimes bad” Satisfactory at times” ”Some was”
3. Would you describe yourself as a self-directed learner, requiring minimal contact with a teacher?	54.5% (114)	45.54% (95)	6 x undecided 1 x “sometimes” **Comment:** ”But sometimes extra information is required” ”Just learn from notes but also require help from teacher” ”Depends on course” ”Depends on what type of unit it is” ”Although I find it positive to have input from lecture” ”I think I’m self-directed but I like contact to Lecturer” ”But the lecturer still needs to be there for guidance” “All of them (sometimes)” “But depends on the subject” ”Self motivated in some respects but always easier if there is a regular class to attend” “Depending on subject” ”I need motivation, such as having to turn up to lectures” ”really depends on what I’m doing”

4. Would you describe your attitude to online learning as enthusiastic, positive, indifferent, negative or hostile?			63.8% (Positive x 82, Enthusiastic x 21, Interested x 1) 8.6% (Negative x 13, Hostile x 1) 23.3% (Indifferent x 38) Half positive/half negative x 1 Depends on content x 1 Undecided x 4 **Comment:** "An excellent way however I don't have the facilities" "Positive – however I do like face-to-face interaction" "I try to maintain a positive attitude towards my studies!" "I don't like sitting at computers and reading from screens" "Positive but it is more difficult than it should be" "I believe it has great potential and is easy"
5. Do you prefer to learn through reading and listening, rather than through hands-on practice?	20.5% (42)	72.5% 148	11 x undecided 4 x both **Comment:** "Depends on what the learning material is" "Bits of both" "Hands on practice allows skills to develop better" "A combination of both is best" "I think it is important to do both" "A mixture of both hands on and reading are important" "It depends on the topic" "Depends on the actual course" "Both" "Both meet my needs" "Prefer a variety of both" "Hands on is doing. Doing sticks in the mind more and gives you a better understanding" "Bit of both but more hands on practice" "I utilise all these options for study" "Both really" "Mixed mode" "Both are applicable i.e. read and then hands on" "I like both and learn more by actually doing it you shut off ½ way through talking" "Depends on subject"

			”Combination of both components” ”Although a small amount of hands on practice combined with reading and listening helps me” ”Hands on works better” ”Combination of both”
6. If you have studied online previously, was it supported by face-to-face or telephone contact with your teacher?	42.2% (35)	57.8% (48)	
7. If so, was this extra support valuable?	97% (34)	3% (1)	“What there was of it” ”Hard to get”
8. If you have studied online before, would you study online again?	86.4% (57)	12% (8)	1 x “Maybe” **Comment:** “But without training in search engines it is hard”
9. If so, would you use online learning for some of your study program?	80% (52)	17% (11)	1 x “don’t know” 1 x marked both boxes **Comment:** “Some times it is useful (i.e. research purposes)”
10. If so, would you use online learning for most of your study program?	50% (32)	45.3% (29)	3 x undecided **Comment:** “Depending on the module I’m doing!” ”Depends on course type” ”Not until it is easier or specific info is convenient”
11. If you study online in the future, would you use it to study short courses that do not lead to a full certificate?	66.7% (130)	26.7% (52)	12 x undecided 3 x maybe **Comment:** ”If studying on line is the only choice then I will do it but if there is another way I will look at the option” “But it depends on the course” ”prefer not to study online” ”Depends it just has to be relevant to me”

12. If you study online in the future, would you use it to study IT-related courses?	62.5% (120)	34.3% (66)	3 x undecided 3 x maybe **Comment:** "you get more practical experience using the computer" "I would prefer teacher contact for this type of course" "Prefer teacher-student learning"
13. If you were dissatisfied with your previous study online, what would need to be improved for you to try it again?			**Comment:** "More access, internet training programs" "never studied online" "speed of computers frustrating" "Easier/more info" "Rather than doing discussions online do them in groups face to face" "It is not the same as face to face learning" "Don't rely too much on online, need regular contact" "Number of examples" "More feedback from lecturer" "Maybe more contact to lecture through phone or e-mail" Faster downloading of course material" More student-to-student contact, i.e. video chat" "hands on involvement" "More support off line for people" "Someone to help here" "Some courses I have done need to be better organized" "More visual interaction rather than read and quiz" "Faster online service" "More information" "Search engines ease of use" "I would probably not do that study again" "Nothing"
14. Are you currently employed?	62.6% (144)	37.4% (86)	

15. If so, do you work in private enterprise or for a government body?			57.3% (82) x Private enterprise 41% (41) x Government body 4 x Both 7 x “No” response 3 x “Yes” response 6 x unclear response
16. Are you male?	28% (62)	72% (160)	
17. Were you born in Australia?	73% (165)	27% (61)	
18. Did you complete year 12 at school?	73.5% (166)	26.5% (60)	
19. Do you have an undergraduate degree?	11.6% (26)	88.4% (198)	
20. If you are employed, do you work in a metropolitan area?	82.6% (114)	17.4% (24)	
21. Do you use the Internet at work?	36.6% (48)	63.4% (83)	
22. Do you use the Internet at home?	71% (154)	29% (63)	
23. How many hours a day do you use the Internet?			2 hours average
24. Would you study online more often if you were aware of more online courses?	54.2% (116)	38.3% (82)	2 x ‘maybe’ 3 x ‘possibly’ 11 x undecided **Comment:** “Depends on course available and suitability” “Possibly – depends on the layout of the module” ”Like people contact”

25. Does online learning appeal to you because you have limited time for study?	51% (105)	49% (101)	2 x not sure **Comment:** "I have limited time but online is not good enough" One "No" comment said 'The course was done in work time but for serious courses I want face2face'. "But prefer teacher contact"
26. If you are employed, or have been employed, which industry do you work in?			Hospitality, Hairdressing, Multimedia, Taxation, Dental Caring, Community Services, Aged Care, Education, Advertising/Marketing, Legal, Finance, Animal Care, Medical research, Banking/Finance, Communications, Automotive, Manufacturing, Manual Labour, Employment Counselling, Printing Industry, Sports Industry, Nursing, Information, Technology, Clerical/Admin, Health Care, Leisure, Building Agriculture, Technical , Accounting, Trading, Crane and Transport, Retail, Service Industry, Foundry Industry, Welfare, Mining, Electrical, Meat Industry, Boating Industry, Training
27. If you are employed, does online learning appeal to you because what you learn may help you do your job better?	47.7% (71)	52.3% (78)	
28. If you are employed, does your employer support online learning?	26.8% (33)	50.4% (62)	11 x "Don't know" 17 x undecided

29. If so, what does you employer like about online learning?			"Gives me more options of the way I want to study" "Time away from work minimised" "more info" "don't think he knows about it" "Easy access" "Efficient rural education" "Allows us to organise learning around other workload factors" "Out of hours" "Cheap, done in office" "We may have to use in future" "Computer skills" "Don't know" "Flexibility" "Distance delivery new pedagogy" "Resource minimization" "Geographical advantages" "Inherent recording of student work" "No travelling costs" "Great amount of information" "Fast and efficient" "The flexibility" "Good"
30. Does your employer provide access to online learning facilities at work?	26% (35)	66% (89)	1 x "Don't know" 1 x "No idea 9 x "not sure" **Comment:** "We are all given internet access and the Academics are currently organising study on-line programmes"

Appendix 8: Results from Provider Survey

Following are the responses from twenty five VET organisations, listed in Appendix 3. Comments received in response to a number of questions from 17-27 are quoted in the body of this report, so are not repeated here.

Questions	Yes	No	Comments
1. Does your VET organisation deliver online learning, as defined above?	96% (24)	4% (1)	We will progressively develop our profile in niche areas.; Southrock is not a VET provider directly, but provides elearning management and delivery services to VET customers. Chisholm has an Online Learning & Virtual Campus Unit; In hybrid formats; downloading required information use Internet for communication undertake on-screen exercises is almost always supported by face-to-face contact with the teacher other technologies are often used (CD-ROMs or videotapes.
2. Do the individuals who might study or do study online with your organisation prefer to use online learning in conjunction with other delivery strategies?	95.5% (21)	4.5% (1)	Our only strategy is using mixed mode/blended approaches; Our data collection process for our 2002 – 2005 strategic plan, clearly identified the our students see “online” support the most valuable aspect; Statistical evidence a bit ambiguous here To the extent that we have explored this issue with students and with teachers; Absolutely all our customers prefer our holistic approach; Depends on the individual and their circumstances, but generally yes. The Institute has a Strategic Direction in Applied Education. Our philosophy is that online is only one delivery method and that it should be used in conjunction with a range of other delivery options; Strong demand for some face-to-face aspects, particularly in early stages of delivery; Mainly off shore/ inter state therefore mainly totally independent; Depends on the course. For example most Quarry students are located in regionally dispersed areas and on-line learning is very effective, particularly after an orientation to being a technologically based learner.

3. Are the individuals who might study or do study online with your organisation mostly working adults?	81% (17)	19% (4)	This is the pattern at present. We expect it to remain the majority for some time, although there will be increased use and availability to oncampus students. And high end on line users generally; Mixture of full-time students out of secondary education and part time adults; Increasingly, online delivery is being used with all students, in line with a commitment to our funding body ETTE that the Institute will deliver a minimum of 15% of its student contact hours with an ICT component; Many are retraining to enter a new fields as a result of voluntary or forced career changes; 79% of students are PT - not all are working
4. Are the individuals who might study or do study online with your organisation mostly studying Information Technology topics?	27% (6)	73% (16)	The focus here has been on Management and on Workplace Trainer and Assessor; The ones who like studying in the purest "online" mode eg course on line are IT. However, we are finding that the CSH like using email and the program is introducing chat sessions soon in response to their students needs. Some also doing renewable energy No, finance; Not necessarily – our online offerings are across a range of programs Broad range of online delivery across many program areas; ICT usage is spreading across all programs, from Justice to Automotive to Horticulture; We do a lot of work in Acess for youth, women and NSEB
5. Are the individuals who might study or do study online with your organisation mostly self-directed learners, i.e. they require minimal guidance from teachers?	45.5% (10)	54.5% (12)	Our only strategy is using mixed mode/blended approaches; Support is required, as most of them are first-time users of online delivery. In the main; Mainstream students from all subject areas are undertaking parts of courses with online components. While some courses may seem to lend themselves more readily to online delivery, it is not only self-directed learners who are using the technology; The subjects are designed for that however teacher/student interaction is required via OL communication technologies Varies – self motivated but still want security of some face-to-face contact; Online modules are used on-campus for all students in some courses (esp IT); No – the minority – we build in learning to learn strategies; We'd like to think that they are but the reality is that online learners are proving to need just as much facilitation to be successful as the people sitting in classrooms

6. Are the individuals who might study or do study online with your organisation mostly verbal learners, i.e. they prefer to access the written or spoken word?	55.5% (10)	49.4% (8)	We don't have data on this, and the staff involved feel it is not an easy judgment to make. Not really they are into maths and graphs a lot; Added interaction through web board has positive response so students also have peer learning; Many prefer to print text for study purposes but others are visual learners; Learners like the written word plus contact via phone, email, workshops, tutorials; Most of our on-line programs are not "text on line" but include interactive activities, sketches, photos etc.; Possibly but we would get a mixture of learning styles like in everything else; Here I'm speaking about the group that I work with rather than our institute population as a whole. The largest group are probably best classified as visual learners with kinaesthetic running a reasonable second. Verbal (I'm reading this as auditory) are in the minority.
7. Do the individuals who might study or do study online with your organisation, prefer to use online learning to study short courses that do not lead to accreditation?	13.3% (2)	87% (13)	Yes and no. Yes, they prefer short chunks, but no I think our clients are seeking accreditation.: We don't yet support/ promote a wide enough range of study options to respond to the 'might' option. Our orientation and development has been towards markets that are highly qualifications oriented; The opposite; Mostly accredited programs; Most of our online learners are using online for accredited courses Varies too greatly to make a generalisation – many want the qual as well; Many short courses are practically based and people actually prefer f2f; Not necessarily – most of our online components lead to or are part of accreditation
8. What percentage of the students who might study or do study online with your organisation work in government bodies?			0%; Significant (50%?), and likely to increase. Less than 10%; Sorry don't know- again varies. Some programs run specifically for govt sector organisations – don't keep this info in any organised way. Minimal;

9. What are the most common industries to employ students who study online?			IT, Retail; Education and community services. IT, Financial Services; Ours are all finance; IT based industries; Multi-media, training; Hairdressing, IT, Electronics, Dental, business, community services; hospitality; Info Technology, Retail, Child Studies; Nursing, Horticulture, Engineering, Quarrying as well as the traditional IT and Business fields; Rural sector;
10. Do the companies or government bodies who are your customers and are interested in online learning value online learning for the benefits it brings to their business?	85.7% (18)	14.3% (3)	Most organisations that we deal with are just entering the online learning arena; Those who are interested. Many companies haven't taken up the option because of perceived security issues. Some do not trust their employees to use the technology and access appropriately. Numbers of our clients see benefits in their staff not having to leave the workplace to study or train, and appreciate being able to communicate across distance using devices such as online forums, discussions and threaded conversations; DMIT is currently involved in implementing market research across all programs. One question relates to preferred delivery mode. Only 2 industries, mainly in User Choice areas, have been surveyed so far - IT based industries indicated more interest vis-à-vis trades; Some do – others don't care about the strategies, only the outcomes; It is mainly the student's choice to study rather than the company's. No, very strong message from companies/industries in our SP data process that they still prefer their staff to study face to face and they saw little benefits to their business.; Demonstrated by testimonials and rapid enrolment growth; Now I'm speaking about my own students who are employees of my own organisation. Whilst there is a general feeling that online courses are good for the 'business' in that they can fit into work schedules more readily, it is really the learners who value the flexibility it offers them.; Generally in the northern territory it has been slow to attract interest

11. Do the companies or government bodies who are your customers and are interested in online learning have branches spread over large geographical areas?	95.2% (20)	4.8% (1)	Not all but some are. Queensland Rail, Goodman Fielder are both large and dispersed organisations with training needs at many locations; Most of our clients could access other modes – we use hybrid models with part on line and other strategies integrated into the program; But some of these still prefer f2f facilitation and on site workshops - so we travel!; Major reason for on-line requests; Government has not used online for training despite having a reasonable IT infrastructure NT Govt has very remote locations!
12. Do the companies or government bodies who are your customers and are interested in online learning have a high staff turnover?	42.9% (6)	57.1% (8)	Some, not all organisations; Not sure; Yes particularly relevant in isolated/rural regions who have a high turnover of professional staff – also many professional staff coming to the country are new graduates; High staff turnover across NT
13. Do the companies or government bodies who are your customers and are interested in online learning require regulatory training?	82.35% (14)	17.64% (3)	Not sure what that question means exactly; OH&S, Food Handling etc. This is patchy. Often depends on the culture of individual organisations so it's difficult to generalise; It is possible that aspects of regulatory training could be delivered this way; Some do eg mandatory notifier training for child staff, teachers, police and safety training in mines etc; Particularly in OHS, Risk and Legislative compliance
14. Do the companies or government bodies who are your customers and are interested in online learning require induction training?	95.65% (22)	4.35% (1)	Our customers who use online learning have in many cases provided intro training in the use of computers prior to involvement with online learning. It then falls to us to familiarise our customers with the particular online platform or operating system; I think it's educationally negligent not to provide this; Most often but not always as more and more companies expect their staff to have IT skills but do not allow sufficient time for the staff to be competent and therefore the staff become frustrated; Induction of some type is usually required. RMIT offers online resources to support induction (eg. animated screen shots demonstrating how to login or use an online tool). The Support Desk runs induction sessions for teachers. Teachers often use the first class of the semester to induct students into the online environment, in a face-to-face setting.

15. Do the companies or government bodies who are your customers and are interested in online learning require the software tools needed to manage online learning?	62% (13)	38% (8)	A pre-requisite for us dealing with an organisation is that they are equipped with appropriate hardware and software; Tricky, depends on the circumstance; Some have them already but we provide preferred purchasing arrangements as part of our service for those who need it; SA Business is very small business - most do not need this level of sophistication; Definitely – depending on what is chosen as the primary vehicle for training delivery; RMIT has a Web-based online learning system which students and clients are given access to when they enrol in RMIT courses.; Our online students only need to have a web browser (with the usual plugins) and internet access.
16. Do the companies or government bodies who are your customers and are interested in online learning need to instruct their staff in the use of technology or equipment for online learning?	75% (15)	25% (5)	Sometimes; Sometimes - and sometimes they expect us to do this We have more individual than corporate enrolments – we expect to provide this; We provide support at this level
17. Is your organisation's access to the online learning market restricted by the costs of producing and customising online material?	84% (21)	16% (4)	Comments received in response to this question are quoted in the body of this report, so are not repeated here.
18. Is your organisation's access to the online learning market restricted by the time required to develop online learning material?	84% (21)	16% (4)	As above. Related to our ability to access funds.
19. Is your organisation's access to the online learning market restricted by the limited applications of online learning in a competency-based training system?	41.67% (10)	58.33% (14)	

20. Is your organisation's access to the online learning market restricted by the lack of your staff's experience in delivering and assessing online?	76% (19)	24% (6)	
21. Is your organisation's access to the online learning market students restricted by your organisation's lack of experience with online learning?	43.5% (10)	56.5% (13)	
22. Is your organisation's access to the online learning market restricted by some students' learning styles not suiting online learning?	65.2% (15)	34.8% (8)	Plus 1 x "Yes and No"
23. Is your organisation's access to the online learning market restricted by the need to provide student support in addition to online material?	33.3% (8)	66.7% (16)	
24. Is your organisation's access to the online learning market restricted by the students' lack of necessary technology?	50% (12)	50% (12)	
25. Is your organisation's access to the online learning market restricted by your organisation's low-profile brand name in the online arena?	26% (6)	74% (17)	Plus 1 x "Yes and No"

26. Is your organisation's access to the online learning market restricted by competition in the market from international online learning companies?	39% (9)	61% (14)	Plus 1 x "not sure"
27. Could your organisation deliver any more of its existing products and services using online learning?	96% (24)	4% (1)	

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