



Te Kunenga ki Pürehuroa

Global picture, local lessons: E-learning policy and accessibility

Final Report

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Executive Summary

This report was commissioned to consider the e-learning policy experiences of a number of countries in order to identify consistent themes and tensions running through the policy implementation process and relate identifiable outcomes to policy measures. The project comprised three aspects:

- Development of a database of templated summaries of international e-learning policy and strategy documents from 2000-2005
- Provision of a report on overall e-learning policy direction and implementation
- Provision of a report on policy initiatives that focus on accessibility to e-learning in small and remote communities.

This final report brings together these three aspects in a single document.

The following jurisdictions and international agencies are included in this study:

Countries: Australia, Canada, Finland, Iceland, Korea, Japan, Sweden, United

Kingdom, United States of America

States and Provinces: California, Pennsylvania, British Columbia, New Brunswick

Saskatchewan, Ontario

International Agencies: APEC, COL, European Community, OECD, UNESCO

These jurisdictions and agencies are all represented in the database of templated summaries of elearning policy and strategy documents.

Interventions in e-learning

We identified a discernible pattern to development of e-learning policy. The first stage occurs as governments act to make e-learning possible, the second as they work to integrate e-learning into the education system, effectively, to mainstream e-learning. In the third stage a transformative role for e-learning is seen, with changes to views of learning and to the nature and operation of the tertiary institutions and the tertiary system.

First and second stage policy objectives are commonly seen together as policy makers draw on the experience of early adopters of e-learning or on their experience of previous adoption of technology use in education. Similarly, second and third stage policy objectives co-exist in policy documents as policy makers continue to encourage the mainstreaming of e-learning and enhancement of its quality, while seeing the potential for sector efficiencies and the need for policy alignment.

Following this pattern, policy initiatives include

Strategies to develop physical infrastructure

All areas included in this report had undertaken policy initiatives designed to provide access to the physical infrastructure supporting broadband access which is considered essential for effective elearning provision.

Focusing on building and ensuring quality in e-learning

Four groups of initiative were prominent in support of this objective. These were:

- 1. Provision of support, information and guidance for learners
- 2. Professional development and support for tertiary teachers
- 3. Leadership development
- 4. Development of high quality e-learning content

Moves to create a system wide approach to e-learning

Supporting the four major enablers discussed above were several policy objectives that enabled a more systemic approach to e-learning. The move to a systemic approach signals a turn to the second phase of e-learning policy development. Major initiatives here involve:

- 1. Development of collaboration and cooperation between the institutions comprising the tertiary system
- 2. Attempts to ensure an awareness of the benefits of e-learning and to continue to build demand for e-learning services
- 3. Support for research initiatives and policy evaluation to ensure informed decision making

Embedding e-learning and aiming for sector efficiencies

This stage of policy development is only recently noticeable. As the e-learning environment matures there are policy moves to embed e-learning by making it integral to broader strategies for teaching and learning. Thus policy alignment is a key issue at this stage. Sector efficiencies are sought through the integration of information systems and the development of synergies between institutional activities.

Small and remote communities

Five examples of specific policy initiative were identified, three were studied in depth. The major finding of our examination of the three in-depth cases was that the involvement of local communities played a major role in the successful uptake of broadband access which in turn provides a means of access to e-learning. Critical also is a focus on provision of an array of government and non-governmental services for communities, necessitating a degree of liaison between a number of agencies.

Outcomes from policy

Only two distinct evaluations of policy initiatives were located – an evaluation of the Saskatchewan Technology Enhanced Learning Action Plan and an evaluation of the Australian Flexible Learning Framework 2000-2004. The main findings from these evaluations are:

- 1. Professional development for staff and the development of high quality digital content are seen as central to the success of e-learning approaches to education
- 2. Inter institutional collaboration is a key element of integrating e-learning across the tertiary sector
- 3. Policy alignment is essential to ensure a mature e-learning environment
- 4. 'Buy-in' by staff and institutions is slow and considerable investment in time and people is essential. This time is needed to realise the investments that are made. At the same time, it is important to ensure that e-learning is sustainable and that e-learning policies include a strong accountability focus.

Issues for policy makers

The report concludes by identifying 17 issues emerging from the policy initiatives. It does so recognising that New Zealand e-learning policy has largely taken account of the many specific lessons provided by the experience of overseas jurisdictions. These issues are general in nature, focusing on broader questions about e-learning policy and its development, not on specific policy issues. Questions are raised about the way policies might define e-learning; acknowledge and address gaps in e-learning policy; align and differentiate levels of policy, and account for the national and global education context.

GLOBAL PICTURE, LOCAL LESSONS: E-LEARNING POLICY AND ACCESSIBILITY

Introduction

This is the final report for the project "Global picture, local lessons: E-learning policy and accessibility." The report is presented by the members of the research team:

- Dr Bill Anderson (Director)
- Dr Mark Brown
- Mandia Mentis
- Fiona Murray
- Dr Mary Simpson
- Barbara Blake (librarian/contracted research assistant, Phase One)

The nature of the research project

The New Zealand Government, through the Ministry of Education, is currently developing an integrated pan-sector e-learning strategy. An integral part of that strategy will be the development of a Tertiary e-learning Framework that focuses on enhancing accessibility, increasing relevance and ensuring high quality learning outcomes within the tertiary sector. Gaining an understanding of, and learning lessons from the policy formation and implementation processes of other nations, will enhance the New Zealand experience of e-learning policy development and implementation for optimal outcomes.

This project considers the e-learning policy experiences of a number of countries and draws from those experiences to identify consistent themes and tensions that run through the policy implementation process and to relate identifiable outcomes to policy measures.

The research is being developed in two broad areas – policy and accessibility. The area of **policy** requires examination of existing national/federal and state/provincial policy in the area of e-learning, determination of the outcomes of the policy implementation, and consideration of subsequent and proposed amendments and the reasons for those. This aspect of the research draws largely on analysis of contemporary official documents but draws on experienced e-learning officials and practitioners outside New Zealand to add depth to the analysis.

The area of **accessibility** involves determining the nature of government-funded infrastructural arrangements for e-learning, with a particular focus on the specific barriers and enablers faced by small and remote communities. Analysis of official documents will again play an important role in this aspect of the project. However, that phase of the research will also seek the experiences of at most three such communities to be written up as case studies to illustrate the outcomes of such government funding and to support the document analysis.

The focus in both areas of the project includes Australia, Canada, the UK and also considers the experiences of some EU states, federal and state policy in the United States, and the more developed Asian nations. The project looks towards national and state systems that have similarity to the New Zealand context but the project team recognise that experiences from different contexts can provide insights that might not otherwise be obtained.

Outline of report structure

The report is in three major sections. The first of these sections reports on an examination of e-learning policy. This section discusses the policy template development process and provides a series of brief reports generated by the research team through an examination of e-learning policies and related documents from a range of sub-regional (state, province, territory) and national jurisdictions, along with those from a small number of supra-national organisations. It also contains three case studies of policy approaches to e-learning in the tertiary sector, and concludes with a section that synthesises the key points of the brief reports and case studies.

The second section reports on the accessibility aspects of the project, focusing on government funded infrastructural arrangements for e-learning with a specific focus on small and remote communities. A brief discussion of documents that have at least some focus on small and remote communities is followed by case studies of particular projects aimed at ensuring network access, with e-learning being one of the end uses of that access.

The final section of the report summarises a small number of shared themes arising from both previous sections of the report.

Appendices contain templates summarising important features of documents that played a major role in informing the work of the team, and additional material relevant to the research processes undertaken during the project.

Throughout the report the term *e-learning* has been used rather than *elearning* or (e)*learning*. This term, *e-learning*, is the term that was in most common use in the documents studied by the research team.

GLOBAL PICTURE, LOCAL LESSONS: E-LEARNING POLICY AND ACCESSIBILITY. PHASE ONE: POLICY

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Policy templates and area reports

Introduction

There are three main deliverables for this project:

- The development of a data extraction template that will form the basis of analysis of policy documents from the selected countries.
- The provision of a report on the policy dimension of the research. This report will focus tightly on the investigation of policy, policy outcomes and 'lessons learnt'. This analysis will be conducted using a data extraction template developed for this purpose.
- iii. The provision of a report on accessibility to e-learning in small and remote communities. This report will discuss the nature of government funded infrastructure in relation to a selection of communities identified during the analysis of policy initiatives.

This section of the report outlines the processes involved in undertaking the research related to the first two of these deliverables and presents area reports generated by the research team through an examination of e-learning policies and related documents from a range of subregional (state, province, territory) and national jurisdictions, along with those from a small number of supra-national organisations. Following the area reports three detailed cases of elearning policy development and implementation, monitoring and outcomes are presented.

Phase One Research Process

Two tasks ran concurrently in the initial stages of the project. These tasks were:

- A web and literature based search for a range of documents such as policy statements, strategies, background and discussion papers, and evaluation reports relevant to elearning in the tertiary education sector at a national level
- Development and validation of a data extraction template that would be used to summarise the documents located through the search process

Document search process

In order to locate policy documents, a trained librarian skilled in literature and web-based searching was employed. Her expertise, coupled with follow-up searches by the rest of the team lead to a number of policy documents for the identified countries.

As government policies are available on the free internet, Google was the main search engine used to find policy documents. The strategy was that each country was initially searched via the Google site for that country e.g. Google.se for Sweden and Google.com.au for Australia. Keywords from each of the three categories of search terms were used in various combinations.

The three categories of search terms represented *e-learning*, *tertiary* and *policy*. A range of synonyms were used as different countries prefer different terms. For example Australia uses *flexible learning*, while European countries predominantly refer to *e-learning*. Each search consisted of:

Term A + Term B + Term C

The following synonyms were used for each term (listed in order from most used to least):

Term A e-learning:

e-learning, elearning, online learning, distance learning, distance education, flexible learning, distributed learning, ICT, information technology, learning technology, web-based education, open learning, (e)learning.

Term B tertiary:

Higher education, tertiary education, post-secondary, postsecondary, post-16, university, college, VET, advanced learning.

Term C policy:

Government policy, framework, strategy, plan, strategic plan, action plan, initiative, roadmap, project.

The wide range of search terms and the variations in spelling made comprehensive searching difficult.

A date range of 2000-2005 was applied to the returns that were generated by these searches. The policy documents that fitted this timeframe were added to an Endnote library. This Endnote library was updated at least fortnightly and sometimes weekly for the members of the

team to access the most recent additions. Members of the team were allocated regions, individual countries or supranational organisations (depending on the number of potentially relevant policy documents located) and undertook further in-depth searching of their designated area.

The countries that the librarian searched were: Australia (Federal government plus all states), United Kingdom, Ireland, France, Germany, Netherlands, Greece, Norway, Finland, Sweden, Iceland, Canada (Central government plus provinces), USA (Federal government plus Colorado, California, Alaska, Texas, Florida, Pennsylvania), South Korea, Japan, Thailand, Hong Kong, Malaysia. Areas were allocated to researchers as follows:

Area A: UK (England, Scotland, Ireland, Wales)

Area B: US (national and selected states)

Area C: Canada (national and selected provinces)

Area D: Asia (Japan, Singapore, Thailand and Malaysia)

Area E: EU (supranational policies plus selected countries)

Area F: Australia

Area G: Supranational organisations (UNESCO, Commonwealth of Learning, OECD)

For each region, country, state or province the website of the ministry/department of education (and if applicable) higher education, were searched using keywords from the original sets of terms. Some manual browsing of the sites was also undertaken. Leads and links from these sites were followed up where relevant.

Supranational organisations were identified at the outset as being possible sources of relevant policy documents. The librarian searched the websites of the OECD, UNESCO and the European Commission with a mix of searching and browsing strategies.

The policy documents located by the librarian were the starting point for further investigation into each region. The research team were given a pool of documents to explore through the Endnote library. On reviewing these policy documents, team members found links to other documents that required pursuit or realised there were gaps where further investigation was necessary. This meant that the searches performed by team members were generally targeting specific documents that would potentially add to the bigger picture for that country or region. A very recent study by CERI (CERI (2005). E-learning in tertiary education: Where do we stand? Paris: OECD) of institutional e-learning adoption that contained a number of references to national e-learning policies and strategies was located by the librarian toward the end of the search period. It provided additional verification of the completeness of the search undertaken.

Template development and validation

The project delivers a data extraction template that forms the basis of analysis of policy documents. This validated template can be used to provide ongoing analysis of policy initiatives in the e-learning area as they emerge. From our previous experience of such policy analysis projects, we have learnt that this kind of template can be invaluable. It helps to keep the research clearly focused on the core objectives and adds to the rigour and systematic analysis of data. Such a template is particularly valuable when working as a team on reasonably large or open-ended projects as it leads to greater consistency, clarity of focus and enhances the validation of the policy analysis. This is certainly the case when the

methodology incorporates a dual, blind and parallel level of analysis coupled with a systematic moderation process.

In developing the data extraction template the research team began by reviewing similar templates that have been adopted in other policy related projects. Concurrently a preliminary search of the literature was undertaken and we selected a number of different policy documents from a variety of sources, which everyone then reviewed independently.

The research team met to discuss our impressions of these and to identify the kind of major themes, key action points, scale of projects, sponsoring agencies and differences between documents and e-learning initiatives that would need to be accommodated in the template. A draft template was then developed based on an agreed set of core fields along with a document that explained each category and this was piloted independently using two major policy documents located in the preliminary search. Again, the team met to validate our individual analyses of the policy documents and to share impressions of the draft template, and discuss and agree on necessary modifications.

The template and explanatory notes were revised as a consequence of the validation process and after further discussion the final data extraction template was settled on. The final template consists of over 30 fields that attempt to gather data relevant to the research objectives. To this end, the template requires the research team to consider the core Ministry of Education identifiers including amongst other things lessons learnt, barriers and enablers, small and remote communities and bilingual and multi-cultural aspects. These categories were intended to keep a clear focus and allow the research team to capture important data relevant to later research phases.

Using the template

For each of the areas allocated to researchers, two members of the research team were assigned to undertake the analysis. The first member identified the relevant entries in the Endnote Library and explored the primary source policy documents and related internet links. This was a time consuming process varying from region to region, as it was not always easy to establish the sequence and/or relationship between different policy initiatives. The first analyst then identified which documents were related to e-learning policy on a national basis and completed the data extraction template.

On completion of the template by the first analyst, the material was given to the second analyst who read all the relevant information and revised the template where necessary when issues of accuracy and interpretation arose. In cases where there was doubt over the factual account or interpretation of the policy a third member of the research team acted as the moderator. The first and second analyst were different for each geographical location so that the same two people were not always working together. This added an extra degree of validity to the data analysis process which overall had a lot rigour, especially when the information contained in the templates is further validated through the use of overseas consultants.

As a result of the validation process, major changes were made to a small number of templates and minor amendments were undertaken with almost all the remainder. For the small number of templates in which major changes were made the process of validation required significant discussion amongst team members.

Completed templates were used in the first stage of creating reports of e-learning development and implementation, monitoring and evaluation for seven distinct areas. Base documents were referred to as required. The areas were:

- A United Kingdom (UK)
- В United States of America (US)
- \mathbf{C} Canada
- D Asia
- Ε Europe (Iceland, Norway, Sweden, Finland)
- F Australia
- G Supranational

Area reports were also subject to validation. Validation of area reports was undertaken by elearning experts from the country or region of the report. Validation was obtained for all regions except Iceland. Problems with language were more significant than anticipated. Following feedback from validators area reports were amended to reflect local understandings and to incorporate additional material that had not been located in previous searches.

The area report validation process added significantly to the value of the final report. The contextual understandings and complexities of policy of which we were made aware by all validators ensured a more comprehensive and nuanced collection of area reports. Validators were:

UK – Sarah Porter, Head of Development, JISC

US – Lynn Schrumm, Ass Prof. Dept of Instructional Technology, University of Georgia Canada – Prof Terry Anderson, Canada Research Chair in Distance Education at Athabasca University

Asia – Prof Insung Jung, Prof. of Educational Technology and Communications, International Christian University, Tokyo

Europe/Scandinavia - Prof Morten Paulsen - Professor of Online Education, Director of Development, The NKI Internet College, Norway; Dr. Jyrki Pulkkinen, Adviser – Information Society for Development, Department for Development Policy, Finland; Peter Bergström, Department of Interactive Media and Learning, Umeå Universitet, Sweden.

Australia – Dr Peter Smith, School of Education, Deakin University Supranational – Prof Betty Collis, Prof. of Networked Learning, University of Twente.

As an outcome of this process, at least one member of the research team acquired considerable contextual knowledge of their allocated region and this was invaluable in building up a bigger picture of the various policy initiatives and the major themes that ran across them. The following section provides brief overview of these themes and the specific policy documents as they apply to each region.

Area reports: Introduction

Area reports draw on the full range of policy, strategy and associated documents templated, and make occasional reference to additional documents. In areas where more than one country or region is involved comments about each are made. This part of the report sets out the approaches to e-learning policy across a number of jurisdictions and identifies major themes relevant to each. Full evaluation reports were located for Australia's (VET) Flexible Learning Framework and Saskatchewan's Technology Enhanced Learning Action Plan.

Area A: United Kingdom

Introduction

Over recent years the United Kingdom (UK) government has invested significantly in ICT across all the education sectors. While some measurable gains are reported, progress is patchy and inconsistent across sectors and institutions. There is now an attempt to both unify and normalise e-learning as part of the education process.

This section reports e-learning policy from the United Kingdom. In most instances this includes England, Ireland, Scotland and Wales. The UK has a number of agencies that manage e-learning implementation across the various sectors. The scope of these agencies tends to be blurry. Many of the agencies cover all of the UK while others cover only England. In some instances Scotland, Wales and Northern Ireland have their own agencies and develop their own policies. This lack of consistency continues to cause confusion in establishing which countries are covered by each policy document.

Background

Since early this century there has been a climate of educational reform in the United Kingdom. These reforms cross many sectors. e-learning is often considered to be an integral part of these reforms. There has been a transformation in how e-learning is conceptualised which has seen a change in emphasis from the infrastructure to the learner. These changes are even evident in the subtle variation in terminology being used in the reports and policies. Early policy documents referred to *e-learning*, yet the most recent strategy: *Harnessing Technology: Transforming learning and children's services* sees itself as an *e-strategy for learning*.

The recent *Harnessing Technology* strategy has signalled there is an attempt to take a cross-sector unified approach to e-learning in the UK. Documents such as the 2003 E-learning strategy have been precursors to this policy, others, released since, are implementation plans for parts of the broader strategy.

2002/2003 saw many of the initial reform documents go out for consultation. The recent strategies that have been produced in the last 12 months are working mostly towards a five-year timeframe though the HEFCE e-learning strategy takes a 10 year timeframe. By 2010 it is anticipated that the UK education sector will be well advanced in this next phase of e-learning.

A key agency in developing and promoting e-learning policies is the Department for Education and Skills (DfES). The DfES has recently established a new unit: The Technology

Group. It is intended that this group will provide leadership for all those engaged in driving forward the ICT agenda. There are a number of other agencies that work closely with the DfES during consultation or implementation. The Higher Education Funding Council for England (HEFCE) is responsible for promoting and funding both teaching and research in the higher education sector. In e-learning policy development and delivery, it works through its partners the Joint Information Systems Committee (JISC) and the Higher Education Academy (HEA), both of which have a specific e-learning focus. BECTA: British Educational Communications and Technology Agency has a specific e-learning focus and is a key partner in the development and delivery of e-learning strategy for both the school and further education sectors. There are numerous other agencies that have responsibility for implementing initiatives relating to e-learning across all sectors.

Policies, strategies, reports

In terms of the UK, eight documents were entered into the data extraction template. A number of other reports that have obviously informed the final strategy documents were identified during the search process. Consultation with the education sector and other stakeholders appears to be an integral part of the process of strategy development in the UK.

With the UK attempting to develop a unified, pan-sector approach to e-learning, the Harnessing Technology: Transforming learning and children's services strategy should be seen as the central document. The other documents flow in and out of this strategy. In the first instance, this section will provide an overview of Harnessing Technology and will then unpack the other documents that complement or inform it.

The strategy *Harnessing Technology* describes the attempt to personalise education for learners through the use of digital and interactive technologies. The strategy covers the next five years and beyond and is a pan-sector strategy. It makes reference to the schooling sector, the 14-19 and the post-16 sectors, higher education and Children's Services. To date policy and investment has been targeted at improving infrastructure, increasing access and reducing barriers to the use of ICT and e-learning. This 2005 strategy signals a change in emphasis to a more explicit focus on the learner to achieve a more personalised approach. The strategic objectives make this transformation evident:

- Transform teaching, learning and help to improve outcomes for children and young people, through shared ideas, more exciting lessons and online help for professionals;
- Engage 'hard to reach' learners, with special needs support, more motivating ways of learning, and more choice about how and where to learn;
- Build an open accessible system, with more information and services online for parents and carers, children, young people, adult learners and employers, and more crossorganisation collaboration to improve personalised support and choice;
- Achieve greater efficiency and effectiveness, with online research, access to shared ideas and lessons plans, improved systems and processes in children's services, shared procurement and easier administration.

With this change in emphasis, it is important to note that infrastructure is still a feature of the strategy, it is just less of a priority. This suggests a maturing in the e-learning field where the initial focus of e-learning policy was to get the infrastructure in place. Now that that aspect is underway governments are turning their attention to pedagogy and increasing accessibility to all citizens in an attempt to bridge the digital divide.

This strategy has recently moved into a further phase of development. Four 'transformational themes' have been identified that will be used to develop more practical work plans for the e-Strategy and to ensure that they are implemented. The themes are: learner-centric knowledge architecture; strategic technology provision; personalised content and e-maturity. Each area focuses upon the resolution of practical issues that are impeding progress towards achieving ambitions of the strategy. The DfES has not yet published a formal update to the strategy but numerous presentations and briefings have been given in the last six months to inform the educational sectors about the plans.

The strategy has specific priorities for higher education and the skills sector. The e-learning strategy from The Higher Education Funding Council for England complements this pansector strategy and aims to support the higher education sector as it moves towards embedding e-learning appropriately. This focus on embedding e-learning will have implications on policies for higher education. The HEFCE have realised that in order to embed e-learning they will need to review and revise their current strategy for teaching and learning. It seems counterproductive to have a separate e-learning strategy that has a major aim of embedding e-learning into all teaching and learning. The HEFCE Teaching and Learning strategy is currently under review to make these changes.

A priority for the HEFCE strategy is to enable institutions to meet the needs of learners and their own aspirations for development. This will permit institutions to determine their own priorities for e-learning rather than having them prescribed. This signals demand-led development rather than supply-led. In keeping with the focus on embedding e-learning, institutions will not be asked to develop specific e-learning strategies but rather embed elearning within their wider teaching and learning strategy.

The recommendation for the HEFCE to pursue this notion of embedding e-learning came in part from the white paper The Future of Higher Education. The document is focused on reforms for higher education in general not specifically on e-learning. Along similar lines, the Success for All document focuses on reforming the further education and training sector. It makes more explicit links to e-learning than the higher education reform document does. A recommendation is made to develop a coherent national e-learning strategy. This recommendation has since been actioned through the publication of Harnessing Technology.

The Success for All reform strategy identifies four key elements:

- Meeting needs, improving choice;
- Putting teaching, training and learning at the heart of what we do;
- Developing the leaders, teachers, lecturers, trainers and support staff of the future; and,
- Developing a framework for quality and success.

Within these elements e-learning is a notable feature, particularly in the teaching, training and learning area. Specific actions relating to e-learning are identified and obstacles to the success of e-learning are acknowledged. Success for All has undergone evaluations on an annual basis.

The report Get on with IT from the Post-16 e-learning Strategy Task Force could almost be seen as a sector based e-learning strategy. It makes clear recommendations – the first of which is to release the Success for All discussion document. In contrast with the previous two documents the focus of Get on with IT is specifically on e-learning and ICT. The central theme to run through this document is not the need for increased infrastructure but the need

for increased skill acquisition for all learners in the post-16 sector. This includes an emphasis on lifelong learning and building communities of learners. Like many other UK education sectors, post-16 also appears to be entering a second phase of e-learning where the emphasis is on developing capacity, skills and knowledge of leaders, managers, practitioners and learners to make the most of technology, to embed its use in their core activities and programmes, and to extend the programme more widely across the whole post-16 sector. In keeping with Success for All, this document advocates the need for the development of an elearning strategy and asserts the need to firmly embed e-learning within all phases of education in the UK.

The Learning and Skills Council (LSC) produced a report in 2002 from its Distributed and Electronic Learning Group (DELG). The report includes a series of recommendations to the LSC on how best to give leadership and shape to the developments associated with the growing use of ICT and e-learning. The DELG realises the need to develop a strategic framework for distributed and electronic learning, based on 11 stated principles.

The Scottish Funding Councils have not developed an explicit e-learning strategy but instead received a report from their e-learning group in July 2003 that led to the funding councils setting out their approach to e-learning.

The 'Scottish approach' is less directive than that of the DfES; whilst supporting a learnercentred model, it assumes that institutions are well informed about e-learning and are best placed to make their own strategy decisions about investment and use of e-learning. This is exemplified through their investment in a limited number of 'transformational' e-learning projects where e-learning policy and strategy is agreed by each institution or group of institutions, rather than being proposed by the funding councils themselves.

This echoes some of the HEFCE e-learning strategy which places emphasis on the choice of appropriate approaches to e-learning by each institution rather than attempting to set out a 'centralised' model. It also emphasises the 'embedding' of e-learning into strategy, policy and practice rather than attempting to set national benchmarks, targets or to develop a national model of e-learning. It places emphasis on improving the learning and teaching experience but through the structures of current institutions.

The final document in this section, the e-learning strategy for Wales is still only in draft form. The document seeks to develop a pan-sector approach by preparing a strategy for all learning. In this regard it is not dissimilar to the Harnessing Technology strategy. The Welsh strategy places more emphasis on infrastructure than the previous strategies from the UK. The top areas of priority are to: create an integrated e-learning network and to provide high quality infrastructure and technical support. This strategy appears to be independent from the UK strategies and mentions documents such as A Winning Wales that help to inform it. The next iteration of the strategy was due out in March 2006, but as yet there has been no sign of it.

Summary

In summary, the UK appears to be entering a second phase of its e-learning policy development and implementation. It is undergoing a reshaping exercise that is seeing less emphasis on infrastructure and more on connecting pedagogy with technology in a new blended approach to learning and teaching. Policy puts more emphasis on a learner-centred model for education whilst acknowledging the importance of the institution in developing its own policy and strategy for e-learning. Implementation of e-learning policy acknowledges the need to resolve some issues of national infrastructure to support and enable the learner-centred approach.

Area B: United States of America

Introduction

There is significant documentation and available resources relating to federal policy development in e-learning for the *school* sector in the United States of America (US), but for *higher education* it appears that each state is responsible for their own e-learning initiatives and that there is no overall federal policy. School sector information is provided in this overview as background context and contrast for the higher education sector. Within the higher education context, some federal data is available in the form of qualitative findings of a survey of 39 states. This survey provides information on postsecondary and adult work-related e-learning programmes and challenges. In addition, information relating to e-learning for the American workforce is summarised. The challenges for higher education in terms of enhancing technology-based learning to meet the needs of a new generation of learners are outlined in reports by Business and Commerce based forums.

The Higher Education Plans for two States (California and Pennsylvania) are provided by way of example of how individual state policies for e-learning are embedded into the individual State's Higher Education Plans. Although it is recognized that many states have individual master plans for e-learning, the criteria for selecting just these two was based on their being relatively large in terms of population and size and being geographically from the East and West coast respectively and representing. It needs to be acknowledged however, that while many of the smaller states may have plans that are less intensive or organized and with fewer resources, they may still recognize the potential and value of e-learning to their citizens.

Background

Policies and practices relating to e-learning in the school sector for the period leading up to 2005 provide useful background context for the higher education sector. During this time, significant developments for e-learning in the school sector occurred, such as the the Webbased Education Commission established by Congress in 1999. This Commission developed policy recommendations geared toward maximizing the educational promise of the Internet for pre-K, elementary, middle, secondary, and postsecondary education learners. A 16 member strong Commission with input from education, business, policy, and technology experts, as well as e-testimonies developed the report on The Power of the Internet for Learning: Moving from Promise to Practice (December 19, 2000). This report, seen to comprehensively document the impact of web-based learning on education, established a "policy roadmap" to help education and policy officials at the local, state, and federal levels better address the critical "digital age" challenges brought about by the Internet and other emerging technologies. The vision that emerged from this report was: to center learning around the student instead of the classroom; to focus on the strengths and needs of individual learners; and to make lifelong learning a practical reality. Based on the Commission's report, pressure was put on Congress to change public law to support, rather than undermine, the technology changing education in the following ways:

- to make the extension of broadband access for all learners a central goal of telecommunications policy;
- to work with educational institutions and the private sector to support the continuous growth of educators through the use of technology;
- to create a comprehensive research, development, and innovation framework for learning technology;
- to join forces in developing high quality content and applications for online learning;
- to remove barriers that block full access to online learning resources, courses, and programs while ensuring accountability of taxpayer dollars;
- to develop and adopt privacy and protection safeguards to assure that learners of all ages are not exploited while participating in online learning activities; and,
- to expand funding initiatives and to develop new models to bring these policies to reality.

Following on from this came the National Education Technology Plan, Toward a New Golden Age in American Education: How the Internet, the Law and Today's Students are Revolutionizing Expectation, January 2005, U.S. Department of Education. This plan highlighted the following seven action steps to help states and districts prepare today's students for the opportunities and challenges of tomorrow:

- Strengthen Leadership
- **Consider Innovative Budgeting**
- Improve Teacher Training
- Support e-learning and Virtual Schools
- **Encourage Broadband Access**
- Move Toward Digital Content
- **Integrate Data Systems**

In terms of higher education, the National Governors Association conducted a survey of 39 states to establish *The State of e-learning in the States*, in 2001. The survey sought information on what measures and programs states were planning and implementing with regard to postsecondary and adult work-related e-learning and what challenges they were finding. This initiative sought to elevate federal and state dialogue on postsecondary education and to equip governors and their advisors with the ability to diagnose problems, conceptualize issues, identify policy options and implement new public policy. The initiative focused on three priorities: increasing access, learning and attainment; building and sustaining seamless learning pathways; and fostering economic development. The survey results are illustrative rather than statistically representative and show that the States and their postsecondary education institutions systems are engaged in facilitating new e-learning delivery systems, expanding capacity, upgrading infrastructure and instructor skills, promoting access, and shaping the regulatory environment. Many of the examples highlighted in the report are innovative and bold in their pursuit of the opportunities new e-learning technologies offer for adult work-related education and training. The state of e-learning in the States is that most of the following measures were being met in most states:

- Developing delivery systems;
- Promoting access to e-learning through infrastructure investments;
- Assuring the quality of e-learning; and,
- Exploring governance issues to bring e-learning into a coherent system.

States were seen to be beginning to take advantage of the myriad of options made possible by new learning technologies, as they developed and expanded their capacity to enhance the skills of a workforce preparing for the knowledge economy. Although states were engaged in developing these e-learning opportunities, they also keenly recognized the challenges of bringing about significant transformations such as costs of developing content and training, the necessary enlargement of infrastructure capacity, the quality of courses and content, agreements on articulation and residency, the responsiveness of traditional institutions, and issues of privacy and intellectual property rights. States ranked quality issues as their highest concern. The survey report concluded that all States could build on their impressive elearning foundations as they addressed the following emerging questions in this area:

- Should duplicative and costly programs be restructured in light of students' growing anytime, anywhere access to high-quality content that may come from out-of-state providers?
- What incentives may be needed to stimulate private-sector involvement in e-learning courseware to improve the productivity of low-skill, low-wage workers, which otherwise yields lower returns on investment than courseware for higher-paid, already-educated, technologically sophisticated employees?
- How can states help integrate the best content and delivery from both the public and private sectors to increase access to state-of-the-art e-learning?
- How can states best pursue their legitimate public interest in consumer protection and quality assurance, while not stifling the rapid evolution of e-learning and the entry of dynamic new providers?

Linking Higher Education with workforce issues, the American Society for Training and Development (ASTD) and the National Governors Association (NGA) convened the Commission on Technology and Adult Learning, in 2000 with a mission to define and encourage a technology-enabled learning environment that would result in an engaged citizenry and a skilled workforce for the digital economy. The three key questions for the Commission on Technology and Adult Learning included: how to ensure consumer protection and high-quality learning in an open e-learning environment; what the best ways were to assess what individuals are actually learning; and how to promote equitable access to the technologies and the high-quality learning content that play a vital role in the success of elearning? The Commission identified three priority areas for action in their report on A vision of e-learning for America's workforce. These were: to create the highest-quality e-learning experiences possible; to implement new measures and methods for assessing and certifying what individuals know and are able to do; and to ensure broad and equitable access to elearning opportunities. The challenge and the opportunity were seen to be the same: to realize e-learning's potential for reducing the divide between the "haves" and "have nots" in America today.

However, in a 2004 Commerce analysis of 55 industries, the educational services industry, which includes elementary, secondary and vocational schools, colleges, universities and libraries, came in last in terms of information technology intensity. This resulted in the White House National Science and Technology Council establishing a high-level working group with representatives from 17 federal departments and agencies to advance learning technologies with a mission to close the gap between technology's potential and its use in education and training. This group established the Visions 2020 Working Group whose agenda was two fold. First, to examine Federal investments focused on the development of advanced technologies for learning, and the development of digital libraries and

other technology-enabled learning resources. This involved seeking partnerships with the private sector, the academic research community, teachers, and other key stakeholders to speed the development of these technologies. Second, the working group explored barriers to the commercialization, deployment, and adoption of these technologies, and considered where government may be able to remove barriers inhibiting market development.

Similarly the 2003 report on Learning and Technology, Building a Nation of Learners, from the Business-Higher Education Forum, called for higher education institutions to redesign themselves to meet the learning standards of today's world where education must be engaging, flexible, and interactive. Their vision for 2010 would be where forward-thinking institutions can lead the way to pioneer innovative new efforts and become champions of redesign and learning. Their view is that this effort requires a massive new investment in technology infrastructure that will allow US colleges and universities to scale these learning solutions to a broad expanse of learning environments. If these changes are made then students will benefit from a higher education system that is more sensitive to workplace realities and more attuned to creating a nation of learners equipped with essential, highly developed learning tools. The report outlines the goals for 2010 where:

- Every campus will have redesigned its coursework.
- Every student will have access to individualized and customized strategies for his or her specific education needs.
- Every classroom on every campus will have access to the online and off-line tools that students need.
- Every graduate will be assessed not only on his or her academic achievement, but also on his or her skills in leadership, teamwork, problem solving, time management, selfmanagement, adaptability, analytical thinking, global consciousness, and basic communication.

To meet these goals by 2010, the BHE forum outlined the need for federal leaders to rise to the challenge, refocus existing education and training efforts, and create the new policies, priorities, and programs that will transform the United States into a nation of learners.

The focus of the meeting of the Secretary's Commission on the Future of Higher Education, 2005 was on ensuring that America's system of higher education remains "the finest in the world and continues to meet the needs of America's diverse population by expanding opportunity, innovation, and economic grow" (U.S. Secretary of Education Margaret Spelling, October 17, 2005). To this end she called on the commission to be mindful of keeping pace with the demand for teaching for future work in the new high-tech economy.

Policies – examples from different states:

As outlined in the report by the Alliance for International Higher Education Policy Studies (AIHEPS), June 2003, in the United States, the primary responsibility for education lies with individual states, and no two states are alike in meeting their obligation to educate their residents. It follows then that the policy and practice of e-learning in higher education will differ from state to state and the following section outlines examples of e-learning practice in two different states - Pennsylvania and California.

Pennsylvania: In Pennsylvania, distance-learning opportunities grew at the grass-roots among individual institutions that saw a need or "market" within their communities.

The Commonwealth of Pennsylvania State Board of Education's *Master plan for higher education* (September 2005), was a response to the realisation that distance education had become a permanent part of the postsecondary landscape, and yet its potential was only just beginning to be realized. Educators and regulators in Pennsylvania recognized the need to review current policies and practices related to the use of distance education. There was an effort to review and revise where necessary regulations and policies that impeded the development of distance learning opportunities such as the HEA funding restrictions based on the so-called 50 percent¹ and 12 hour rule (where financial aid to students in online programs was denied in institutions that did not offer at least 50 percent of their courses in brick-and-mortar locations – the "50 percent rules", or that fell below a defined week of classroom instruction – the "12-hour rule"). The plan largely focused on the critical issues identified by the Board through its outreach to stakeholders over a number of years. The main priority areas of the plan included: access and affordability; accountability; remedial education; distance learning; articulation and transferability of credits.

California: In California, the California Distance Learning Policy: Status Report Update of 2001 includes within it information relating to Californian e-learning policy. In outlining the guiding goal and principles for the utilization of technology in California postsecondary education it focuses on access to a high quality education as the primary goal for the use of educational technology in higher education. All students in California's public schools and colleges and all adults in the state should have access to educational opportunities for which they are qualified, regardless of their income level, geographic location, or the size of the school they attend, and the California Postsecondary Education Commission should convene an intersegmental working group to determine state funding priorities consistent with these goals. The intersegmental working group should observe all of the following principles to guide the development of priorities and the proposed expenditure of state revenues on technology infrastructure and applications:

- Development of a state-wide infrastructure that provides compatible connectivity between all levels of education to reduce redundancy and increase efficiency.
- Adherence to nationally and internally accepted protocols and standards.
- Assurance that the standards for course and program quality applied to distance education
 are rigorous in meeting accreditation standards, Universal Design Standards, and
 standards currently applied to traditional classroom instruction at higher educational
 institutions in the areas of course content, student achievement levels, and coherence of
 the curriculum.
- Collaboration between the private sector and educational institutions in the availability and use of technology in low-performing schools and underserved areas.
- Collaboration across departments, institutions, states, and countries in the use of technology.
- Use of technology to contain costs, improve student outcomes, such as student services, libraries, and administrative support.

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¹ (Note: The 50 percent rule has been overturned. As indicated in the NY Times March 1, 2006 "it took just a few paragraphs in a budget bill for Congress to open a new frontier in education: Colleges will no longer be required to deliver at least half their courses on a campus instead of online to qualify for federal student aid."

The change is expected to be of enormous value to the commercial education industry as while only a few dozen universities are fully Internet-based, most of them are for-profit ones. This ruling highlighted the tension that exists between the state sponsored institutions and those that are private not-for-profit entities, which impacts on policies and activities. It is likely that tensions will continue and perhaps even be exacerbated as e-learning expands and evolves).

The intersegmental working group should be composed of representatives from public, elementary and secondary education, the California State University, the California Community Colleges, the University of California, independent accredited universities and colleges, state approved schools and colleges, private sector providers of distance education, the Office of the Secretary of Education, and the private sector.

The commission should facilitate the development of state-wide funding priorities for technology in higher education, and should forward the recommendations of the working group to the Legislature and the Governor,

The California Postsecondary Education Commission Federal Education Update in December 2004 highlights Bush's Campaign for a "Bold New Direction in Education", and quotes President Bush as believing that education is the key to opportunity and America's best tool in an increasingly competitive global economy.

Summary

As suggested above, the policy for e-learning for schools in the US operates at a federal level, but for higher education this seems to fall within the higher education plans for each state. As the primary responsibility for education lies with individual states, no two states are alike in meeting their obligation to educate their residents. However, a 2001 survey of 39 states indicated that the state of e-learning in higher education institutions systems in the states is such that most are engaged in facilitating new e-learning delivery systems, expanding capacity, upgrading infrastructure and instructor skills, promoting access, and shaping the regulatory environment. The vision for e-learning in 2010 and 2020 is one where new investment in technology infrastructure will allow US colleges and universities to create environments where learning is engaging, flexible, and inter-active. If these changes are made then students will benefit from a higher education system that is more sensitive to workplace realities and more attuned to creating a nation of learners equipped with essential, highly developed learning tools. In order to meet this potential for e-learning, there is a perceived need for federal leaders to rise to the challenge, refocus existing education and training efforts, and create the new policies, priorities, and programs that will transform the United States into a nation of learners.

Area C: Canada

Introduction

The Canadian experience with online learning originated primarily within provincial initiatives undertaken during the 1990s. The provincial origins of these initiatives highlight a central feature of the Canadian education system – that jurisdiction over educational systems lies with the provincial authorities and not with the federal government. Thus, initiatives associated with any form of technology enhanced learning in Canada are almost invariably provincially-based. These can be traced back to the first province-wide distance learning initiative in Newfoundland – TETRA (Telehealth & Educational Technology Research Agency) in 1977; to the 1988 founding of Contact North/Contact Nord in Northern Ontario; and to the 1993 beginnings of the TeleEducation New Brunswick project.

Canada's immense physical geography makes it an atypical country, particularly when considering the provision of education. The vast majority of the population lives in the south of the country within 100 kilometres of the US border with scattered, remote, and

characteristically small communities spread throughout the vast northern regions. The majority of the population in these remote regions are aboriginal, belonging to numerous diverse First Nations communities. Almost 25% of Canadians speak French as a first language and are mostly resident in the province of Quebec. Finally, Canada is an immigrant nation with major pockets of immigrants residing in communities within the major metropolitan areas. This creates cultural as well as linguistic barriers that can impair the capacity of all Canadians to work and learn together. These features call for particular responses as governments attempt to meet the education needs of all residents.

This report provides some brief commentary on federal initiatives in e-learning but quickly moves to study provincial e-learning policy and strategy. There is considerable provincial policy level involvement in e-learning within several provinces and in others very little. Three provinces have been chosen to represent a range of approaches across Canada. Saskatchewan provides an example of a province where there is considerable provincial government involvement, and where an evaluation of policy initiatives is possible. New Brunswick (Canada's only officially bi-lingual province) has a history of engagement in technology related educational initiatives and is included for that reason. Recent reports concerning Ontario's approach to e-learning appear to suggest a 'hands-off' approach with policy being developed at an institutional level in higher education.

Background

The 1990s and early 2000s saw several education initiatives, based around or drawing in part on the use of technology, developed by provincial governments for the post-secondary sector. The TeleEducation New Brunswick project has been noted already. In Ontario, Contact North and more recently the TVOntario Lifelong Learning Challenge were both designed to support distance learning, the former more academic and the latter more for job skills online. In Alberta the \$20 million Learning Enhancement Envelope project contributed to online learning development and innovation.

Interest at the national level was driven mainly through increasing concern over the development of Canada's "education industry". CANARIE, Canada's advanced Internet development organisation, continued with the development of its Internet backbone linking public and private research institutes, companies involved in research and development in information technology as well as higher education institutions. The now defunct Telelearning Network of Centres of Excellence (1995-2002 was a geographically distributed network of researchers and client communities from across Canada who collectively researched the development, application, and evaluation of advanced learning technologies.

More recently, the federal government has emphasised the support of training for skills required in the workforce. This concern was expressed in reports such as "Building the Information Society: Moving Canada into the 21st Century", a paper produced for the Minister of Human Resources Development Canada in 1997, and materialised as a drive to build a culture of lifelong learning. A 1999 report by the Council of Ministers of Education, Canada (CMEC), "Report on Public Expectations of Postsecondary Education in Canada" provided the initiative for that consortium to appoint an Advisory Committee for Online Learning (ACOL) in June 2000, in collaboration with Industry Canada.

ACOL had the mandate to "provide independent advice to the CMEC Consortium and Industry Canada on means to optimize online educational opportunities, as well as on the

investments required to build a world-class Canadian presence in online learning" (CMEC, 2001a, p. xi). The rationale for the creation of ACOL and the emphasis on online learning was the argument that online learning "can contribute to the quality, accessibility, mobility or portability, and relevance or responsiveness, of post-secondary education" (CMEC, 2001a, p. xi). These themes were four of the six that had arisen within the 1999 report. In addition, a clear concern was that national post-secondary institutions were vulnerable to competition from international online providers who would not be as responsive as Canadian institutions to the needs of Canadian society.

Against this background this Canadian section of the report will report on two attempts to develop a pan-Canadian e-learning strategy. It will also consider the five-year Technology Enhanced Learning Action Plan developed in Saskatchewan, and subsequently evaluated, and then look more briefly at the inclusion of e-learning in post-secondary education in New Brunswick as well as a recent report on higher education in Ontario.

Policies

The ACOL report "The e-learning e-volution in colleges and universities" was an attempt to develop a pan-Canadian strategy for online learning. The use of the term 'online learning' in the text of the document (defined as "the use of digital networks to deliver post-secondary education and training" p. 19) as well as the term 'e-learning' in the title of the document and occasionally within it, seem to be synonymous. On the other hand, the phrase 'technology enhanced learning' used in some provincial documents illustrates the lack of an agreed definition, and thus a possible lack of focus in approach at the stage the report was written.

The intent of the document was clear however. It proposed a pan-Canadian action plan to accelerate the use of online learning in post-secondary education and in lifelong learning (p. 5). As a federal document it acknowledged that provincial and territorial authorities have jurisdiction over education and recognized the importance of collaboration between stakeholders in pursuing the plan. It stressed that "themes of inclusiveness pervade" the action plan (p. 6) and thus a key aspect of the plan was to use e-learning to extend lifelong learning to all Canadians.

Drawing on these major themes the document set out several broad goals. The report authors declared that such a strategy should work to (1) enhance the quality of post-secondary education, (2) improve the accessibility and flexibility of post-secondary learning opportunities; and (3) encourage the creation of synergies and a greater critical mass within post-secondary education in Canada. Attached to these broad goals were several major priorities:

For (1) above:

- The development of institutional strategies to support e-learning;
- Expanding online learning materials and skills;
- Conducting learning research and learnware product development; and
- Revise copyright laws to facilitate the development of online learning.

For (2) above:

- Establish a high bandwidth learning network;
- Ensure affordability;
- Support learners; and
- Achieve portability of learning credits.

For (3) above:

- Create a pan-Canadian Learning Service with three functions:
 - a) Support learners;
 - b) Support faculty and institutions in online course and programme development; and
 - c) Provide marketing support.

This major report, emphasising a number of areas of e-learning development that were common to approaches being developed elsewhere in the world at that time, did not ultimately lead to the creation of a pan-Canadian strategy. In fact, very few of the recommendations were ever enacted, in part because of the jurisdictional concerns between the federal and provincial governments leading to a general lack of leadership in this area.

In 2002, a discussion paper from CANARIE entitled "An E-learning Vision: Towards a pan-Canadian Strategy and Action Plan" made a strikingly similar call for a national strategy for e-learning. This call had four major themes, and echoed that earlier document:

- Anytime, anyplace lifelong learning (lifelong learning);
- High quality e-learning content (enhancing quality);
- Ubiquitous broadband networks (accessibility); and
- International recognition of Canadian excellence in e-learning.

Two aspects of this document suggest difficulties that may possibly have faced the earlier attempt to develop a pan-Canadian strategy. This document places considerable emphasis on the need for collaboration. It indicates that a national strategy is only possible if key Canadian stakeholders and partners work together across boundaries to effect the goals of a larger strategy. The second aspect is the need to explain and communicate the strategy effectively to the Canadian public as well as the education providers. The document says "The public needs to understand that e-learning is a valuable component to the education and training system that will bring substantial benefits to learners and to Canada as a whole" (p. 16). The demandside elements of an e-learning policy are highlighted in this call.

This document also seems to have met with little response. The report concluded with a set of four "First Steps" that CANARIE would take in support of a pan-Canadian strategy and indicated that it would report on progress toward the strategy by January 2004. The Workshop at which the report was to be made did indeed have such a report, but it was in the guise of a panel discussion. At that Workshop, the panel set up to discuss the topic "Does Canada need a pan-Canadian e-learning strategy" had the brief to respond to the following:

Lifelong learning is a critical component of a successful knowledge-based economy. In Canada, all levels of government, as well as many other institutions, organizations, and associations have important roles in learning. This diversity contributes to the fabric of Canadian learning activities and provides many examples of creative collaboration. However, there is debate as to whether or not a Canadian strategy for e-learning is appropriate or useful. And if so, how might such a strategy be developed?

It would seem that the value, usefulness and potential for success of a pan-Canadian strategy is still under question.

Turning now to provincial examples of e-learning policy and strategies, we consider first the case of Saskatchewan. Saskatchewan has a very small population of less than one million, spread across a large agricultural plain with a few settlements in the northern boreal forest.

Saskatchewan adopted a Technology Enhanced Learning (TEL) Action Plan which was initiated in 1997 through a series of discussions leading in 2000 to Phase Two which set out a policy framework, the goals of the Plan and a set of strategies to achieve those goals. A strong thread of social equity runs through the rationale for the Plan alongside an argument for online learning in support of ongoing economic development. The major themes of the TEL Plan are collaboration between stakeholders, learning for all, programme quality, and access. These themes are remarkably consistent with the ACOL report, suggesting that it had some indirect impact on e-learning development. The focus on a single province however skirted the contentious jurisdictional issues.

Although no definition of technology enhanced learning was developed at the outset, during the Plan's implementation a definition² was developed to support the creation of Campus Saskatchewan, a partnership model for promoting inter-institutional collaboration. The TEL Action Plan had four goals:

- Enhance Métis and First Nations peoples' education and training;
- Advance education and training in rural and northern communities;
- Develop and retain students, graduates and faculty for a knowledge-based society; and
- Develop Saskatchewan's intellectual capital.

Five 'enablers' are listed as identifying "spheres of action that need focused attention, coordinated effort and sustained investment" (p. 29). They are:

- Development of TEL content and instructional strategies;
- Faculty development and support;
- Learner support and connectivity;
- Management and coordination; and
- Linkages with industry, communities, and other organisations.

Through these enablers, the Plan's authors set out a series of strategic collaborative priorities involving various groupings of stakeholders, as well as a set of institutional priorities for individual institutions to pursue. The priorities are enacted through a set of projects. The institutional priorities are specifically set out for each of three major higher education institutions in Saskatchewan. It is thus clear that there is considerable engagement between those major institutions and the provincial government and other stakeholders.

The TEL Action Plan had a timeframe of five years. In March 2005 an evaluation of the plan was published. That evaluation drew on several sources – documents, key informant interviews, surveys of faculty, students and instructional designers and an expert panel – and addressed the following four areas:

Phase One: Policy 21

² This definition is closely aligned with the e-learning definition adopted in New Zealand. The definition is as

Technology enhanced learning means using a variety of information and communications technologies to provide flexible, high quality learning opportunities for both on and off-campus students. Technologies include, for example, the Internet and Web-based applications, video and audio conferencing, CD-ROMs, videotapes and interactive television. The use of technologies supports distributed learning where faculty and students can be located at different places and can interact at different times, enabling people to participate in education and training "anytime, anywhere". Technology enhanced learning can be used to offer wholly "virtual" online opportunities, can be multi-mode, employing a combination of technologies, or can be integrated with traditional classroom instruction or independent study courses.

- Relevance, flexibility and usefulness of the Plan as a provincial strategy;
- Actions implemented to achieve the vision, goals and priorities within the Plan;
- Impacts and effects of the Plan, including intended and unintended impacts for learners, faculty, and institutions; and
- Alternatives, including strengths and challenges of the Plan, and future directions.

The findings of the evaluation can be summarized as follows:

Relevance: The TEL plan was considered appropriate and was an important catalyst for activity in TEL. At the time of the evaluation there was broad support for another shared provincial strategy with fine-tuning of the goals and principles rather than a full re-drafting. The current plan was seen as well aligned with provincial priorities but ongoing work was seen as necessary to ensure that it continued to dovetail with emerging plans and priorities.

Planning and Implementation: The Plan was implemented as intended but with slow buy-in by some institutions and with some challenges to the collaborative model. The initial lack of a strategic approach to the incorporation of TEL into institutional policies limited effectiveness early on. While TEL provided significant professional development and support for learners, faculty involved in TEL were still a small proportion of overall faculty. TEL content development had been a major activity, but sustainability of courses was an issue because of the cost of maintaining and upgrading courses. Remote and Aboriginal institutions were still seen to face challenges relating to accessibility. Project tracking had been implemented but it provided data of limited value.

Impacts and Effects: There were significant impacts on capacity within institutions. In the last year of the plan a requirement of funding for the three largest post-secondary institutions had been the preparation of institutional plans showing priorities and actions for TEL and how they related to broader corporate strategic plans. Inter-institutional collaboration had been enhanced and Campus Saskatchewan³ had been developed. The report noted that "While TEL certainly provides another option for rural and northern residents and for First Nations and Métis students to participate in PSE, the "penetration" of this mode is difficult to assess." (p. 78).

Implications: The TEL Action plan was well accepted; drove TEL development effectively; and all partners indicated that a future shared strategy should be developed. However there was an expressed need to ensure closer links between the goals of a new strategy, institutions' academic plans and priorities, and funding decisions. One implication for institutions was that a programmatic approach (i.e., an approach intended to provide learners with a coherent array of course offerings to complete a credential using alternative modes) was an important thrust of e-learning development. Additionally, dissemination of TEL related products must be enhanced. From a learners' perspective, non-traditional part-time learners valued the enhanced flexibility offered by TEL; other learners did not report significant issues with respect to learning outcomes. The picture was different as regards faculty. Broadening engagement by faculty, who were seen as more conservative and less enthusiastic in their views on TEL than students, was considered a key issue. The needs of rural and northern Saskatchewan, and of Aboriginal institutions needed to be addressed to ensure adequate capacity building and full participation. Finally, there was dissatisfaction with the

³ The purpose of Campus Saskatchewan is to enhance collaboration among the province's postsecondary institutions in the use of information and communication technologies to increase accessibility for students and to enhance the quality of programs and services. See: http://www.campussaskatchewan.ca/pdf.asp?pdf=CS_MOU.pdf

accountability aspect of the Plan as full assessment of impacts was not supported by the then current reporting regime. It was noted that evaluative research was needed to support well informed decision making about TEL.

It has not been possible to locate any 2005 Action Plan for TEL in Saskatchewan. However two provinces published reviews of post-secondary education in 2005 and the discussion of and weight given to e-learning in those reports perhaps indicates a maturation of the elearning environment within Canada. The point to be made is that e-learning may now be seen by some as an integral part of the post-secondary education environment, not a unique feature that needs special consideration in the early stages of its development. However because elearning needs both economy of scale and can benefit from collaborative development, student support and evaluation, in a widely distributed context, there remains a need for coordination and funding beyond individual institutions – and this will not decrease over time.

The second example comes from New Brunswick, the province that introduced TeleEducation New Brunswick in 1993. In April 2005 the New Brunswick Departments of Education, and Training and Employment Development published Quality Post-Secondary Opportunities as part of the province's Quality Learning Agenda. The "Quality Learning Agenda" is composed of four interdependent policy statements from Early Childhood to Adult and Lifelong Learning, and includes this document. This policy statement is not specific to e-learning, but makes reference to it. There is no specific e-learning strategy for New Brunswick.

The post-secondary report has seven goals. Of these seven the first two

- Ensure higher standards of excellence and quality; and
- Increase accessibility and completion.

are directly relevant to the e-learning aspects of the report. The e-learning aspect of the first goal comes with the specific mention of online degrees in a call for minimum standards across Canada for university degrees. Ironically, it seems that the use of e-learning on campus to create "blended learning" opportunities is also emerging as a sign of quality for face-toface courses. The second goal is closely aligned with the affordances of e-learning through specific actions noted in support of that goal:

- Identify means and models to expand online services to enhance availability of online learning;
- Encourage online degree granting through public and private institutions;
- New Brunswick Community College (NBCC) campuses will implement a network-wide e-learning environment;
- Increase availability of online learning products to community access centres to support learner preparation for post-secondary education and training;
- Explore means of strengthening opportunities for students studying in rural areas; and
- Strengthen access to online information in public libraries by distance or e-learning students.

The strong emphasis on accessibility is in line with the drive to increase participation in and completion of post-secondary education in New Brunswick, and is common to most Canadian e-learning reports. Collaboration is not specifically mentioned within the document until the last page, where it is noted that "success is contingent on all partners being fully engaged in the identified actions" (p. 44). There is no mention of faculty development or content or instructional strategy development. Given the wealth of information available to inform the New Brunswick document it seems unlikely that such omissions are by chance. Rather, they

may signal an environment in which certain aspects of e-learning are considered sufficiently mature to not need further attention. Alternatively, the change in government since the early and successful days of TeleEducation (closed in 2003) may indicate incapacity or little interest by a new government in involvement in the perceived internal issues of New Brunswick postsecondary institutions.

Finally, and briefly, the Rae Report into higher education in Ontario (Canada's most heavily populated province)" *Ontario, A leader in learning*" was published in February 2005. This report was developed under the mandate to provide recommendations to improve higher education. During the review, five key themes were used to guide the assessment of the current system. Those themes were:

- Accessibility
- Quality
- System design
- Funding
- Accountability

The themes of accessibility and quality seem to provide linkages to e-learning such that there might be a reasonable expectation of considerable involvement of e-learning in the review. Using online learning and e-learning synonymously, the report declares that this form of learning is an effective learning method for some students. It also notes that online learning is a useful form of distance education. The report indicates that Athabasca University, based in Alberta and offering only online degrees, is one of the fastest growing universities in Ontario. However, Rae makes no recommendations in the area of e-learning. Instead he says that "The better way (to encourage the use of innovation and technology) is to encourage competition in this area, insist on best practices and find practical ways to fund innovation and collaboration" (p. 17). The Rae report however was not helpful in recommending funding sources for or means to support and encourage this "innovation and collaboration." His focus is on ensuring teaching quality, enhancing the student experience, and concentrating on teaching excellence. In sum, the report implies that a specific e-learning strategy is not (now) necessary given the current state of Ontario's education system.

Summary

Three distinct strands for consideration arise from the Canadian experience. First is the difficulty experienced in developing a pan-Canadian e-learning strategy. This is likely of little relevance to New Zealand, and provides an interesting contrast with the experience of the VET sector in Australia (see Area F). While the actions undertaken in support of this strategy seem to have been ultimately unsuccessful, they clearly informed e-learning development within certain provinces in Canada.

The second strand is the experience of Saskatchewan, dating from 2000. The Saskatchewan experience was founded on commitment by the three major universities who took a lead role in the Plan's implementation. Their commitment and collaboration, leading to the development of Campus Saskatchewan, played an integral role in the success of the TEL Action Plan. There are clearly still issues regarding accessibility for remote and indigenous communities. The goal of access for all is hard to attain and reasons for this warrant further investigation. The incentive provided by new provincial funding to support course development, training and collaboration explains the rapid development in Saskatchewan as compared to that in other provinces, with no similar funding incentives.

The final strand – the recent experiences of New Brunswick and Ontario – suggests a return to a focus on core features of education placing e-learning alongside other methods of learning. Excellence in teaching quality, high levels of student support, affordability, and ready access to post-secondary education have all driven strategic approaches to e-learning. The move to place e-learning alongside other means of attaining these goals may signal a move to consider the effectiveness and sustainability of e-learning environments following their quite major penetration into post-secondary education systems. Alternatively, it may highlight the inability of Canada to sustain national strategies and focus such as implemented in many other countries due to the fractious nature of federal/provincial relations in relation to education funding, planning and control.

Area D: Asia

Introduction

Asia is a diverse and complex grouping of countries at different stages of economic development. The context for policy framework development differs across countries and comparisons are difficult to make. All countries recognise the growing impact of information and communication technologies (ICTs) on social and economic development, but differences become apparent when the ways in which education policies for integration of ICTs and elearning are examined more closely. Such differences are visible in varying approaches to policy formulation, ICT infrastructure development and access to it, e-learning content development, and training for staff. In several instances policy development for tertiary education appears to be less advanced than in the school sector. Nevertheless it is possible to broadly sketch a picture of similarities and differences across the Asian countries in the timeframe 2000-present.

Background

This background material is drawn extensively from the report Integrating Information and Communication Technologies in Education in Asia and the Pacific: Trends and Observations. UNESCO Meta-survey on the use of Technologies in Education by Glen Farrell and Cedric Wachholz. All countries have given some thought to the present and future impact of ICTs on their economies and cultures and have developed some statement of vision regarding development goals. These mostly remain general, IT-centred and not specifically related to the education system.

There are differences between countries in their "visions" for the role of ICTs in economic development. For example, Sri Lanka has developed a comprehensive strategy to position the country as a "hub" for ICT development in the sub-Asian region; the Republic of Korea has committed to the development of excellence in science and technology and is focusing on the training of gifted students in order to develop the necessary expertise; and others, such as Mongolia, have a vision for a "knowledge-based" society in which people have access to ICT infrastructure, and the skills to use it, to enhance all aspects of their lives.

Countries are at differing stages in terms of having a policy framework that goes beyond the "vision" level. Those countries that have the most mature policy development processes in place are the more mature and robust economies such as the Republic of Korea, Singapore and Japan. These countries not only have comprehensive policy frameworks, but also implementation strategies and mechanisms, measurement indicators, and have committed

resources to such matters as infrastructure access and connectivity, training and learning software development. Countries also differ in the processes used for developing policy, and the forces that influence policy also differ between countries.

One of the most salient differences is seen in perceptions regarding the role of ICT in education. These fall into three categories – one is that ICT must be taught in upper-secondary institutions as a subject, in order for the country to have a labour force with essential skills; another is that ICT must be part of specific areas of the curriculum to improve subject teaching, e.g. to simulate experiments in physics; the third category aims at creating knowledge societies with ICT-competent citizens and skilled workers, where anyone can learn anytime, anywhere.

In broad perspective, the definitions of e-learning tend to be embedded in strategies and policies for ICT development which are related to national goals. Thus discrete e-learning policy is not highly developed. However the use of information technologies in education is evident within the education policies and strategies of most Asian countries.

A further perspective on similarities and differences can be obtained from the summary of computerization strategies, goals and plans across a number of Asian countries obtainable from the Survey Research on e-Learning in Asian Countries – Fiscal Year 2002 (http://www.asia-elearning.net/content/relatedInfo/report.html). Major points from that document are summarised here.

Summary of e-learning related strategies and policies across Asian countries

Across Asia, tertiary education is the most active field of e-learning. However the extent of involvement varies greatly. Singapore, Japan and the Republic of Korea (Korea) have highly developed IT infrastructures, while countries such as Myanmar and Cambodia are severely limited in infrastructural terms.

All countries have education policies that allude to the use of information technologies in education. Singapore has had a separate IT education plan since 1997; Korea's phased 'ICT use in education' approach has been underway since 1996; Thailand has had UniNet and SchoolNet plans since the mid 1990s. In other countries educational use is advocated in a general way in policy statements that relate to national development of information technology. Thus, Myanmar's IT Master Plan (2001-2010) aims to utilise IT in education and training, and despite the Vietnamese Master Plan for Information Technology in education and Training (2001-2005), most e-learning related activities are based on individual projects.

Quality related issues have attracted some attention across the region. In Singapore, the Elearning competency Centre was established to monitor, regulate, and develop standards for elearning. Korea has noted the importance of improving the learning experience for students, but has yet to develop a rigorous approach to assuring quality in e-learning.

Policies, strategies, reports – Detailed focus on Japan and Korea

Japan: The e-Japan Priority Policy Program – 2003 (Template D1) details measures that are proposed to ensure Japan meets the aim of the IT Strategic Headquarters, Japanese government, to become the world's most advanced IT nation. For this project we could only

access summary document, and it is used as the basis of this description of the e-Japan Priority Policy Program.

Seven areas are set out as leading areas in the promotion of effective IT utilisation. One of those seven is the area of 'Knowledge". Thirty seven distinct 'measures' or policy objectives, are set out for this area. Some of those objectives are extremely broad such as the "Promotion of e-learning at universities" while others, such as "University open lectures are to be made available throughout the country" are more focused. The objectives relate to knowledge in a broad sense, not just education. Thus this area also contains objectives such as "Support for content production for films, animation". A considerable number of the objectives are concerned with development of digital resources of various types and thus many also concern intellectual property rights and copyright issues. Five specifically concern the education sector. In addition to the two objectives mentioned above, there are objectives that focus on:

- Promotion of the continuous skill development and re-education of technical experts
- Promotion of improvements in the IT instruction capabilities of teachers utilising elearning
- Development of programs which nurture content producers

The policy also highlights what it calls 'cross-cutting' issues. These issues are those that reach across the dimensions of the policy and are seen in common to them all. Although these cross cutting issues are conceptualised in the wider social context, discussion of them makes clear that several have application within the field of education. Three that are of particular relevance are noted as

- The promotion of research noted because "drastic changes are expected" from network applications to social systems.
- The digital divide recognising that issues might arise regarding ability to use and availability of information technology.
- Public relations acknowledging that ensuring supply of IT resources is not enough. There is also a need to improve understanding of IT and the ability to put it to use.

The e-Japan Strategy had the overall goal of moving Japan into 'top-ranking ICT nation' status by 2005. From 2005 on Japan has moved to a new strategy called the u-Japan strategy, where the 'u' stands for 'ubiquitous', with the overall goal of creating a "Ubiquitous Network Society". Like the e-Japan policy before it, the u-Japan policy is a wide-ranging social policy that includes reference to education in terms of human resource development. Specific education based policy initiatives could not be located however.

Korea: The Republic of Korea White Paper – *Adapting Education to the Information Age* 2004, (Template D2) is a record of government policies, results of previous initiatives and future directions in the area of e-learning. The document records the broad goals of e-learning policy in higher education as improving the competitiveness of universities, and creating a ubiquitous learning system for lifelong and vocational education.

Within the document the following are listed as areas of priority:

- 1. Creating a Knowledge-based Society by Adapting ICT into Education
- 2. Building a System to Adapt ICT into Elementary and Secondary Education
- The Informatization of University Education (including academic research) 3.
- 4. Adapting ICT into Lifelong Education
- 5. Adapting ICT into Education Administration
- 6. e-Learning Globalization and International Cooperation

Of these six items, the third is of major direct relevance to this report.

Item 3 discusses four aspects of e-learning at university level and two aspects of academic research. The first relates to the Korean Education Network, a physical network linking more than 360 institutions that includes web services that offer video on demand, content sharing and searchable research databases.

The second aspect concerns the adaptation of ICT into university education. A major goal in this area through to 2007 is the promotion of institutional collaboration. There are two mechanisms for achieving this goal. One is an initiative to create e-learning support centres that each serve a number of universities, and where each university contributes to the work of the centre through, for example, shareable content development. The other is the development of a 'next-generation' administration system to standardise administration systems.

A third aspect is the establishment of cyber-universities. The document defines a cyber-university as one "which allows students to learn without time or location constraints by using ICT to access education services provided by teachers" (p. 75) and indicates that 17 accredited cyber universities have been established since 2001. Four major issues with this direction of policy are noted. The cyber-universities are not currently recognized as universities under the Higher Education Act being, instead, registered only as institutions under the Lifelong Education Act. The institutions and their graduates are not well accepted within Korean society. The administration of the institutions is not considered to be strong. Finally, the quality of the education offered at cyber-universities is not regarded as equivalent to that of regular universities.

The fourth aspect of the informatization of university education concerns two-year colleges which produce around 40% of all Korean higher education graduates. In the words of this document "two year colleges lag far behind in the use of ICT in administrative affairs" (p. 78) and it is clear that they make little use of ICT resources in teaching.

Academic research is addressed in two ways. Several projects concern the digitisation and sharing of library resources – making academic journals and papers, along with theses, more easily accessible. A discrete but related initiative involves the Research Information Service System of KERIS, the Korean Research Information Centre. This initiative "promotes the digitization of university research papers and creates links to these papers making them available to other colleges and allowing researchers to obtain information" (p. 83).

Summary

In summary, the countries can be situated on a continuum of stages with regard to policies for ICT and e-learning. While all have stated that the development of ICT capacity is important for economic development, fewer have grappled with the policy questions on ICT applications in education. Those that have tend to lack the resources to implement their strategies.

The most overlooked aspect in many policies is the question of scope – to what extent can the recommendations of policies actually be implemented and achieved? In addition there seems to be a lack of alignment with educational goals and little planning for educational change. Successfully integrating ICTs into education systems implies fairly radical shifts in teaching and learning. These are not acknowledged or planned for. There is also the tendency for

policies to be developed by outside consultants, often without stakeholder participation. This becomes problematic since broad consultation and ownership are crucial to sustaining momentum during the difficult implementation stage.

Area E: Europe

Introduction

The initial database and web searches identified 18 documents linked to e-learning in European countries. A number were almost immediately put aside either because they did not provide material of any depth or because they were written in French or German. Although the librarian used to conduct the initial search had a working knowledge of French and was thus able to be sure that the French documents found were relevant none of the team had sufficient knowledge of either French or German to be able to analyze the documents or to be certain, in the case of Germany, that the documents were relevant.

Documents, available in English, which related to Finland, Sweden, Iceland and Norway were examined and templated. Additional documents were read and judged not to be relevant. They were put aside. Several documents (and websites), although more general in nature, added to the general picture of education policy and delivery in a country. Where this was the case their content is reflected in the introductory context setting section of the material that follows.

It is interesting to note that many of the documents that set e-learning directions do not come from education ministries. In some of the countries reported on here e-learning is seen as having wide applicability. In Norway for example the eNorway action plan was contributed to by 16 ministries. It was also interesting to note that actions related to higher education are often found within a lifelong learning framework. Planning seems to be for learning across the life span with an emphasis on providing the structures and resources that will allow education at any level to take advantage of the outcomes.

Finland

Introduction

Finland has a population of 5.2 million. There are two official languages in Finland – Finnish and Swedish. Education in Finland is compulsory from 7 to 16.

The main aim of the Finnish education system is to ensure that the entire population has access to education and training. The principle of lifelong learning is an important principle for all education provision. In 2001, public spending on education accounted for 5.74 per cent of GDP in Finland (against an OECD average of 4.96 per cent) (source: OECD in Figures, 2005, OECD). Finnish people have a high standard of education.

Background

The Finnish higher education system is made up of two parallel sectors: universities and polytechnics. According to the legal definition, it is the purpose of the universities to promote free academic research and scientific and cultural education, and to provide higher education based on research and scholarship. The polytechnics are usually regional higher education

institutions which provide instruction in subjects from several sectors, and which emphasize a connection with working life. The polytechnics system is fairly recent in Finland, having been created in the 1990s. The degrees they provide are higher education degrees with a professional emphasis. There are universities and polytechnics throughout Finland, and the ultimate aim is to ensure that all prospective students have equal opportunities for study, regardless of where they live.

Adult education has become an important part of Finnish education policy, particularly during the last twenty years. Adult education is arranged at universities, polytechnics, vocational schools, vocational adult education centres, folk high schools, adult education centres and summer universities.

In Finland, Parliament decides on the general principles of education policy and the related legislation. Implementation then rests with the Government, the Ministry of Education and the National Board of Education. The Ministry of Education prepares acts, decrees and decisions in its sector for the Government and Parliament. It also helps to draft related legislation and decisions concerning cooperation in the European Union. The Ministry directs and develops operations in its sector of administration, makes grants to State-owned institutions and grants State subsidies and support to municipalities, joint municipal boards and private organizations.

Policies, strategies, reports

Government policy seeks to position Finland as one of the leading knowledge and interaction societies. The National Strategy for Education, Training and Research in the Information Society (2000-2004) published by the Ministry of Education was examined. The national vision stated in the strategy was: "Finnish society will develop and utilise the opportunities inherent in the information society to improve quality of life, knowledge, international competitiveness and interaction in an exemplary, versatile and sustainable way."(Finnish Ministry of Education, 2000, Section 1.2.1). Implementation of the strategy was to be complete by 2004.

Success of the strategy was to be "based on citizen's equal opportunities to study and develop their own knowledge and extensively utilize information resources and educational services" (Finnish Ministry of Education, 2000, section 2.1). To do this the establishment of a highquality, ethically and economically sustainable mode of operation in network-based teaching and research was seen as necessary. The strategy was divided into six sub-themes:

- Information society skills for all
- The information society skills of educational staff
- The knowledge of professionals in the information and content industries
- The consolidation of virtual learning environments
- Electronic publication, classification, and distribution of research information and teaching material
- Strengthening the structures of the information society

The strategy identified a number of broad action points. Those specific to higher education were:

- Research and development that is connected with the progress of information and communication technology and the information society with universities that are at the leading edge of information technology applications
- Enhancement of public libraries so that all citizens have access and libraries support independent study and degree-oriented distance learning. Libraries would be networked and offer opportunities for publication of material.
- Universities developing their own content production units and marketing products jointly in networks.
- Inclusion of the preparation of digital material in teacher education and training in the preparation of teaching material for practicing teachers and other interested parties.

E-learning was not defined in the strategy. Instead, the concept of virtual studies at virtual school, a virtual polytechnic and a virtual university was used. With regard to university study the strategy reads:

Virtual university education is based on the principles of open and distance learning. Students have the option of completing their degree studies through distance learning. In this case, the curricula must be developed in the network to take into account the opportunities offered by the educational use of information and communication technologies. Although virtual university studies could be implemented solely through a variety of media, the advantages of contact education must not be ignored. In addition to high-quality open and distance learning, investments must be made to make highquality information available through networks and organise it in a way which ensures easy access (sect. 2.2 Education and Knowledge)

Any evaluation of the strategy was not found. The Finnish validator reported that an evaluation of the strategy had been undertaken but was only available in Finnish. He provided a brief summary which is noted here, verbatim.

Summary of "An evaluation of the Strategy for Education, Training and Research in the Information Society 2000-2004".

An Information Society Structures Committee was set up to step up the development of information society infrastructures – hardware and network environments and supportive services – in the field of education and research. The committee conducted a survey to find out the situation in information technology in universities and polytechnics at the end of 2004 and in other educational institutions in autumn 2004.

According to the survey, there was an average of 10 students per one workstation in educational use in 2004. Over half of the workstations were old, acquired before 2002. Most institutions already had acquired fixed broadband internet connections, but their speed was often too low. In nearly all institutions, technical and especially pedagogic support was inadequate. Most institutions had already organised data security, but there were a number of institutions which had not yet taken care of these basic matters. There were few digital adapters or televisions.

From 2000 to 2004 information society structures developed fairly steadily, with small changes. The trends were, however, clear:

- increase in the number of workstations used in teaching and studies
- improvements in telecommunications

- more Internet connections in the workstations and teaching facilities
- technical and pedagogic support still inadequate in most institutions.

The committee's recommendations:

- One fourth of the workstations must be renewed annually.
- Comprehensive schools, upper secondary schools and universities must acquire more workstations than required for the renewal.
- All the institutions need high-speed external network connections and extensive local area networks.
- Both technical and pedagogic support must be available in a sufficient extent.
- All the institutions must take care of technical data security and instruction of users in data security.
- The institutions must prepare themselves for the reception of digital television transmissions.

Source: Information Society Structures in Educational Institutions – Results of the Surveys 2004 and Summary of the Years 2000-2004. Reports of the Ministry of Education, Finland 2005:31.

A strategy for the period 2004-2006 follows on from the previous strategy. The Information Society Programme for Education, Training and Research 2004-2006 contains major priorities and actions for boosting information society development in the areas of education, training and research. It builds upon the information strategies of 1995-1999 and 2000-2004 and complements the Ministry of Education Strategy 2015 and the Development Plan for Education and Research 2003-2008.

The 2004-2006 strategy sets out seven aims which are focused on the areas of knowledge, content and operating environment. The aims are:

- 1. Finland is an open and secure, networked society with high-level information society knowledge.
- 2. All citizens have opportunities and the basic capabilities to use electronic services (eService) and content.
- 3. Appropriate use of ICT in learning and in teaching is part of everyday school life.
- 4. ICT is used widely and appropriately in research.
- 5. Electronic materials are of a high quality, pedagogically justified, serve different user groups and are available openly.
- Also, electronic materials are comprehensively available for science and research.
- 7. The programme actions are evaluated on a continual basis with a view to development (p. 11)

Thus the goals in relation to the three focus areas are:

Knowledge: The enhancement of information society knowledge and skills of every citizen and player in the information society with a view to gaining access to and using and producing information society services.

<u>Content</u>: The production of high-quality, educational contents for use in studies and everyday activities and other digital materials for other purposes, such as research.

Operating environment: An open, easily accessible and secure environment which serves different user groups according to their specific needs (p. 12).

The first area arises from the need to develop or increase recognition of the nature and value of information services thus ensuring uptake. Teachers at all levels, researchers, ICT professionals and students at all levels are targeted in specific measures. Production of digital educational and research materials in a quality assured manner, and open access to them, are key points of the second area. For the third, additional development of the technical environment and enhancement of support services in educational institutions are central. Over the strategy's timeframe the Finnish virtual University and the virtual Polytechnic will be established on a permanent basis.

Summary

The Finnish approach to virtual education [e-learning] has always been subsumed within the goals of the Information Society strategy that has been a consistent policy theme since the mid-1990s. The Finnish focus on adult education, a term used in the sense of lifelong learning, has provided a broad social context for the development of virtual education at tertiary levels. Finland continues to work on upgrading infrastructure to ensure high-speed access for research use, and on the development of skills enabling people to learn and work in virtual environments.

Sweden

Introduction

Sweden is a technologically advanced country with good infrastructure. The population of the country is nine million. This population is far from evenly distributed, half being concentrated in just 3% of the country's area. The native language of the country is Swedish. It is spoken by 90% of the population.

Background

In Sweden academic programmes are offered by 61 institutions – universities, university colleges and independent program providers. Almost all higher education institutions, except for the University of Agricultural Sciences which is under the jurisdiction of the Ministry of Agriculture, Food and Fisheries, fall under the Ministry of Education and Science. Most institutions are thus run by the central government and their staff are state employees.

Fourteen of the central government-operated higher education institutions are universities and two are specialised institutions of higher education and research – the Karolinska Institute (medicine) and the Royal Institute of Technology, both in Stockholm.

From Luleå in the north to Lund/ Malmö in the south there are some 22 small and mediumsized university colleges. Ten smaller colleges for various sectors of the arts are located in Stockholm. The University College of Physical Education and Sports is also located there. Three colleges of health sciences train staff for the paramedical professions.

There are, in addition, three major private institutions in the Swedish higher education system: the Stockholm School of Economics, run by a private foundation with central government support, the Chalmers University of Technology, and the University College of Jönköping, both foundations.

Distance learning, mainly in the form of correspondence courses, has a long tradition in Sweden. Today most universities and other institutions of higher education offer this form, along with second and third generation distance education study. Most of the courses and programs are offered by the Swedish Netuniversity. Through the Netuniversity portal, 35 tertiary institutions offer 2700 courses. The courses are designed to meet the educational needs of both individuals and the country at large. Their aim is to enable people to study unencumbered by where they live, their work or their family circumstances.

Policies, strategies, reports

Two documents with links to e-learning in Sweden were examined. The first "An information society for all" was a Ministry of Industry, Employment and Communications publication was a document describing the Swedish IT (Information Technology) policy. The second document published by the National Centre for Flexible Learning (CFL) describes the work of that agency in promoting the development and utilization of flexible learning in adult education and working life. The Ministry document does not contain a definition of e-learning although the aim of becoming the first country to be an information society for all is quite clearly stated in the preface to the document. This document describes how new groups of people might begin to study in higher education. The model used is distance education through the Swedish Netuniversity with support from learning centres in the different communities in the country.

In the CFL document flexible learning is defined as "a form of study that concentrates on the individual and therefore takes great account of the student's wishes and capabilities". A third document was referred to by the Swedish validator but was only available in Swedish (SOU/2004:29). This report from 2003 defines the Swedish Netuniversity net-based distance education system.

Implementation of the IT policy is seen primarily as a partnership with private enterprise but supported by a range of initiatives. The government is responsible for ensuring that infrastructure (e.g. broadband) is available in all parts of the country, and 40% of the Swedish population has broadband in their homes in mid 2005 (PTS, 2005). Government funding is made available only in areas deemed to be in the public interest where the market is unable to foster appropriate development. Building national infrastructure, skills, access and confidence are key points of action.

The National Centre for Flexible Learning document provided an insight into how one of the agencies of education could support and promote projects that targeted minority or special needs groups. One such project was the development of teaching aids using sign language. The CFL also gathers and disseminates research results and experiences in the fields of distance education and flexible learning.

Summary

Neither of the Swedish documents provides much detail on policy initiatives or implementation in higher education. This reflects the approach taken in Sweden which has focused on a market-driven approach where the primary aim of public sector is to regulate, to procure and to set a good example. This is seen as then ensuring that everyone has access to IT and that IT will be used in all aspects of life including education. The recent involvement of the Netuniversity and the CFL has appears to have signalled a modification of that approach toward some use of a more direct and centralised focus for e-learning.

Iceland

Introduction

Iceland is the most sparsely populated country in Europe with a population of just under 300,000 – an average about three inhabitants per square km. The population is concentrated in a narrow coastal belt, valleys and the southwest corner of the country. Approximately 180,000 live in the capital, Reykjavik, and surrounding areas.

Background

Presently there are eight institutions of higher education in the country. Most of the institutions of higher education are run by the state. Private parties with state support run three institutions. Institutions of higher education differ in the extent to which they engage in research and the number of programmes of study offered.

Distance learning courses are increasingly being offered in schools at the upper secondary and higher education levels, for example, at the College of Vocational Training in Akureyri, the University of Iceland, the Reykjavík University and the University of Akureyri.

Policies, strategies, reports

Two documents related to e-learning in Iceland were examined. A project plan from the Ministry of Education, Science and Culture provided some insight into desired outcomes for IT. The second document, a policy document, was also from the Ministry of Education, Science and Culture. This document gave insight into how policy is enacted. Policies put forward are enacted by the Iceland's governmental IT task force. Any necessary legal framework is established and an action plan developed. Part of the Ministry's function is also to promote cooperation between groups.

The main focus of the project plan was stated as compulsory schooling but there was some reference to post compulsory/higher education and some initiatives that appeared to be promoted to have wide applicability. Details follow and are listed under the major themes of the plan.

Initiatives in teaching and learning included:

A focus within teacher education programmes on changing teaching practices. There was also a commitment to improving distributed learning so that students can engage in diverse studies regardless of where they live. Research and development in the field of teleprocessing was to be augmented. The supply of fully developed distance studies leading to university degrees was to be increased.

Initiatives focused on content included:

Digital educational material: The production and adaptation of teaching software for the Internet was to be encouraged. Digital material at libraries and other cultural organisations was to be adapted to the needs of the educational system.

Initiatives focused on equipment included:

Connections: Secondary schools, universities and continuing education organisations will be linked on a high-speed network. There will be wireless networks in secondary schools and universities

Initiatives focused on educational gateways included:

menntagatt.is: A database with information on educational material. Dissemination and exchange of educational material.

Library system: All libraries in Iceland will be connected in a single library system. Increasing accessibility to books and diverse digital material.

Metadata recording: The producers of educational material will be able to record it according to standards. Suitable recording forms with accessible instructions will be published.

As has been indicated earlier this document provided a very brief overview and the precise area of educational focus for some of the initiatives is unclear.

The policy document identified five areas of priority. They were:

- Access to the information society
- ICT infrastructure
- Digital content
- New opportunities and innovative practices
- Ethics and safety

Each of the areas of priority has stated objectives and an (often numerous) set of action points that related to tertiary education and lifelong learning.

Summary

Iceland appears to be taking a systematic and planned approach to the use of ICT in education. This policy builds on two earlier policy papers (1996 and 2001). There seems to have been a focus on building infrastructure and information systems. There also seems to be an acknowledgement that these actions by themselves do not lead to progress – and to change in educational practice. The document places a marked emphasis on cooperation – and it is to be presumed from the desire to see this and the central funding model that funding will be tied to this emphasis. The focus on lifelong learning is important. This concept is centrally built into the policy.

There are many similarities between Iceland and New Zealand. Both are small. Both have remote communities although isolation in parts of Iceland is certainly more challenging. Both countries are emphasizing the maintenance of an indigenous culture and their language. In both countries the populations are quite advanced users of technology. These similarities suggest that close attention to ICT policy in Iceland could usefully inform New Zealand's practice.

Norway

Introduction

The Kingdom of Norway has a population of 4.6 million. The general level of education in Norway is high. Total expenditure on education in Norway comprises 6.4% of the gross domestic product, compared to an OECD average of 5.5%.

Background

Norway has six universities, six specialized university institutions, 24 university colleges, two national colleges of the arts and 30 private institutions of higher education. There are four major providers of distance online education: NKI, BI, NKS and Nettverksuniversitetet. Three of the four are private educational foundations. The fourth is a consortium of public university colleges. All four initiatives have proven to be sustainable even though private institutions receive only 10% of their funding from the State (Paulsen, 2004).

Policies, strategies, reports

The eNorway (3.0) Action Plan was examined. The action plan focused on maintenance of progress towards being an information society and in the forefront of IT development. New areas in this the third eNorway action plan include convergence, development of content and actions for the disabled. While the plan was presented by the Ministry of Trade and Industry sixteen ministries had in fact contributed to the plan. The over riding aim of the plan is the achievement of an information society for all. To do this three basic pre-requisites were identified: Access – competence – confidence. The Government therefore wants to:

- contribute so that everyone is able to gain access to the new technology
- increase the competence and understanding of the population so that each individual is capable of using IT as a tool in accordance with their own desires and needs
- implement actions to increase confidence. IT should be secure and available to all irrespective of level of expertise.

The plan focuses on five main themes:

- individuals, culture and the environment
- lifelong learning
- industry
- workforce
- the public sector

Each contributing Ministry identifies areas of priority. In the area of lifelong learning it was considered important to identify barriers which might prevent the correct use of ICT from an educational point of view. This was seen as not a question of how much ICT is used, but of how it is used. Successful use is dependent on educational assessments being the decisive factors and laying the guidelines for use.

With a focus on lifelong learning all action points become relevant. The five key overarching action points were:

- Integrate ICT in all education. Everyone should have equal access to ICT during their education, irrespective of sex, social background and expectations.
- Develop and exploit ICT as a separate subject and educational/teaching resource in order to fulfil individuals' and society's qualification requirements.
- Establish an infrastructure which allows for the use of ICT in all areas where such would result in a better learning situation.
- Develop content and teaching resources which are based on access and active use of ICT in education and teaching.
- Develop skills for all players in the education system which will enable them to become active users of ICT when organising and implementing teaching processes.

Each major ministry related area has an action plan that lists key actions, identifies who is responsible for ensuring the action is completed, a deadline for completion and a comment on the status of the action item. The plan is revised every 6 months as implementation proceeds. In addition the Government's eEnvoy also submits reports to the Prime Minister. An interministerial group of officials meets once a month in order to ensure that the reviews take place and actions are implemented.

Summary

This document outlines a comprehensive government ministry-based approach to the development of an information society. The approach taken is multi-faceted approach designed to create the right conditions for an information society. The creation of an information society is set within the aim of a green knowledge economy and an information society for all.

Area F: Australia

Introduction

Federal policies in Australia in support of e-learning have been in existence since the mid 1990s. Early policies such as the "Creative Nation" and "Networked Nation" statements helped to establish an environment in which e-learning developed and initiatives such as the Education Network Australia (EdNA) and *education.au limited* were begun. These Federal initiatives had to be read in the context of two sets of boundaries. First, Australia is a federated system and because of this there are different constitutional responsibilities in each state's education system. Second, the various sectors of the education system (schools, higher education, vocational education and training for instance) have different forms of governance and administration. Crossing these boundaries made collaboration a central issue in the advancement of e-learning. Australia has tended to adopt a sectoral approach, providing support across state boundaries while accepting the distinct nature of the approach within each sector.

Background

In 2000 the Australian Government published *Learning for the Knowledge Society*, its Education and Training Action Plan for the Information Society. Based on this document the various education sectors each developed its own action plan in collaboration with government departments and agencies. The action plans followed a framework agreed between all parties that comprised five key areas:

People: Supplying the skills to drive the information economy; including improved career advice for students and professional development for teachers, trainers, content developers, researchers and all other workers in education and training.

Infrastructure: Reliable and sustainable telecommunications and information technology infrastructure including high bandwidth.

Online Content, Applications and Services: New approaches to education and training content, applications and services and a quality assurance framework including the development of standards for technical interoperability and intellectual property rights management.

Policy and organisational framework: Promoting a shared national vision for education and training to support and sustain the information economy and knowledge society, including the maintenance of collaborative organisational structures.

Regulatory Framework: A regulatory framework in areas such as telecommunications and copyright to support the needs of education and training without inhibiting progress and change.

(Learning for the Knowledge Society: education and training action plan for the Information Economy, 2000)

The action plan for the higher education sector, entitled *The Way Forward* (see http://www.avcc.edu.au/archive/policies/information_tech/action_plan_information_econom/wayforward.pdf) was developed in 1999 under the auspices of the Australian Vice-Chancellors' Committee and its Standing Committee on Information Policy on behalf of the Australian higher education sector. It has not been possible to locate any sector-wide national follow-up to this document.

In contrast, the vocational education and training sector (VET) developed a national programme to support flexible learning with an emphasis on technology enhanced learning. The programme is entitled "The Australian Flexible Learning Framework". The Framework, and its associated projects, was managed by the Flexible Learning Advisory Group (FLAG), formerly the EdNA VET Advisory Group (EVAG). This country report focuses on the Flexible Learning Framework.

Policies - Australian VET sector

In 1996 by the Australian National Training Authority's National Flexible Delivery Taskforce provided the following conceptualisation of flexible delivery:

Flexible delivery is an approach rather than a system or technique; it is based on the skill needs and delivery requirements of clients, not the interests of trainers or providers; it gives clients as much control as possible over what and when and where and how they learn; it commonly uses the delivery methods of distance education and the facilities of technology; it changes the role of trainer from a source of knowledge to a manager of learning and a facilitator (ANTA, 1996, p.11).

Note that this is a definition of flexible delivery, rather than flexible learning or of e-learning, but the learning side was just commonly understood within the same conceptualisation as the

delivery. No special mention is made of e-learning in that definition, partly due to the broad nature of the definition and, presumably, at least partly because in 1996 e-learning was less central to policy thinking. This definition however has informed the development and implementation of the Flexible Learning Framework (called the Framework).

The Australian National Training Authority, which championed the development of flexible delivery/learning and e-learning in VET in each of the States through its funding and support of the activities of the Flexible Learning Advisory Group (and, therefore, the Framework) played a central role in development and implementation of the Framework. Apart from its role in supporting flexible delivery, ANTA also served an important purpose in bringing some unification among the States in their development of VET and VET delivery strategies. It's noteworthy that the Framework is funded and managed cooperatively between the Commonwealth and the States – an important achievement in a federal system

Being developed against the backdrop of the "Learning for the Knowledge Society" report, the Flexible Learning Framework suggests that Governments have a catalytic role to play in the development of a coordinated VET system, but that collaboration between stakeholders is central to its success. It has the five major themes noted above central to its development. It refers to these themes as goals, and develops each specifically for the VET sector as follows:

- 1. Creative, Capable People: To build a critical mass of VET staff who are able to use flexible learning approaches to accelerate Australia's transition to the information economy.
- Supportive Technological Infrastructure: To achieve a national VET system which facilitates affordable access by all communities, learners and employers to online services; is underpinned by advanced information and communications technologies; and achieves connectivity and associated interoperability in the application of technology to delivering training services and, where required, to its business processes.
- 3. World-class Online Content Development, Applications and Services: To assist the Australian VET system to maintain and expand its share of the training market within Australia and internationally.
- Enabling Policies: To ensure that all nationally agreed policies and protocols for VET are designed to facilitate the uptake and usage of flexible learning by the VET industry.
- Problem-solving Regulation: In partnership with other education and training sectors, to advocate that the legal and regulatory framework in Australia provides adequate protection for VET learners; removes legal and regulatory barriers to the effective use of information technology in VET and fosters the export market in Australian VET products and services. (Australian Flexible Learning Framework, 2000-2004, pp. 13-14)

Cutting across these five goals is a set of seven principles that stress collaboration and partnerships and the importance of a strategic approach. There is also a focus on the involvement of employees and the need for uptake of e-learning to be driven by demand. In this first iteration of the Framework's implementation there is a set of six measures of overall success. These broad measures have a strong focus on increasing participation of students in a variety of settings. An interesting note is recognition of the fact that the capacity to undertake the measurement outlined is "limited by current measures and sources in relation to flexible learning outcomes" (p. 14). An early focus for the Framework is thus the development of tools to measure performance effectively.

Finally, more detailed statements of strategies necessary to attain the goals, and particular performance measures to assess the outcomes of the projects related to each strategy are also set out. These strategies (14 in total) are listed according to the goals of the document.

Each year of the Framework's initial five year plan (2000-2004) a detailed annual strategy was developed. The annual strategy set out the projects being undertaken in support of the implementation of the Framework. For each project, a short description of the project was provided along with information about the project manager, funding allocation and the project management arrangements. The annual strategies are available from http://www.flexiblelearning.net.au/aboutus/keydocuments.htm. One such strategy – that for 2004 – is provided as a template. Two projects are of particular note. First, LearnScope operated through providers seeking funding for specific projects to support the development of flexible delivery/learning and e-learning. LearnScope focuses on professional development of individual and groups of VET professionals. The project has operated since 1998, continues to do so in 2006, and has been an important part of the policy implementation strategy. Second, research focussing on flexible delivery/learning and on e-learning has also formed part of the national strategy. From 2000 to 2003 the National Centre for Vocational Education Research managed, on behalf of the Flexible Learning Advisory Group, a major research agenda focussing on issues of management, professional development, teaching and learning in flexible delivery/e-learning environments.

A number of evaluations of the Framework were undertaken. Evaluations of both specific projects and of the operation and overall management of the Framework formed part of this overall task. The overall Framework was evaluated twice. A Phase One Evaluation Report covering the period 2000-2001 was published midway through the life of the Framework and a second evaluation was published in 2004, covering the period 2002-2003. This second evaluation comprises five complementary reports and an overall summary.

- Evaluation of the Australian Flexible Learning Framework 2000-2004: Phase Two Evaluation – Final Evaluation Report
- Part A Gathering Momentum: Growth in the Uptake of Flexible Learning in Vocational Education and Training since 1999.
- Part B Connecting Capable People: The Australian Flexible Learning Framework as
- Part C Solving Problems: The Australian Flexible Learning Framework 2002 and 2003.
- Part D Rising to the Challenge: The Case for Collaboration.
- Part E Evaluation Infrastructure.

The overall summary is the document that has been referred to and templated within this project.

The Report is divided into three main themes. One set of recommendations involves the Framework, its value as a strategy and its efficiency and effectiveness as a system shaping the delivery of its goals. A further section discusses uptake of flexible learning in VET since 1999 but no recommendations are made. A final set of recommendations relates to collaboration between states/territories and institutions.

A total investment of \$A80m over the five years of the Framework is noted. 41% of this is committed to direct professional development objectives; 42% to development of online content, applications and services; the remainder to policy, research and standards-based activities.

The approaches to learning adopted through the Framework's intervention are primarily part of a blended approach rather than 100% online, with substantial increases in student use of technology, the number of technology enabled learning resources, the number of training providers offering enrolment/admin/support online and the number of practitioners accessing information about e-learning. However, level of uptake is rather small in overall terms. Less than 10% of VET activity is effectively supported by technology. There is considerable untapped potential, but the VET sector is not yet equipped in either a personnel, technological or policy sense to meet the challenges of the new national VET strategy with its strong emphasis on flexible learning. A central thread is the need for a commitment to work that will help the VET sector realize and sustain the investment made in the 2000-2004 period.

The commitment referred to in the last sentence of the preceding paragraph surfaces in the development of a two year (2005-2006) Framework plan from which a 2005 Framework Business Plan was developed. The major themes of that document reflect a maturation of the e-learning policy environment. The themes of that document are: sustainability of practices; development of synergies between activities; and, a call for a strong accountability focus. In addition the document is now quite explicit about the need for and development of links to the wider VET policy environment. It explicitly makes links to the current national VET policy: *Shaping our Future: Australia's National Strategy for Vocational Education and Training* (VET) 2004-2010 (see http://antapubs.dest.gov.au/publications/publication.asp?qsID=488). Of interest is the point that the document refers specifically to e-learning, a word that was not used once in the 2000-2004 Framework.

This document sets out what it describes as a "streamlined design" for implementation of a set of projects designed to achieve its declared purpose. The document is a more strongly demand-side strategy than previously as a result of the experience from and evaluation of the 2000-2004 Framework. It is stressing targeting of supply-side initiatives rather than broadbrush approaches and is focused on accountability and sustainability. The threads of the previous framework can still be seen but with a stronger focus on building the demand for elearning. These points are evident in the programmes and projects set out in the Plan:

- Programme 1: Client engagement comprising 3 projects
- Programme 2: Resources and innovation comprising 4 projects
- Programme 3: Capability building comprising 4 projects
- Programme 4: VET system support comprising 4 projects

Implementation of the Framework has led to state-based responses. Although New Zealand is not a federal system, the models adopted by some of the States in Australia are of interest. Western Australia (WA) provides a good example here. That State once had a distance education provider within its total suite of VET providers, and that distance education provider enrolled individual students directly and serviced them directly. Now the WA government-funded organisation WestOne plays that central role of development of learning resources (mainly e-resources) that are made available to registered training organizations (RTOs) throughout the State. The local or specialised RTOs, in turn, enrol and service students who use those resources as provided through the RTO. The relationship here has moved the central function from a retailer position to a wholesaler position, wholesaling to the more local (or specialised) RTO retailer. Other States have similar arrangements, although some of the State-based central functions also continue to enrol students direct as well as service RTOs.

Summary

The VET Framework and the documents associated with it provide a valuable picture of the ongoing development and maturation in the integration of technology into an area of education. The reasons for the development in this sector of a national collaborative approach, in contrast with the more institutionally based approach of the higher education sector may lie with the traditional institutional autonomy of universities, but were not explored during this project.

Of particular note in relation to the Framework are two factors: the considerable emphasis on the development of people capable of teaching and leading development in the area of flexible learning; and the extent of work involved in developing content and tools for content development. Together these areas drew on 83% of the budget over the period of the 2000-2004 Framework. Despite this work the overall involvement in flexible learning noted in the final evaluation of the Framework is somewhat limited.

In the most recent iteration of the Framework it is possible to discern a stronger focus on performance measurement and accountability, and a need to align the Framework with the current national VET policy. In addition there is a strong call for sustainability as a key criterion for selecting and supporting Framework activities. Another important thrust is the development of a demand-side approach – working to enhance engagement by VET institutions and staff, and businesses involved in VET.

Area G: Supranational organisations

Introduction

This section reports e-learning policy with a supranational dimension. The international polices in the area of e-learning differ from those in other countries and regions as in most cases they do not directly influence nation-state policies. Indeed, many of these policy documents and related e-learning initiatives go beyond the original brief of examining national/federal and state/provincial policy. However, because of their scope and potential significance to the future development of e-learning policy we decided to include them in the report. It needs to be noted, nevertheless, that the inclusion of the international policy added another layer of complexity to the literature searching and data extraction template design.

On the whole, the international policy literature falls within two clear camps. The first of these relates to a series of European initiatives under the umbrella of the European Commission. For more than a decade, the Commission has been proactive in shaping the strategic direction of telematics, informatics and now e-learning across Europe. In so doing, the Commission has attempted to influence policy development within individual member states. The second kind of policy initiative tends to focus on promoting e-learning in developing nations and these polices have a strong Asia-Pacific theme. Organisations such as APEC, OECD, UNESCO and The World Bank have identified e-learning as an important area of development within their broader objectives.

Another important distinction can be made between the various e-learning activities at the international level. The policy initiatives can be described as either formal policy documents specific to e-learning or broader policy initiatives that include a dimension of e-learning in a wider strategy designed to modernise the economy and promote the use of information and communication technology (ICT) throughout all sectors of society. The contribution of e-

learning to the economy is a consistent theme throughout these polices and it appears to have been a key driver behind many early initiatives.

A third distinction exists between official policy documents – e-learning and beyond – and those that are simply a collection of ICT-related activities under the direction of a supranational organisation. Many of the e-learning initiatives by the aforementioned organisations fall within this category – that is, they do not come under an overarching policy framework.

A common theme across these three different policy distinctions at the supranational level is that many e-learning policy initiatives appear to focus on the compulsory schooling sector. The European Union (EU) is perhaps the exception as there has been an effort to stimulate new cross-institutional and cross-border consortia in tertiary education. Noteworthy are EuroPACE⁴ and the Coimbra Group⁵. Many, if not most, European universities appear to have made use of the funding opportunities supplied by the EU related to cross-border collaboration and other mobility related initiatives. The underlying objective has been to promote the trans-border mobility of students and potentially the workforce.

In the case of Europe, there has also been an effort to focus on small and medium-sized enterprises and their learning needs in attempting to promote a cross-border e-learning industry. While these private sector initiatives do not appear to have a natural coverage in formal policy, this is not something that has started to emerge since the introduction of the term e-learning but has been an important driver for EU funding for more than a decade.

Overall, the key point is that although the definition of e-learning varies from one country and continent to another, and nomenclature is inconsistent, the latest policy initiatives in this area need to be located in a wider context that includes both the economic drivers and the history of telematics, informatics, lifelong learning, and open and distance education.

Background

The European Union (EU) is a supranational union of 25 European countries. These are known as Member States and in 2007 another two countries (Romania and Bulgaria) will be added to the Union. The enlarged EU will have a population of nearly half a billion. Over the period covered in this study, its membership has grown from six to 15 nations, with 10 more joining in May 2004. Because of the expanding membership, a number of the e-learning policy initiatives sponsored by the Commission include or run parallel to those in Candidate Countries.

Drawing on information contained in the Europa Gateway to the European Union website⁶, the EU's activities cover all areas of public policy, from education and economic policy to foreign affairs and defense. However, the extent of its powers varies depending on the area in question. This makes the structure of the EU difficult to define, as it can resemble:

- A federation (for example, on monetary affairs, agricultural and trade policy)
- A confederation (for example, on social and economic policy)
- An international organisation (for example, in foreign affairs)

⁵ http://www.coimbra-group.be/

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⁴ http://www.europace.org/

⁶ http://europa.eu.int/abc/12lessons/index en.htm

The executive body of the EU is the European Commission. Alongside the European Parliament and the Council of the European Union, it is one of the three main institutions governing the Union. It acts as the guardian of the treaties, which provide the legal basis for the EU, and has responsibility for proposing and implementing legislation. In theory, the European Commission is supposed to be independent of Member States and representatives are not permitted to take instructions from the government of the country that appointed them. Instead, they are supposed to represent the interests of the citizens of the EU as a whole.

In the case of e-learning, the European Commission has been particularly proactive as evidenced by the launch in 2000 of the original eLearning Action Plan. The Commission uses two important instruments to promote the effective use of ICT in education: the Socrates and Leonardo da Vinci programmes. Socrates has a specific line, known as Minerva specifically dedicated to open and distance learning. The vocational training Leonardo da Vinci programme has been innovation-led from the outset and supports many projects that make extensive use of ICT for training purposes. In-depth information about these projects goes beyond the scope of this report.

In a similar vein, we have not provided a detailed description of some of the other supranational organisations, as despite the complexity of inner workings their role and objectives are generally better known. However, it is useful to identify the key differences between organisations such as UNESCO as opposed to APEC, the OECD and The World Bank. Arguably, the interests of the former are not strongly focused on an economic imperative that promotes the value of free trade and market driven policies of economic and educational reform. Indeed, the right to Education is at the very heart of UNESCO's mission and is an integral part of its constitutional mandate. The key point, therefore, is that the above organisations may share a common goal of raising living standards in the developing world but they often differ in their emphasis and interpretation of how this objective should be achieved, leading to different policies and implementation strategies in the area of Education.

Another international group with a unique focus on the provision of educational opportunities in a manner akin to UNESCO is the Commonwealth of Learning (COL), an intergovernmental organisation created by Commonwealth Heads of Government to encourage the development and sharing of open learning and distance education in the pursuit of knowledge. Its mission is to assist Commonwealth member governments to take full advantage of open, distance and technology-mediated learning strategies to provide increased and equitable access to education and training for all their citizens.

The equitable provision of educational opportunities through ICT also fits neatly with the objective of the World Summit on the Information Society. In December 2001, the UN General Assembly endorsed the holding of the World Summit on the Information Society (WSIS) in two phases. The first phase took place in Geneva in December 2003 and the second phase recently took place in November 2005 in Tunis. The objective of the second phase was to put Geneva's Plan of Action into motion by taking concrete steps to:

Build a people-centred, inclusive and development-oriented Information Society, where everyone can create, access, utilize and share information and knowledge, enabling individuals, communities and peoples to achieve their full potential in promoting their sustainable development and improving their quality of life, premised on the purposes and principles of the Charter of the United Nations and respecting fully and upholding the Universal Declaration of Human Rights (World Summit on the Information Society, 2003, A1).

In light of this development, both national and supranational policy in the area of e-learning must be located within the backdrop of this broader social objective. The World Summit on the Information Society coupled with the inclusion of data from other international policy initiatives helps to convey a sense of the bigger picture that could easily be missing from national/federal and state/provincial e-learning policy.

Policies, strategies, reports – EU, UNESCO, CoL

In terms of the European Commission, seven policy documents were entered in the data extraction template. A number of related documents are crossed referenced to the main policy initiatives – thereby adding to the impression that over a relatively short period (2000-2005) the Commission has been particularly proactive in the e-learning area. Of course, it needs to be noted that the history of e-learning has strong roots to earlier European initiatives in the areas of telematics and informatics.

The catalyst for the latest iteration of work in this area began with publication of eEurope: An information society for all (Commission of the European Communities, 2000a). This document was quickly followed by the release of eEurope: An information society – Action Plan (Commission of the European Communities, 2000b). Together these two policy documents laid the foundation for bringing the perceived benefits of the Information Society to the reach of all Europeans. However, the concept of the Information Society is poorly defined in the two policy documents and notably one of the three key objectives was to create a digitally literate Europe, supported by an entrepreneurial culture. Therefore, despite the rhetoric of creating an inclusive society, there is a sense in which some of the action points are heavily skewed to the goals of accelerating and exploiting the benefits of e-commerce.

Put another way, arguably, the goal of bringing European youth into the Digital Age was as much about employability and modernising the economy as it was about improving the educational opportunities of young people. On a more positive inclusive note, the policy initiative singled out the promise of 'eparticipation for the disabled' in keeping with its social agenda.

The important lesson is that from the outset there is a tension in the language of eEurope between the ideals of inclusion and social cohesion. On the one hand, the policy seeks to create an Information Society, whereas on the other hand it aims to turn Europe into 'the most competitive and dynamic knowledge-based economy in the world' (European Council, 2000; cited in Candidate Countries with the assistance of the European Commission, 2001, p. 1).

This tension continues in the parallel *eEurope* 2003+ Action Plan developed by the Candidate Countries with the assistance of the European Commission (2001). While adopting the same content and structure of the *e*Europe Action plan, this parallel development inserts an extra priority area by aiming to 'accelerate the putting in place of the basic building blocks for the Information Society' (Candidate Countries with the assistance of the European Commission 2001, p. 2). In this regard, there appears to be concern on the part of the Candidate Countries that they need to make greater progress than existing EU member countries. The strong economic undercurrent continues throughout the policy but this is tempered by the goal of securing access to digitized cultural heritage and multilingual multimedia, which was not a stated outcome of the original *e*Europe initiative. Thus, there is a sense in which the Candidate Countries have a more acute awareness of the need to retain their own national and cultural identity.

The main lesson here is that many of the assumptions of *e*Europe and the attributes of the new ICTs themselves are part of, and an important contributing force to, globalisation. Although the Candidate Countries appear willing to embrace the benefits of economic and political globalisation, there is an indication of greater resistance to social and cultural globalisation through any attempt to blend the societies and education systems of individual nation-states. What is not so apparent from this suite of policy documents is whether the same concerns about globalisation exist throughout the EU and the extent to which the European Commission has influenced policy-makers in Member States.

In the foreground of this broad policy framework, the Commission released a specific *e*Learning policy (Commission of the European Communities, 2000c) coupled with a separate Action Plan (Commission of the European Communities, 2001) that specifically with regard to education and training sought to implement the objectives of the *e*Europe Action Plan. Once again, the competing and coexisting economic agenda is evident in the language of the *e*Learning Action Plan, as illustrated by the central objective of making 'life-long learning the driving force behind a cohesive and inclusive society, within a competitive economy' (Commission of the European Communities, 2001, p. 4). This point is evidenced by the acknowledgement that investment in *e*learning will lead to an important source of jobs in the new economy, which is estimated to require over a million potential new positions by 2005. Thus, the promotion of Art, Culture and Citizenship as key components of the plan, aimed at preserving cultural diversity, is interconnected to wider economic and vocational rationale.

This brings into question the some of the goals of the *e*Learning Action Plan beyond the investment in high-quality infrastructure, stepping up the training drive, and strengthening cooperation and dialogue between local, regional, national and European initiatives. In keeping with the original *e*Europe initiative, the impression is that e-learning is part of an attempt to mobilise the education and training communities to enable Europe to catch up and accelerate other countries in their pursuit of a modern knowledge economy.

The launch of *e*Europe 2005: An information society for all (Commission of the European Communities, 2002) does little to dispel this impression. This new iteration of *e*Europe is dominated by the need to adopt broadband technologies throughout Member States and the interface with the *e*Learning Action Plan is somewhat vague. The policy has a far stronger technical and networking focus than earlier documents, as illustrated by the apparent shift away from the need to invest in people and skills including those with special needs. And there is little or no discussion of why European citizens would want to adopt broadband technologies in the first place. In a similar vein, the concept of the Information Society is no longer central to the policy and the main emphasis appears to be on stimulating secure services, applications and content based on a widely available broadband infrastructure. Notably, there is now reference to '*e*learning' as a new market and no explicit statement is made of how an investment in ICT will lead to better educational opportunities and overall quality of life.

The last of the policy documents that directly address e-learning is The Multi-annual Programme (2004-2006) for the Effective Integration of ICT (Commission of the European Communities, 2002). This policy has a somewhat different flavour to earlier documents as it explicitly acknowledges the need to clarify the 'why' and the 'how' to use ICT in education. Interestingly the policy comments that 'e-learning is proving to be a major evolution rather than a revolution' (Commission of the European Communities, 2002, p. 5). It goes on to observe that many early attempts at *e*Learning were unsuccessful, as they did not sufficiently

consider the needs of the learner and the nature of the skill and knowledge to be learnt. For the first time 'blended learning' is introduced in the context of *e*learning and there is recognition that ICT is not a standalone innovation but rather it needs to be part of a more flexible approach to learning and teaching.

Overall, the concept of e-learning does not appear to have the same high profile as in previous policy documents. Indeed, *e*learning as a term is no longer used to describe this movement. The European Open and Distance Learning Liaison Committee (2004) confirms this observation in a report on *e*learning between 2000 and 2004 in which they claim that *e*Learning is no longer a star in the policy discourse. The Committee points out that:

eLearning has almost completely disappeared from top-level policy speeches, both as a term suspected of having lost its impact, and – more seriously – as a significant component of educational policy. In part this is due to the fact that education has lost weight on the overall policy agenda due to the increased concerns on security and the need to concentrate resources elsewhere (European Open and Distance Learning Liaison Committee, 2004, para. 5).

On the other hand, there is a far broader educational rationale implicit in this latest policy, as reflected by the renewed emphasis on lifelong learning and the provision of educational opportunities for disadvantaged people. While this may be the case, the European Open and Distance Learning Liaison Committee (2004) argues there has been a lack of real integration of the elearning discourse into the lifelong learning agenda; it is almost as if the two movements need to be kept separate to avoid contaminations. For example, the lack of alignment between policies is evidenced by few links to ICT in the *Action Programme in the Field of Lifelong Learning 2007-2013* (Commission of the European Communities, 2004). In addition, closer analysis of the *Action Plan on Promoting Language Learning and Linguistic Diversity 2004-2006* (Commission of the European Communities, 2003) reveals only one sentence devoted to the potential of ICT in a 30-page document.

While speculative, of course, the existence of separate policies in areas of strategic importance to Europe may be an indication of the maturing of the policy literature beyond a pure e-learning focus. As the European Open and Distance Learning Liaison Committee (2004) comment:

More than four years later the situation appears very different: in synthesis we could say that elearning is up in practice and down in policy discourse. In theory this could be the best possible development (para. 4).

However, the Committee does not believe this is the case. In their important summary of the weaknesses of recent *e*learning policy initiatives, the Committee claims that the loss of policy momentum hides the level of resistance to innovation where small elements of ICT-based learning have been adopted in practice to offer the same teaching as before. In other words, beyond massive networking activity at the European level due to a number of policy initiatives, *e*learning has had minimal impact on practice. In some cases, the unbalanced emphasis on *e*learning in the context of economic competitiveness, especially in the initial period, is claimed to have resulted in a reluctance in the educational community to join the promotional hype associated with *e*learning (The European Open and Distance Learning Liaison Committee, 2004).

In identifying a number of other important weaknesses, the European Open and Distance Learning Liaison Committee claim that there has been too much focus on formal education as opposed to post-initial, non formal and informal learning. In our view, there are clearly some important lessons here for New Zealand policy-makers.

It also needs to be noted that simply re-establishing the policy momentum and building greater alignment between European Commission policies would not overcome the fact that the success of the implementation of such polices rests with the extent individual member states are willing to revise their own government polices to bring them in align with those of the European Union. Put bluntly, there is little or no requirement for individual European states to act on these supranational policies. Herein lies a fundamental tension and common theme throughout the international e-learning policy initiatives reviewed in this study.

The lesson here for New Zealand policy-makers is that national e-learning policy may have limited impact on institutional and organisational policy in both the public and private sectors.

In terms of other supranational policy initiatives, with possibly the exception of the OECD and The World Bank, these exist at an even more removed level from the policy-making process in individual-nation states. In the case of The World Bank, its sphere of influence is largely through the financial support they offer for e-learning initiatives such as the \$4.6m (US) provided for the new Chinese distance learning project and the \$100m (US) for the first phase of the Russian Federation eLearning support project.

The research team can only speculate whether the recent decision by APEC to terminate the project to develop an e-learning Strategic Plan was a response to the supranational-national policy tension. It may have been, of course, simply a reflection of the fact that most of the countries in the Asia-Pacific region have now initiated policies of their own in this area. Thus, the perceived need to stimulate such activity may no longer exist. While traditionally APEC have had a strong compulsory schooling focus in a similar manner to the work of the Southeast Asian Ministers of Education Organisation (SEAMEO), they continue to sponsor elearning initiatives through regular gatherings and activities (e.g., The Knowledge Bank and the Cyber Education Cooperation).

The OECD has also been heavily involved in studying the adoption of ICT in the compulsory schooling sector and in the area of teacher education but their direct influence at the tertiary level appears relatively weak. Apart from a recent study of e-learning in post-secondary education at an institutional level, the OECD's influence on individual nation-state policy has been minimal. That said, behind the scenes of the policy making processes within individual countries the OECD has been proactive in promoting greater access to higher education across regional, national and institutional boundaries. This point is evidenced by the OECD's involvement in hosting the first ever conference on Trade in Educational Services⁷.

Since this forum in May 2002 a number of reports have been published that discuss the importance of e-learning in the context of the cross-border challenge of quality (OECD, 2004a) and in terms of internationalization and trade in higher education (OECD, 2004b). Moreover, the OECD is currently undertaking a major review of tertiary education (2005-2006)⁸, which will no doubt inform how governments respond to the growth of e-learning throughout the developed world. Thus, policy-makers would be wise to keep a watchful eye on this review, as any e-learning component will be shaped by, and set in the wider backdrop of, proposed changes to the General Agreement on Trade in Services (GATS).

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⁷ http://www.oecd.org/document/14/0,2340,en 2649 34549 1833550 1 1 1 1,00.html

⁸ http://www.oecd.org/document/9/0,2340,en_2649_34859749_35564105_1_1_1_1,00.html

Although this agreement and the pressures exerted by the World Trade Organisation (WTO) to extend free trade to Education are largely beyond the scope of the current research, cross-border e-learning is believed to have huge market potential. The Secretary General of the OECD believes that the future development of trade in educational services will: (a) increase the number of students taking courses abroad, (b) accentuate the need for an agreed international quality framework for tertiary education, and (c) reduce the rate of growth in international student mobility (Johnston, 2002).

On the other hand, there is there is concern that the liberalisation of trade in educational services will lead to the MacDonald's-isation of tertiary education (Higher Education Union, 2005). As Codd (2003) writes:

This extension of globalisation into the domain of education produces an agenda for educational reform that raises fundamental questions about the purposes of public education. To what extent, for instance, should global economic purposes have priority over those of citizenship and national identity? (p. 21).

Critics of the proposed changes to GATS argue that the impact of liberalisation and greater international competition could be massive. For example, there is a danger that the variety and viability of local content for domestic students could be placed in jeopardy as cheap labour and economies of scale from large international providers put downward pressure on fees and academic salaries. These concerns help to underscore the point that e-learning is not on an independent trajectory and must be understood in the context of wider neoliberal market reforms to education and society (Clegg, Hudson, & Steel, 2003). The real question for New Zealand policy-makers is to what extent e-learning should be part of a strategy to strengthen the viability, quality and uniqueness of local providers as opposed to being a vehicle for opening tertiary education up to increased national and international competition.

On a slightly less contentious front, another important player is UNESCO, especially in the Asia-Pacific region. With the support of the Japanese Funds-in-Trust they have a raft of elearning initiatives underway. However, the term e-learning is not typically used by UNESCO to describe their activities. This point highlights the lack of consistent use and accepted definition of terminology throughout the supranational policy initiatives. Thus, international comparisons are highly problematic when e-learning refers to activities as different as using tools to build communities of practice among professionals to the use of Google to find information relevant to a specific question, and hundreds of permutations in between.

At the tertiary level, UNESCO's work has some relevance to the New Zealand policy context as they have sponsored a number of cross-border collaborative projects. A good example is the report entitled *National Strategies for e-Learning in Post-secondary Education and Training* in which Bates (2001) discusses some quite specific considerations in the development of e-learning policy for the tertiary sector. UNESCO has also made a contribution in the areas of teacher education and in helping to underscore the very real nature of the Digital Divide. In terms of the latter, the key implication for New Zealand policy-makers is that we have an important responsibility to our Pacific neighbours. In other words, e-learning policy should not only align with internal national policies but also the goals and aspirations of Pacific nations, which play such an important part in New Zealand society.

On the theme of the Digital Divide, some of the ideals and commitments presented at the World Summit on the Information Society encapsulate the potential of e-learning to extend educational opportunities to all – including youth, older persons, women, indigenous peoples, people with disabilities, and remote and rural communities. Although arguably lacking in substance, there is a

challenge here for New Zealand policy-makers to develop action points that operationalise many of these goals.

To some extent, the Commonwealth of Learning (Col) has already started this work through its contribution to open and distance learning in less developed countries. This raises another strong theme throughout the supranational policy initiatives – namely the historical connection and convergence between e-learning and open and distance education. While the activities of the COL have limited relevance to policy development within tertiary education in New Zealand the question is to what extent e-learning should become part of the wider move to promote more flexible forms of learning based on the tradition of distance education and lifelong learning. Again, the key lesson here for policy-makers is to align e-learning with the considerable body of literature that exists in these more traditional areas.

The last policy document stands out from the rest as the International Association of Universities (2004) produced it. The document has primarily been included to signal that a different kind of elearning policy may exist beyond the scope of this study. Although a sidebar to national policies, the IAU statement underscores the unique nature of university education and indicates how universities have an important role in not only exploring the potential of e-learning but also in researching the long-term effects – for better and worse. In keeping with the tolerance of divergent opinion and freedom from political interference in university work, the implication is that policy must be sufficiently opened-ended to allow the pursuit of new knowledge in directions that may not be popular or consistent with current orthodoxy and the direction of government.

Summary

The supranational policy documents span a continuum from quite specific e-learning initiatives aimed at the education sector, with specific action points, to rather board policy briefs that refer to the importance of ICT in the context of the private sector and global economy. With the notable exception of Europe, many of the policies we reviewed have a strong compulsory schooling focus.

The concept the e-learning is broadly and/or poorly defined throughout the supranational policy documents. Irrespective of the definition or alternative nomenclature, a fundamental tension exists between supranational policy and the extent individual nation-states are willing to adopt and revise their own national/federal polices to align with those internationally. At a deeper level, this tension illustrates that e-learning is part of a wider social practice that is inextricably linked to the forces of marketisation and globalisation. There is also a tension embedded within the discourse between what the policy aims to do for individual citizens (whether or not they want it) and what it seeks to achieve for the economy and global market. The social and educational rationale that elearning can boost citizenship, extend educational opportunities and contribute to a better quality of life competes and coexists with the drive to create a new knowledge economy.

There is some evidence to suggest, nevertheless, that as countries develop their own policies the policy literature may be maturing away from a strictly e-learning focus. However, this observation is open to conjecture. In the case of Europe, for example, e-learning is no longer a star in the policy discourse as issues of national security appear to have taken on greater significance. It is also important to note that new developments in the areas of language and lifelong learning continue to be aligned poorly with the use of ICT in education. This suggests that e-learning in the EU has failed to have a major impact on policy making processes in the wider context.

Overall, at the supranational level e-learning remains an area of strategic importance. A number of high profile organisations such as OECD continue to sponsor and champion the contribution that e-learning can make to both education and the economy.

Case studies

This section of the report provides in-depth descriptions of three case studies of jurisdictions in which e-learning policy has been developed and implemented, monitored and evaluated. These case studies focus on three provinces in Canada – British Columbia, Saskatchewan and Ontario. This decision was made for the following reasons:

- 1. Canada, the US and Australia are federated systems at the national level thus bringing particular complexities to the analysis that are not relevant to New Zealand.
- 2. The UK countries (England, Scotland, Wales) are already well known examples.
- 3. The European and Asian nations reported on gave us greater than anticipated difficulties with language issues.

The three Canadian provinces provide quite distinct experiences, are all part of a system where responsibility for education is at the state level and there is little evidence of federal intervention. Thus the policy development and implementation processes occur in a context similar to those of New Zealand.

Case Study of British Columbia

British Columbia (BC) is similar to New Zealand in several respects. It has a population of just over 4 million; a natural resource dominated economy; numerous small and scattered communities; and a long history of distance education. The history of distance education at the tertiary level begins in a formal public sense in the 1920s. From that time the initial correspondence education offered evolved to forms of education at a distance that made increasing use of new technologies, moving through film in the 1940s, educational television in the 1960s, the introduction of computers and computer-based instruction in the 1970s. Delivery modes were expanded in the 1980s with phone networks and satellite links being used. The early 1990s saw increased awareness of the importance of computer technologies and networks, leading into the e-learning era.

The 1970s also saw the creation of the Open Learning Institute (OLI) to provide system-wide programs leading to a first degree in arts and science, programs in career, technical and vocation areas, and adult basic education, and to manage support systems, through the use of distance education methods. The OLI was noteworthy because it quickly became the largest distance education provider in the province. It was later to merge (in 1988) with the public educational broadcaster, the Knowledge Network, to become the Open Learning Agency (OLA).

Background

The development of e-learning in British Columbia is cleft in two by the provincial election of 2001. From 1990, under the New Democrat government, several Task Forces, Working Groups and Forums were involved in developing policy and strategy documents and proposing projects to advance the use of educational technologies and in particular distance or distributed learning. A number of initiatives were undertaken. Prominent amongst these initiatives were the creation in 1995 of a Centre for Curriculum Transfer and Technology, tasked with working with faculty in provincial higher education institutions to assist in the development of online courses, and, in 1998, the initiation of a Provincial Learning Network project to provide a hardware infrastructure province-wide to enable communication and datasharing within the post-secondary system. This project was completed in 2000.

The years up to 2000 were marked by a relative lack of coordination between projects and innovations that were not sustainable without ongoing public funding. The need for a comprehensive and coordinated system-wide approach in the area was recognised and through 1999 and 2000 the development of an Educational Technology Policy Framework (ETPF) was undertaken as an outcome of the Ministry of Advanced Education and Training's mission document "Charting a New Course".

In the provincial election of May 2001 the Liberal Party was elected to govern British Columbia. In the area of Advanced Education the newly elected Liberal Government instituted an immediate core review of programmes and services which ultimately proposed a number of "strategic shifts". The ETPF was placed to one side but the review party made recommendations, amongst others, for improving access to on-line learning and part-time learning.

The Liberal government inherited a tertiary environment in which there was considerable innovation in e-learning, a provincial data network for educational institutions and great acceptance of distance and online education. Existing programmes that proved to be starting points for the Liberal government's new policy directions were:

- e-merge (formerly the Collaborative On-Line Project for E-Learners), a system-wide collaborative effort to develop and deliver on-line courses and programs, share support and administrative services, and collaborate on credentialing issues; and,
- BCCourses.com, an on-line directory providing information on credit courses offered at a distance, through a variety of media and formats, in British Columbia's postsecondary system.

In February 2002 the Ministry of Advanced Education (AvEd) undertook a review of the OLA to explore options for a more collaborative model of online and distance learning across the advanced education sector. In March it announced targets for on-line enrolments for students in tertiary education, and by October that year it was announced that the OLA would be wound up and replaced by BCcampus – a new organisation designed to support online learning. These initial steps were indicative of the new government's approach to e-learning. The remainder of this case study focuses on provincial policy and policy implementation in the area of e-learning in the tertiary sector from May 2001 on.

Rationale for e-learning policy direction

In August 2001 the BC government formed the Premier's Technology Council (PTC) to provide advice to the Premier on all technology related issues facing British Columbia. This group provided considerable input into the policy agenda for British Columbia edevelopment, including e-learning. The PTC was charged with examining ways to:

- Remove barriers that keep many British Columbians from participating in the knowledge-based economy and from accessing the educational, social, and cultural benefits delivered through broadband networks.
- Identify areas where technology can make government more efficient and improve the delivery of government services throughout the province, including education and health
- Ensure the growth and development of a vibrant, globally competitive technology industry in British Columbia.

To address these issues the PTC initially formed four task groups relating to: access and opportunity; government operations and services; industry growth and development; and marketing and public awareness. The first group focused on provision of broadband access to every community in BC. The second was concerned with delivery of government services online to increase efficiencies and reduce costs, with emphasis on telemedicine, e-learning, and (e)procurement. The third group is not as relevant in the educational context but did note the importance of educating a world-class technology workforce. The final group had two foci, one of which was the need to educate the public on the benefits of Internet-based applications and information including education and government services.

In the first PTC report, e-learning was viewed as overcoming distance and contributing to the re-development of the economy. It was seen as a way to "...bring the classroom to the student. Distance should not be a barrier to accessing any educational programs. K-12 students, college or university students, companies retraining workers, or lifelong learners seeking new skills, can all be aided through distance learning on-line. As the province evolves from a resource based economy, e-learning can help stimulate the development of skills which will drive the economic diversification necessary to support small communities – and do it in a cost-effective manner" (PTC, 2002, p. 5). Three emphases can be seen here. The first addresses the potential of e-learning to support the development of skills across British Columbia; the second recognises the needs of the small and scattered communities in the province; the third sees e-learning as a cost-effective means of addressing educational needs.

These emphases can also be seen in the statement (Oct 30, 2002) of the Minister for Advanced Education, Shirley Bond. Bond announced plans to enhance online learning in BC stating that "Online learning is more efficient and more flexible, and we are committed to using that technology to benefit BC students. BCcampus [the initiative being announced] will help us move post-secondary education into the 21st century and pave the way for a more integrated, efficient and responsive system – one that will increase access, flexibility and choice for all students."

A constant emphasis was the Council's call for a broadband infrastructure, a call that it frequently tied to e-learning. In its fifth report it noted that "E-learning is reliant on a technology platform. Implementing a broadband infrastructure that connects all communities in BC will allow people in the province's remote or rural communities to cross the Digital Divide and to have access to vital services such as elearning" (PTC, 2004, p. 17). The PTC leveraged this call on advice from a Task Force on Rural Education "that the government increase learning options for rural students and educators through technological solutions" (p. 17), suggesting that e-learning was an important option. This indicates again the emphasis that was placed on provision of (e-learning) services to the small and remote communities of British Columbia.

The themes of access, flexibility, choice, cost-effectiveness and service to small and remote communities thus constitute the rationale for e-learning in BC. Cost-effectiveness, viewed at a system level rather than in terms of delivery, is seen to arise from changes to the system of advanced education through integration and increased responsiveness, rather than the traditional distance education cost saving through reduction in per-student variable costs with large numbers per course. Access, flexibility, choice and service to small and remote communities all reflect the overall drive of the new government, with its "New Era" platform, to create closer and more effective links between the economy and post-secondary education,

to increase choice of courses and means of study for students, and to achieve a more coherent and integrated tertiary system.

Description of specific e-learning initiatives

Two major initiatives associated with e-learning mark the period since the election in 2001. The initiative directly associated with e-learning is the establishment of BCcampus designed to be "a collaboration of post-secondary institutions in BC providing an online central access point to post-secondary distance learning resources and support services for learners, faculty and course developers, staff and administrators" (Ministry of Advanced Education, 2003). The second initiative, Network BC, is associated with the project of enhancing PLNet and providing broadband access throughout the province.

BCcampus

The BCcampus project was announced in late 2002. It was noted in the AvEd 2001/2002 Annual Report subsequent to the 2001 election as being a response to the need to enhance student choice at the post-secondary level by expanding online access.

The BCcampus initiative effectively spelt the demise of the OLA. An explanation of the nature of the initiative and its impact on learners and the tertiary system was presented as follows:

Through BCcampus, learners will be able to:

- access information on all distance education courses and programs available throughout the British Columbia public post-secondary system;
- access all student support services tasks online, including applying for admission, selecting and registering for courses online and tracking personal academic history as well as extended hour (24 hours, seven days a week) helpdesk services for on-line students;
- transfer courses easily from one institution to another;
- enhance individual choice by giving learners access to a broad range of programs, courses, schedules and delivery formats. Students will be able to choose learning that fits their individual needs;
- have the option of completing their programs of study entirely online and receiving their credentials online; and
- access interactive student resource and "chat" areas to enhance networking, information sharing and peer support.

BCcampus will contribute to a more coherent and integrated public post-secondary system in a number of ways by:

- providing a focus for distance learning activity in the public post-secondary system in British Columbia;
- offering opportunities to reduce duplication and redundancy and perhaps achieve economies of scale;
- encouraging faculty to share ideas and best practices through online conferences. These online conferences could also develop mechanisms for peer review of research and proposals;

- promoting the development of high quality curriculum through access to shared databases of learning resources that faculty and developers may use in the development of new courses;
- facilitating collaboration in course development and delivery through "virtual" development teams of faculty working on joint projects online; and
- allowing institutions to share information to manage enrollment and better deploy resources (Open Learning Agency, 2002)

The BCcampus initiative set out to build much more than a portal to a collection of courses. It was seen as a way of integrating the post-secondary sector course offerings thus reducing duplication and providing opportunities for staff access to tools for course development and collaboration to enhance the quality of courses. It was designed to provide students with the opportunity to transfer between institutions and to access all student support services online.

A range of sub-projects in the overall BCcampus project are bound to the goal of integrating the post-secondary education system. These projects include the development of an automated registration system that is integrated with partnering institutions, a service listing all courses available from post-secondary institutions, a portal to (home) institutional libraries for BCcampus students, and several projects associated with financial aspects of post-secondary study.

Network BC

The Network BC project was initiated in 2003 to provide high-speed connectivity to provincial communities. The project was not solely designed to serve e-learning. It was "created to work with British Columbia communities and the private sector to bridge the digital divide in British Columbia by 2006 and put in place the next generation data network for the provincial government and the broader public sector (BPS). In this context, the BPS refers to all provincial health authorities and Crown corporations" (Network BC, 2005).

In 2002 the PTC identified 366 communities that were a priority for high-speed internet access and work began to provide connectivity. Contracts to telecommunications providers for Network BC were to take service to a central community access point. Communities were responsible for the 'last mile' connections from the central community access point to individual businesses and homes. This initiative will be addressed further in a later section of the report

Implementation mechanisms

The BCcampus project was established in 2002 with a steering committee and a project team. The goals of the project have been described in the previous section. The project is part of the public post-secondary system and thus ultimately comes under the jurisdiction of the Minster of Advance Education.

The overall project has been undertaken in stages. In 2003 the steering committee published a series of implementation targets in a booklet entitled "Defining Success" which included "short- and long-term measures as well as a mix of hard and soft measures to assess progress" (BCcampus, 2004). The "Defining Success" booklet was not available to the authors of this report.

Monitoring and evaluation procedures

In addition to any internal BCcampus project monitoring and evaluation procedures, the provincial government put in place a performance measure for the Ministry of Advanced Education relating to the priority to enhance student choice by expanding online access. The performance measure set targets for the number of new full-time-equivalent students (FTE) enrolled in online learning. It was withdrawn following the Ministry of Advanced Education's 2004/05 Service Plan Report because it reported only enrolments through the BCcampus initiative, not through the entire tertiary system. However, the measure signals the AvEd requirement for accountability within the BCcampus project.

Evaluation outcomes

The Ministry of Advanced Education Service Plan Reports for the years from 2001/02 through 2004/05 provide information about targets for BCcampus enrolment in numbers of full-time-equivalent students and actual enrolment. The following table, derived from information in the AvEd Service Plan Reports illustrates the growth in BCcampus enrolments.

<u>Year</u>	Target FTE	Actual FTE
2001/02	260	183
2002/03	390	387
2003/04	620	698
2004/05	850	1128

Actual head-count enrolments are reported in the BCcampus implementation overview (BCcampus 2004) as "increasing from 211 registrants in 2000-2001 to more than 7,300 in 2003-2004 and to 10,050 in 2004-2005". This does not indicate total online student numbers, representing only those students actually enrolling in post-secondary courses through BCcampus.

Progress in the development and implementation of sub-projects is mentioned in BCcampus (2004). Two services (BCcourses.com; PASBC) that were operation prior to the implementation of BCcampus continue as part of the initiative and others are in various stages of piloting.

This brief case study sets out a very circumscribed picture of the major e-learning initiative within BC since 2001. The picture provided shows a successful initiative that is continuing to develop. It is an initiative that has built on the previous strengths of the province in the area of distance education and moves them forward. It has a strong focus on the integration of the post-secondary system.

The picture provided is bound by several limitations. It has not been possible to source data that places the BCcampus initiative in the overall context of online learning enrolments across BC. There is no indication of the extent to which the project meets the provincial government's aim of serving small and rural communities. Nor is there any sense of gains from what was proposed as a cost-effective system. The relationship between BCcampus and individual institutions has not been explored, and this relationship is central to the ultimate success of the project.

Case Study of Saskatchewan

Saskatchewan is a relative latecomer to e-learning but is now well underway with the development of infrastructure and initiatives to support e-learning (referred to as Technology Enhanced Learning throughout the province). This section provides an overview of the policy initiatives that have emerged from Saskatchewan.

Background

The province of Saskatchewan began discussions between the Saskatchewan Post-Secondary Education and Skills Training and provincial institutions in 1997. These discussions resulted in the formation of the 2000 Technology Enhanced Learning (TEL) plan, which is a comprehensive policy statement and five year Action Plan for Technology Enhanced Learning. It was anticipated that this action plan would guide the expansion of on-line learning and the use of related technologies throughout the post-secondary sector.

Through the participation of many partners, the plan represents a collaborative effort to increase access and quality in the post-secondary system by building on existing strengths, developing complementary roles, undertaking joint initiatives and sharing resources (Saskatchewan Department of Learning, 2000, p. 1).

The TEL Action Plan had four goals:

- Enhance Métis and First Nations peoples' education and training;
- Advance education and training in rural and northern communities;
- Develop and retain students, graduates and faculty for a knowledge-based society; and
- Develop Saskatchewan's intellectual capital.

The action plan outlines three distinct phases to implement TEL into post-secondary education.

Phase 1 – Centred around the discussions between the post-secondary institutions and provincial government.

Phase 2 – Involved the development of an Action Plan which determined the direction that TEL would take in the province of Saskatchewan.

Phase 3 – Saw the implementation of the Action Plan through the specific priority actions that had been identified in the plan.

The five years of the Action Plan have now run their course, there is not yet any firm direction set for the future of TEL in Saskatchewan. There does seem to be support for another province wide strategy that would set the future direction and continue to fund TEL.

Up until this point the TEL initiative has provided the funding for the provincial institutions to support the initiatives outlined in the TEL action plan. The provincial institutions collectively received funding of over \$4million per year through the TEL initiative.

The Saskatchewan post-secondary institutions were all responsible for developing their own institutional vision and plan for TEL. The nature of the Action Plan encourages alliances between institutions rather than competition.

Rationale for e-learning policy direction

The original 1997 TEL discussion document spells out the issues surrounding the use of TEL. During these initial discussions policymakers warned that institutions adopt technology aggressively or risk being overtaken by institutions that are already doing so. This seemed to prompt Saskatchewan Learning, the provincial institutions and the stakeholders into action.

The subsequent TEL Action Plan makes the context for TEL application in Saskatchewan apparent through its list of influencing factors for post-secondary students, educators and administrators. It was envisaged the TEL would provide greater choice of location, time, and instructional approach for students. With this greater choice will also come greater competition. There was a fear that institutions in Saskatchewan might lose potential students to institutions in other provinces if they did not adopt TEL. New Institutional Alliances needed to be established. Models from the US and other provinces of Canada were cited as examples of institutions working successfully in a consortia arrangement.

The integration of technology is becoming an expected part of instruction both on and off campus for all of the provincial institutions. This also results in a changing role for staff in how they teach and how they interact with students. Finally, the Action Plan noted that under some circumstances the use of TEL can lead to improved cost-effectiveness. The authors noted that although adoption of TEL would require substantial investment by institutions the investments would be unlikely to see a return or be offset by savings in other areas for quite some time.

The Action Plan for TEL was shaped to ensure that the future use of technology addressed provincial realities and assisted post-secondary institutions in responding effectively to the changing needs of their constituents. In order to do this these factors needed consideration:

- Increasing Public Demands for Post-Secondary Education and Training
- Economic Development and Diversification
- Learning Opportunities for Saskatchewan's Rural and Northern Communities
- Meeting of First Nations and Métis Needs for Education and Training
- Social Equity

Description of specific e-learning initiatives

The major initiative to stem from the TEL Action Plan has been Campus Saskatchewan – the virtual university. This consortium involving the province's universities, technical institute, regional colleges, and other partners, was a major TEL initiative. Through Campus Saskatchewan, institutions have provided: a coordinated range of on-line courses and programs; enhanced credit transfer arrangements so that students can earn all or part of a credential through alternative means and by taking courses from different institutions; a network of services in rural, northern, and urban areas to provide the support and connectivity required by many learners to benefit from new on-line opportunities; a streamlined admissions process with linkages to on-line registration and application for student financial assistance; a Web site for students, faculty, counsellors, and the general public to have onestop access to Campus Saskatchewan information and services.

Another significant partner in the implementation of the TEL Action Plan is the Saskatchewan Communications Network Corporation (SCN). SCN was created in 1989 to provide increased access to information for the people of the province. As a result it has developed the SCN E-Learning Network, the SCN Broadcast Network and the SCN Technology Services.

Saskatchewan Education and the telecommunications provider SaskTel developed the CommunityNet programme in 2001. It was charged with the responsibility of providing high speed internet access to all communities within three years.

At an institutional level, online and televised courses formed a major part of the TEL initiatives with 5,765 students enrolled in a course of this type in 2003-2004. The two universities and Saskatchewan Institute of Applied Science and Technology (SIAST) dominated this area and offered 162 online and televised courses of the total 175 courses in the 2003-2004 academic year. Reports projected that the 2004-2005 academic year would see an increase in these figures.

Substantial TEL funding has also gone into content development for these online courses, this included the creation of learning resources. The types of resources being developed included digital image banks and resource websites that enhance and enrich courses and programmes.

Many institutions in Saskatchewan have taken a programme approach to developing courses for online and televised delivery. This approach will allow students to work towards completion of an entire qualification through online or televised courses. The University of Saskatchewan listed as an institutional priority in the TEL Action Plan to develop online delivery for one professional graduate programme where the university is a recognised national leader. This has been accomplished through the post degree course in Special Education.

There is a trend towards blended options for courses. Many of the institutions extended faceto-face courses with online components. Within these blended options institutions made use of a wide variety of technologies.

While the TEL Action Plan guides and funds a number of initiatives at the institutional level it has also been a catalyst for institutions to develop online courses and programmes themselves. This allows institutions to strengthen their own capacity in the area of TEL, rather than relying on TEL funding for support. For example the University of Regina now requires departments and faculties to include TEL in their curriculum planning, activities in particular when establishing new courses.

Staff development and support has been a key area of emphasis for the post-secondary institutions. A variety of activities and approaches have been adopted to engage and support staff in technology enhanced learning. An example of this is the model of faculty development at SIAST where a 'Greenhouse' model was adopted. Institutional staff development has been supplemented by the annual Teaching Learning and Technology conference Tl^t.

Implementation mechanisms

Much of the implementation of the TEL Action Plan is occurring at the institutional level where institutions receive funding for the action points identified for them to work towards. For the Saskatchewan Virtual Campus initiative, Working Groups were set up to assist in the implementation phase. Working groups had representatives from many of the key institutions: University of Saskatchewan, University of Regina, SIAST and some of the regional colleges and were guided by terms of reference. There were five working groups established:

- TEL Content Development: Academic Preparation Task Team
- TEL Content Development: Arts and Science Task Team
- Faculty Development and Support Task Team
- Learner Support Services Task Team
- Technical Infrastructure Support Task Team

The only working group that had any published information about its direction and progress was the Academic Preparation Task Team. In 2002 this group published a strategy and action plan entitled: The Role of Technology Enhanced Learning in Academic Preparation. It outlined a four phase action plan to assess needs and existing resources before deciding on areas of priority and action to be taken.

Monitoring and evaluation procedures

The monitoring and evaluation process for the TEL Action Plan in Saskatchewan has focused on the completion of an Annual Reporting Template by each institution. This Annual Reporting Template outlines TEL content development and delivery status for each funded project. The template also requires similar information for any institution funded TEL initiatives. The Reporting Template also provides opportunities for post-secondary institutions to identify:

- key accomplishments
- TEL integration within the institution
- faculty development support activities
- impact of TEL activities
- issues/barriers for development of TEL and lessons learned
- learner support activities
- emerging trends affecting institutions and recommendations for the future of TEL.

It has been noted in the TEL evaluation that these annual reporting templates were cumbersome in the initial years and did not generate the desired information. Changes were made so that data collected from the 2003-2004 fiscal year onwards was more useful.

In 2005 a full evaluation of the TEL Action Plan was undertaken. This involved a review of the documents and literature, interviews with key informants, surveys of faculty, learners and instructional designers and discussions with an expert panel. Some of the key findings of the evaluations are outlined in the next section.

Evaluation outcomes

The TEL Evaluation report cites a number of lessons learned through the implementation of the TEL Action Plan and from subsequent discussions with experts in the field of TEL. These lessons will need to be taken into account in any future iterations of the Saskatchewan TEL plan but will also help to inform other countries embarking on TEL strategy development.

- The success of technological innovations in teaching and learning must be inextricably linked to the extent to which these innovations support and enhance learning. Initiatives that do not have this primary goal as their underpinning will not achieve the support of staff in the institutions or learners themselves.
- Building partnerships to address need in the area of TEL is critical.
- To be most productive, funding for technology enhanced learning and the intellectual energy of faculty should be linked to the administrative and strategic goals of the institutions
- The appropriate use of technology carries significant demands for staff to master technological skills, pedagogy and to understand the strengths and weaknesses of learning technologies.
- TEL content and delivery needs to be guided by best practice, these practices need to be sustained by strong senior management support and organisational/technological/project management support.
- The need to develop learning objects to a common technical standard that are potentially shareable.
- There is a need for more research to understand what makes for effective use of learning technologies and to distinguish between successful and ineffective innovations through evidence.

The province of Saskatchewan is currently sitting at the crossroads. The 2000 TEL Action Plan was a five year plan and it has now run its course. There is support from the institutions to continue with another shared provincial strategy to guide and fund post-secondary initiatives in TEL. There is a need for the province of Saskatchewan to adapt and renew the TEL Action Plan while there is still some progress being made in this area. Alternatively TEL could be moving towards becoming an integral part of the post-secondary landscape in Saskatchewan rather than being a unique feature. The direction Saskatchewan intends to head in the near future is still unclear.

Case Study of Ontario

This section provides a brief case study of e-learning in Ontario in which the major policy initiative is *Ontario: A Leader in Learning* (Rae, 2005). In keeping with the terminology of Ontario, this section uses the terms higher education and post-secondary education interchangeably to describe apprenticeship, college and university programmes and institutions.

Background

The proclamation of the *Post-secondary Education Choice and Excellence Act* (2000) positioned Ontario to expand the range of educational choices for students (Ministry of Training, Colleges and Universities, 2002). A new Post-secondary Education Quality Assessment Board (PEQAB) was created to make recommendations to the Minister on proposals for new applied degree programmes. In 2002, the Ontario government also introduced legislation to allow the import of transnational higher education. At the same time, new legislation was introduced to establish a new "College Charter" to give colleges and universities more autonomy to better respond to their communities, individual circumstances and unique areas of specialisation.

It is noteworthy that up until this time the governance and regulation of post-secondary education in Ontario was characterized by a very centralized approach. The pressure to open the doors and introduce greater choice was in part a response to the need to meet the increased enrolment expected when the first students in the new four-year high school programme graduated at the same time as the last students in the old five-year programme (Ministry of Training, Colleges and Universities, 2002). However, in a stinging critique of ICT in the context of higher education, Magnusson (2005) shows that the forces to plug Ontario into the knowledge society go far deeper than simply a response to the double cohort and burgeoning demand for higher education.

In the 2004 Ontario Budget, the government announced a review of the design and funding of post-secondary education. Premier McGuinty appointed the Honourable Bob Rae to lead this review with the support of a seven-member Advisory Panel. Rae was asked to advise on strategies to improve higher education by providing recommendations on:

- The design of a publicly funded postsecondary system offering services in both official languages that promotes:
 - recognized excellence in curricular activities to build the skilled workforce and promising scholars of the future;
 - an integrated and articulated system that meets the diverse learning needs of Ontarians through the most cost-effective design;
- funding model(s) that:
 - link provincial funding to government objectives for postsecondary education, including the objectives of better workers for better jobs in an innovative economy and an accessible, affordable and quality system;
 - establish an appropriate sharing of the costs of postsecondary education among the government, students and the private sector;
 - identify an effective student assistance program that promotes increased access to postsecondary education.

Secondary recommendations were also requested on:

- the role of international students in enhancing higher education in Ontario;
- the role of marketing higher education in Ontario internationally

(Rae, 2005, p. 1)

The overall objective of the Review was to provide evidence-based recommendations that were realistic, would make a real difference in both the short and the long term and which could begin to be implemented with the 2005 Budget.

At each step in the Review, five key themes were explored to assess the current state and challenges confronting the education system:

- Accessibility
- Quality
- System design
- **Funding**
- Accountability

The so-called Rae-Review claims to have implemented an ambitious and multifaceted public engagement and stakeholder consultation strategy. Several key approaches were adopted as

part of a deliberate strategy to promote debate and dialogue over the course of the review. Much of the discussion was centred on issues and questions raised in an earlier discussion paper. The consultation phase was claimed to be 'one of the most extensive undertaken on an important public policy issue in recent years, fostering public awareness and debate in communities across the province' (Rae, 2005, p. 109).

The outcome of this process was the proposal for a number of sweeping changes to postsecondary education. Beach (2005) describes these changes in his recent book critically appraising the review as challenging all those who work with higher education in Ontario. He observes with a number of fellow contributors that the report addresses the quality of higher education and training, the overall design of the postsecondary system, accessibility, current underfunding of universities and colleges, availability of loans and bursaries, and accountability and governance in the postsecondary sector (Beach, 2005). Thus, the review is comprehensive as it seeks to ensure that Ontario is a competitive and prosperous society for generations to come. Overall, Rae (2005) concludes that 'We won't get where we need to go by piecemeal tinkering' (p. v).

Rationale for e-learning policy direction

The Rae-Review makes it clear that institutions rather than the provincial or federal government are largely responsible for the future development of e-learning in post-secondary education. As noted in an earlier section of this report, Rae (2005) comments that he received some submissions for a new institution dedicated to distance and online education. However, Rae chose not to make such a proposal as he considered this too expensive and it would duplicative what was already starting to develop. In particular, he cited the example of the growth of the number of "articulation agreements" with Athabasca University based in Alberta. Instead, the Review concluded:

The better way is to encourage competition in this area, insist on best practices and find practical ways to fund innovation and collaboration (Rae, 2005, p. 17).

The key assumption, therefore, is that a more competitive higher education marketplace would help to produce greater numbers of highly trained graduates with the most up-to-date training and education possible.

In responding to the Rae-Review, the Association of Colleges of Applied Arts and Technology of Ontario (2005) argues that to achieve the above goal college and university programmes need greater funding to further integrate elements of e-learning into their curricula. The Association points out that online courses and distance education offer more flexibility to students and overcome geographical barriers but at the same time the evolution of ICT places tremendous pressures on technological infrastructure. Industry partners and the government expect colleges and universities to adapt to the new knowledge economy, which means additional support is required to update and enhance technological capacity and resources (Association of Colleges of Applied Arts and Technology of Ontario, 2005). To some extent, the Rae Report recognises this point, and recommends that an extra \$40 million per year in each of the next three years (beginning in 2005-06) be allocated for updating college instructional equipment.

The key point is that this additional funding for technological infrastructure is part of a much wider policy framework. The Rae-Review indicates a focus on core features of education in which e-learning is placed alongside other methods of learning. It is not the central focus of

policy development. Rather, e-learning is integrated within other strategic policy directions such as excellence in teaching quality, high levels of student support, affordability, and ready access to post-secondary education. The rationale to place ICT alongside other means of attaining these goals may be a deliberate attempt to consider the long-term effectiveness and sustainability of e-learning environments following their rapid adoption into post-secondary education systems.

Description of specific e-learning Initiatives

In 1970, the Ontario government established TVOntario⁹ for the purpose of using technology to support the province's education priorities. TVOntario is one of several educational services that fall under the jurisdiction of the Ontario Educational Communications Authority (OECA). The brief description below of these services is largely summarised from the OECA website¹⁰:

TVO is TVOntario's English-language service. It is Canada's oldest educational broadcaster, and is available to over 98% of Ontario homes. TVO provides educational programming and online resources that potentially enhance and extend learning at home and in the classroom, as well as promoting Ontario's rich cultural identity.

TFO is TVOntario's French-language service. It was launched in 1987 and provides a broad range of educational and cultural programs reflecting the dynamic and rich nature of French-speaking Ontario. TFO is the province's source for Franco-Ontarian educational and cultural multimedia products.

The Independent Learning Centre (ILC) enables learners of all ages to pursue their high school diploma, upgrade their skills, or advance their careers through flexible and personalized distance education courses and web-based resources. For over 70 years, ILC has delivered distance education to Ontario residents and more than 30,000 individuals, institutions and schools are reported to use their services each year.

In addition, the Ontario government continues to support the provision of distance education in the North through a grant to Contact North¹¹, which uses audio conferencing and video conferencing to offer education to residents in small and remote northern communities. Contact North reports over 14,000 registrations in over 700 distance education courses with a 10% annual enrolment increase.

In the backdrop of these existing e-learning initiatives, a report on adult education published after the Rae-Review warrants closer analysis. In May 2004 the Adult Education Review was launched at the request of the Minister of Education and the Minister of Training, Colleges and Universities. The goal of the review was 'to propose a policy framework for adult education and recommend actions that would not only support but also improve adult education in Ontario' (Wynne, 2005, p. 5). This review recognised that adult education provides an important pathway to secondary or postsecondary systems but it is often distinct from these programmes. It takes place 'in formal and informal settings in a wide range of locations – in the community, the workplace, formal institutional environments, and the home' (Wynne, 2005, p. 48).

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⁹ http://www.tvontario.org/index.html

¹⁰ http://www.tvontario.org/tvontario choose.html

http://www.cnorth.edu.on.ca/

The review claims to have focused on the specific programmes that help adults gain or keep employment, access further education and training, or participate more fully in the life of their community. In keeping with the broader conception of adult education a wide range of stakeholders were involved in the consultation process. Their responses were organised into the following themes:

- Adult education as a key component of Ontario's education system
- Learner pathways
- Integration of programs
- Partnerships
- Accountability, outcomes, and funding
- Access to adult education
- Information and communications technology in adult education
- Innovation and excellence in teaching and learning

While in the final report, *Ontario Learns: Strengthening our Adult Education System*, elearning is part of a much wider review there is general acknowledgement of the importance of ICT in adult education. The report states:

The use of information and communication technology (ICT) in the delivery of adult education and training improves access to opportunities, particularly for people in remote northern and rural areas, accommodates persons with disabilities, enriches the learning experience beyond the classroom by providing additional resources and alternative teaching and learning modes, and helps learners acquire or improve their skills (Wynne, 2005, p. 32).

The relationship of this report to the Rae-Review is unclear, but it shares the view that ICT is not the only solution to strengthening the education system for all learners. While acknowledging that ICT offers innovative ways to reach out to adults where they live and work, low literacy and numeracy skills, and accessibility is still a concern. The (2005) report points out:

ICT cannot fully address the issue of access—many learners cannot afford to buy a computer or pay for Internet service. and access time on the computers available in libraries or community agencies is limited. Many remote and rural communities do not have private phone lines or access to computer technology, let alone high-speed Internet services. ICT is certainly not appropriate for all learners: they may not have the level of literacy required to use computer technology; instructors may not have the expertise to help learners use ICT appropriately; and in some regions, the necessary technical support may be difficult and/or costly to access (Wynne, 2005, pp. 32-33).

Despite these concerns, the Adult Education Review makes a specific recommendation to explore the potential of ICT to support programme delivery and to improve access for learners in a range of settings including classrooms, correctional facilities, libraries, and community agencies and to enable self-study at home.

Implementation mechanisms

Little information is available on how the recommendations of the Rae-Review or Adult Education Review are being implemented in Ontario. As noted earlier in the Canadian country report, the Rae-Review is not particularly helpful in indicating the funding sources or implementation mechanisms to promote best practice. However, in May 2005, the

Government of Ontario introduced a budget containing substantial increases in postsecondary funding and indicated their intention to adopt many of the major recommendations of the report (Beach, 2005).

Monitoring and evaluation procedures

At this stage of the implementation process there is little or no information readily available on the proposed monitoring and evaluation procedures.

Evaluation outcomes

Both the Rae-Review and the Adult Education Review are still very fresh in the policy cycle. No official evaluations of the outcomes are available as most of the recommendations are under consideration or still in the process of implementation.

However, several important critiques exist of the general policy direction of the Rae-Review. Beach (2005) offers a critical analysis of the recommendations by bring together four quite different perspectives. While the four contributors to this book identify some difficult questions that need to be addressed, they have a strong economic flavour and do not touch on the area of e-learning.

In contrast, Magnusson (2005) offers a stinging attack on the busnocratic orientation of the Rae-Review in seriously challenging the role of ICT in Ontario higher education. Of particular interest is the way Magnusson's critique of ICT in the context of the Rae-Review is constructed around a 'poster-perfect' example of neoliberal knowledge society rhetoric taken from New Zealand. The thesis of the paper is that ICT is embedded within the knowledge society discourse, which legitimises serious changes to the social organization of higher education. According to Magnusson (2005), the Rae-Review promotes a neoliberal language of persuasion for reforms to higher education that undermine 'the public framework that has been strong in the Canadian provincial systems, including the province of Ontario' (p. 121). In short, the recommendations repackage an existing public sector to mimic the free market characteristics of the private sector. Overall, Magnusson (2005) argues that technological innovation is woven into the discourse of plugging Ontario into the international market wherein decisions within higher education are shaped by market forces.

This is an important critique of the e-learning movement in the wider context of the pressures exerted by the WTO to open up the education market through the proposed changes to GATS. In this regard, it is interesting to note that on 16 February 2005, the Ontario government announced that Australia's Charles Sturt University had gained consent to establish a degreeawarding branch campus in the province¹². The intention of Charles Sturt was to open a teacher's training college in September 2005. This would be the first foreign institution to open its doors under the new transnational regulations.

In sum, the province of Ontario makes a particularly interesting case study. There is a long tradition of distance education throughout Ontario and the recent decision to encourage competition to promote best practice in the area of e-learning within a wider policy context raises a number of questions.

¹² http://www.obhe.ac.uk/news/February2005.html

Conclusion

This section of the report has provided a series of reviews of seven areas of the world in which there have been varied approaches to the development and implementation of elearning within the post-secondary sector and supplemented them with three in-depth case studies. The reviews were preceded by the development of a template that enabled systematic and reliable analysis of e-learning policy and strategy documents as well as background papers. Case studies of three Canadian provinces provided in-depth description of the development and implementation, monitoring and evaluation processes.

A final section of the report will draw together the key points of these reviews and case studies in a synthesis that highlights the evolving rationales for e-learning policies and strategies and the different approaches taken to implement them. A brief comparison of New Zealand policy in relation to these key points will conclude that section. The templates for policy and strategy documents are attached to this report as an Appendix.

GLOBAL PICTURE, LOCAL LESSONS: E-LEARNING POLICY AND ACCESSIBILITY. PHASE TWO: ACCESSIBILITY

Accessibility for small and remote communities

Introduction

There are three main deliverables for this project:

- The development of a data extraction template that will form the basis of analysis of policy documents from the selected countries.
- The provision of a report on the policy dimension of the research. This report will focus tightly on the investigation of policy, policy outcomes and 'lessons learnt'. This analysis will be conducted using a data extraction template developed for this purpose.
- iii. The provision of a report on accessibility to e-learning in small and remote communities. This report will discuss the nature of government funded infrastructure in relation to a selection of communities identified during the analysis of policy initiatives.

This section of the report concerns the last of these deliverables and presents a brief review of policy and related documents that were identified as relating to access to e-learning for small and remote communities. Following that review three detailed case reports of projects related to accessibility for small and remote communities are provided.

Phase Two Research Process

Documents identified through the first phase of this research were reviewed to locate those that identified specific mention of accessibility for small and remote communities. The document templates developed through Phase One recorded three ways in which this was done. Item 5 of the template records whether or not a document notes or refers to small and remote communities; Item 12 records whether or not small and remote community members and those working on their behalf are an intended target audience for the document; Item 27 records whether or not any action or strategy relating to e-learning access for small and remote communities was proposed as part of the document. The selection of documents for further consideration was limited in two ways: documents were only selected if actions or strategies for small and remote communities were proposed; and no documents from supranational organisations were considered. These criteria resulted in a very limited selection of documents. Five documents met the criteria, three from Canada, one from Iceland, and one from Australia.

Document review

The documents identified for review were:

- Quality post-secondary opportunities. The quality learning agenda policy statement for post-secondary education and training. New Brunswick, CA. (Template C#3)
- Technology enhanced learning. An action plan for post-secondary education and training in Saskatchewan. Phase2. Saskatchewan, CA. (Template C#4)
- Review of the Technology Enhanced Learning Action Plan. Final Report. Saskatchewan, CA. (Template C#5)
- Risk with responsibility. Policy for ICT in education, science and culture 2005-2008. Iceland. (Template E ICE 2)
- Australian Flexible Learning Framework Implementation Plan 2004. Australia. (Template F#3)

New Brunswick: New Brunswick has a long history of involvement in distance education via a range of technologies. E-learning was still being introduced to the province at the time that Quality post-secondary opportunities. The quality learning agenda policy statement for postsecondary education and training was published in April 2005. A small section of the document entitled "Expand e-Learning opportunities and distance education" is devoted to the provinces approach to and strategies for e-learning. It is clear that the government intends make e-learning opportunities more widely available throughout the tertiary sector. The specific reference to small and remote communities comes on page 26 of the document where it is stated that "Within three years, the province and the post-secondary sector will explore the best means of strengthening opportunities for students studying in rural areas". It appears from this document that New Brunswick is in the formative stages of developing strategies to provide e-learning access to small and remote communities

Saskatchewan: The Saskatchewan documents are the Phase 2 plan for technology-enhanced learning (TEL) in Saskatchewan and an evaluation of that plan. In the rationale for the Plan, of five contextual factors identified as challenges to be faced, three are relevant to this section of the report. In the first of these the Plan notes the challenge of providing access to learning opportunities in rural and northern areas, noting that over half of Saskatchewan's population is distributed over a large geographic area outside major urban centres. TEL is seen as enabling access to provincial and out-of-province post-secondary courses, expanding training opportunities for workers, and contributing to economic and social development capacity building for communities.

The second factor involves meeting the needs of First Nations and Métis people for education and training, noting that about 25% of youth are of First Nations or Métis descent. Noting the extremely low graduation rate of First Nations or Métis youth when they are taken out of their community to study, the plan recognises the importance of allowing them to complete the first year or two of study in their home communities. The third factor notes that access to the Internet for activities such as e-learning is more a function of income and prior education than of location, gender or ancestry. However, the Plan points out that

many small communities and rural areas do not have access to high speed internet, which greatly improves information quality and the potential for educational applications. Current patterns in access to computers and the internet have implications for the province and post-secondary education and training. If poverty is defined as a lack of resources to participate fully in our society, those residents who are already disadvantaged by reasons of low income or education may fall further behind without access to technology and computer literacy skills (p. 15)

The Plan set out five enablers with specific associated strategies linked to institutional priorities for the three major post-secondary institutions. Within the enabler "Develop TEL content and instructional strategies" were two relevant strategies:

- Provide post-secondary education and training opportunities that respond to identified needs in rural and northern Saskatchewan.
- Enhance access to and success in education and training programs for First Nations and Métis people.

These were linked to institutional priorities that involved development of 80 new courses for synchronous and asynchronous delivery in specified areas; developing online delivery modes for over 100 courses already delivered at a distance; and developing a nurse education course with a focus on Aboriginal recruitment and retention.

The review of the Plan, published in March 2005, noted the progress toward meeting the targets set. Two points from the review are noteworthy and are quoted verbatim:

A number of unique and noteworthy initiatives were developed and implemented by Aboriginal institutions under the TEL Action Plan. Still, many Indigenous learners living in remote communities do not yet have access to the technological infrastructure required for online courses (p. v);

And,

There are indications that the TEL Action Plan is contributing to addressing the four goals set out for the Plan. While TEL certainly provides another option for rural and northern residents and for First Nations and Métis students to participate in PSE [postsecondary education], the "penetration" of this mode is difficult to assess. Professional development activities and support for learners and faculty has undoubtedly led to increased skills, though impacts on the retention of faculty and graduates and on economic development of the province are unknown (p. vii).

The review concluded that "Full assessment of impacts on learning would require support for evaluative research which is much more demanding and costly than the compilation of administrative data. This type of information could be valuable, however, in supporting wellinformed decision-making about TEL and guiding change that is system-wide" (p. ix).

Iceland: The Iceland document focused on the need to increase the rural population's access to information and communications technology primarily through the network of libraries and lifelong learning centres in rural areas. The mechanism by which this was to be achieved was through increased collaboration between the centres and libraries. Cooperation was to be in two areas – the operation and servicing of high-speed computer networks for the public, and resource sharing.

Australia: The Flexible Learning Framework Implementation Plan 2004 noted 6 priority areas, two of are relevant to this section. They are

- A range of flexible learning solutions to meet the needs of Indigenous Australians
- A range of flexible learning solutions to meet the needs of people in rural and remote communities.

The priority areas were woven across a range of five programmes in which funded projects were based and continued on to the 2005-06 Plan. The project that related to our interests in this section of the report is reported on in a case study subsequently and so will not be discussed further at this point.

Additional projects: Through additional searching we became aware of further work relevant to this section. The work bears on the issue of access but arguably does not directly concern small and remote communities. However given the comments of the community informant in the Canadian case study (see later) concerning the impact of socio-economic factors on access it appears relevant.

One set of findings is presented in the Final Report of the Wired Up Communities (WUC) project that occurred in the United Kingdom from 2000 to 2002 (Devlins, Darlow, Burden, & Petrie, 2003). "The aim of WUC was to bridge the digital divide by enabling communities to use ICT to access jobs, learning opportunities, government and other services ... and sought to provide ICT to enable home access to the Internet and to overcome barriers to use of the Internet" (p. ii). The WUC was partially successful, but a final survey found that in homes where technology was provided free of charge, 25% of participants did not bother to do so citing lack of interest or lack of time. In addition the report indicates "there are concerns which have been voiced by both local and national stakeholders that the intervention has not reached those most at risk of exclusion" (p. 43) from the 'information society'. In discussing this initiative Simpson (2005, p. 92) concludes that "The development of online services and the trend toward the 'information society' will leave groups without access to the Internet even further excluded from the ability to exercise democratic rights and claim the full benefits of that society", where foremost amongst those benefits is access to education online.

Following on from the WUC report the UK Government funded a project "Overcoming social exclusion through online learning" to examine the potential of online learning to overcome social exclusion and identify the factors that influence participation, drop out and successful completion in online learning especially in relation to learners who are socially or economically disadvantaged (see http://www.niace/org.uk/online/index.asp). The project is scheduled for completion this year, and indications are that it is providing valuable information about how online learning might promote social inclusion.

A 2003 study by Crump and McIlroy should perhaps be mentioned here because of its New Zealand nature and the similarity of conclusions to the WUC projects. Crump and McIlroy conducted a study concerning use of a community computing facility in a lower socioeconomic area in Wellington. The facility was situated in a city council high-rise apartment block and offered free access to the Internet. Investigations into usage revealed that after six months the majority of residents in the apartment block still did not use the ICT facilities. Following a survey of non-users the authors concluded that the digital divide would not be addressed through universal physical access to computer technology. They added:

with approximately 70 percent of the apartment population on state benefits the struggle to meet basic needs is greater than for those people in work. Interest in accessing computing, even when situated in a convenient social space, and offered at no charge, is unlikely to be seen as a priority for daily living (Crump & McIlroy, 2003).

This line of research highlights Simpson's argument that "that there is as yet very little evidence to support the contention that e-learning will help overcome social exclusion or widen participation" (2005, p. 93) to education and points to the urgent need to focus on accessibility from a demand perspective rather than a supply perspective.

Case Studies

Introduction

This section of the report provides in-depth descriptions of three case studies of projects that had the goal of enabling access to e-learning. The case studies drew from Australia, Scotland and Canada. The projects studied were:

- *E-learning Creative Community Partnerships*, an Australia project initiated as part of the Australian Flexible Learning Framework 2004-2006
- Connected Communities, a Scottish project that was part of the Broadband for Scotland's Rural and Remote Areas Initiative. This case focuses on the Western Isles
- Network BC, a Canadian project undertaken in British Columbia.

Case Study Research Process

Three potential areas for case studies were easily identified subsequent to the review of policy documents. Particular initiatives that could be the subject specific investigation at a community level were more difficult to locate. The three countries – Australia, Canada, and Iceland – were reduced to two as we found considerable difficulty in obtaining information about the Icelandic experience.

An Australian project was quickly identified and a potential informant at the project level located. A provincial initiative in Canada (Saskatchewan) was identified but no project informant could be located. Further searching across Canadian provinces beyond the scope of the documents identified in Phase One identified the Network BC project and a project informant was located. To identify a third case, additional searches were undertaken, widening the search beyond policy and policy related documents. Our focus was to locate specific projects that had, at some stage, a substantial community focus but which could be identified as arising from a national (or state/provincial) initiative. The Scottish project was subsequently identified through searches of the academic literature and a project informant located.

At an early stage a low risk ethics application was approved by the Massey University Human Ethics Committee. An informed consent form, information sheet and proposed interview schedules for the participants in the research accompanied the application. Subsequently Web and literature searches were undertaken to locate documents and information for each case study. Analysis of this information provided the core of material for a first draft of each case report. Once the initial draft was complete contact was made with the first participant – a person associated with the project team. As part of their response to questions this person was asked to nominate a person at the local level who would be able to provide additional information about the project from a community perspective. We received contact information for a local person in two of the cases, but only one responded to our request for information. Responses from participants were built into the case report.

Australia – E-learning Creative Community Partnerships

Background

The 2005-2006 Australian Flexible Learning Framework is a two-year national strategy collaboratively funded by the Australian Government and all States and Territories. It builds on the work of the 2000-2004 Framework by attempting to meet the e-learning needs of students and communities, business and industry, including indigenous learners and people with disabilities. There are 14 projects grouped into four conceptual clusters located throughout Australia working as part of the 2005-2006 Framework. The project selected as a case study for this accessibility phase of the research was *E-learning Creative Community Partnerships* [http://www.flexiblelearning.net.au/flx/go/home/projects/2005/pid/41].

The earlier policy analysis phase indicated that a closer investigation of this project was likely to yield valuable information on e-learning initiatives in small and remote communities. More information about this project was obtained from an analysis of public documentation along with an interview with Mary Hannan, National Project Manager, E-learning Creative Community Partnerships Project. To build a picture of the initiative at the local level, the Project Manager nominated The Milang Group working with a South Australian community as a contact, but we received no formal response from the two people invited to participate in the study. However, additional information about the local initiative in Alexandrina, SA was obtained from the Milang Old School House Community Centre website [http://www.lcc.edu.au/lcc/go/home/pid/114].

Brief description of the initiative

E-learning Creative Community Partnerships aims to create sustainable demand for, and use of, e-learning in communities, to foster learning in the communities and, through learning, economic and regional development for the communities themselves. In 2005, the following eight communities/regions participated in the first iteration of the Project:

- Central Gippsland Institute of TAFE
- IMPACT Make your Mark
- CHARTTES Training Advisory Council
- Milang Old School House Community Centre
- Challenger TAFE Peel Campus
- Wodonga Institute of TAFE
- Tasmanian Communities Online, Dept of Education
- Central West Community College

The 2006 iteration of the Project builds on the first year of the initiative by further enhancing and growing community capacity. This is done through skill development and reaching disengaged and disadvantaged client groups, including people with disabilities, disengaged youth, mature age workers, long-term welfare recipients, and people in rural and remote areas. The selected communities each have a supported community flexible learning leader whose job is to develop a specific consultation and implementation plan to meet local needs. A 'virtual package' of e-learning resources, services and guides is available that can be applied to a range of community and regional development initiatives. Specifically the E-resources kit:

- Provides guidelines to communities on how to get into e-learning;
- Outlines low cost tools that can be used in e-learning;
- Contains links to appropriate resources and support services contained on the Australian Flexible Learning Framework website.

The overall objectives of the Project are to:

- Embed e-learning in existing community based and regional development initiatives;
- Foster strong partnerships between RTOs, community based organisations, business and government:
- Use e-learning to increase participation of targeted disengaged and disadvantaged client groups in formal education.

Rationale for the specific policy initiative

The Project makes a direct contribution to 2005-2007 Australian Flexible Learning Framework Outputs. For example, it addresses the following two outputs:

- 1.3 E-learning embedded in existing community-based and regional development initiatives.
- 2.2 Increased provider capability to provide training delivery and support service innovation for improved flexibility, quality, productivity and client satisfaction.

In 2006, the Project is designed to support the sustainability of the e-learning capacity of the eight communities/regions that were originally funded in the first iteration of the initiative. It also aims to develop and grow a further six community/regional development initiatives. The models and recommendations to arise from this project will also assist in meeting Objective 3 of the 2004-2010 national VET strategy. This strategy, entitled *Shaping our Future*, has an objective that:

Communities and regions will be strengthened economically and socially through learning and employment.

Target audience for the initiative

The target audience is disengaged and disadvantaged groups, including people with disabilities, youth, mature age workers, long-term welfare recipients, and people in rural and remote areas. In this regard, the priorities for 2006 are:

- Targeting initiatives to assist specific sub groups
- Building on existing partnerships and targeting initiatives that will have a direct impact on identified regional skills shortages and 'welfare to work' programs.
- Building on, and integrating with, the Framework's E-learning for Target Learner Groups Project to implement practical strategies within the community partnership model.
- Supporting 2005 Community Leaders to mentor new Projects in 2006, to broaden the impact of the 2005 Projects.
- Engaging other community and regional development initiatives and networks with the project on a broader scale.
- Further development and refinement of the e-learning resources kit for communities, including recommendations for models arising from the Projects.

Anticipated outcomes of the initiative

The Project has four main intended outputs:

- Fourteen communities integrating e-learning into their learning and/or regional development initiatives.
- A network of community leaders able to support further community initiatives.
- Models developed and promoted to engage disadvantaged learners and reduce skills shortages through community partnerships and the use of e-learning.
- Usage and further development of the community e-learning resources kit.

The following performance criteria are consistent with these outputs:

- Diversity of models arising from the funded projects.
- Number of community leaders with the capability to support similar initiatives.
- Engagement by key stakeholders in networking events.
- Evaluation and usage of the community e-learning resources kit.
- Increased uptake of e-learning by funded community and/or regional development initiatives.

Processes for monitoring the policy implementation

The following processes are being used to monitor the policy implementation:

- Facilitated online discussion supporting project community leaders.
- Mentors supporting community leaders in their role and suggesting online tools to support their objectives.
- Professional development workshops to support project community leaders.
- On-site visits to support community leaders.
- Facilitated an environment where community leaders feel supported and part of the process.
- Cross collaboration across all 2005-2006 Framework activities. Extending the networks not reinventing the wheels – use the tools already developed within the Framework.

The National Project Manager reports that the above strategies worked well for the 2005 project and have been implemented for the 2006 project.

Actual outcomes from the initiative

The following comments are based on the 2005 Project, as it is too early to have any outcomes related to the new 2006 initiatives. One of the essential selection criteria for this Project was the engagement of disadvantaged learners in communities. According to the National Project Manager:

All eight projects (2005) demonstrated clearly how e-learning built their community. Qualitative data indicates that the projects have had an overwhelmingly positive impact of participants' learning experiences and has further strengthened their ongoing engagement with learning as life long learners.

An extract from the final report, using an example from the eight projects funded, states:

- In the Leongatha Education Precinct (LEP) 340 students undertook online learning using the WebCT online platform. This included disengaged youth in a range of settings: TAFE ACE, disabilities and schools. Leongatha is a small rural community of some 5,000 people with high unemployment rates. This project demonstrated how co-operation between various sectors of educational provision in Leongatha working together to provide specialist learning programs tailor made for a particular community group made a real difference in supporting the community.
- The Tasmanian Communities Online project demonstrated that local support in the form of learning circles was an essential ingredient in building community and supporting mature aged learners who wanted to re-engage with the community and learning.
- The online survey of stakeholders and partners indicated that an overwhelming:
 - 96% of respondents believed that e-learning offered an opportunity for organisations in their community to increase the employment opportunities and life chances of disadvantaged members of the community.
 - 87% responded that involvement in the project had achieved results for them in that it has enabled them to form new networks and build up contacts in the community.

Lessons learnt

Although the Project is on going, the National Project Manager reports that a number of lessons learnt. She comments that:

Lifelong learning is a key element of the E-learning Creative Community Partnerships, and as such, it is the essential driving force in all our projects. One of the guiding principles of the project is that lifelong learning provides the impetus for engagement with or pathways to informal and formal learning. This has been clearly articulated through the feedback provided by the project partners.

More specifically, the online survey for partners and stakeholders indicated that:

- 92% of the respondents engaged in formal learning as a part of the organisation's overall activities;
- 96% of the respondents acknowledged the role of informal learning in the workplace as a valuable tool in encouraging pathways to more formal education;
- 64% indicated that the level of participation in formal or informal learning activities by the targeted community members (e.g., youth, young mothers) had greatly increased as a result of participation in this project;
- 78% indicated that the particular project that they were involved in had a positive effect on learners' attitudes to learning.

The Project Manger also reports that research conducted into the flexible teaching and learning needs of regional and rural ACE in Victoria indicated that one of the greatest barriers to lifelong learning opportunities is the fact that organisations battle with small student numbers. For example, the Central West Community College project has confirmed that elearning is a viable option in rural communities and that it can assist ACE providers to run courses with low numbers. Disadvantaged clients who participated in the project were surprised at the accessibility and flexibility of the e-learning. Many participants in the project have taken further opportunities to engage with e-learning, particularly the small business sector. As the Project Manager summarises:

The true value of life long learning lies in its capacity to empower individuals and communities. The project reports abundantly illustrate through quotes and success stories how the participants have built self-esteem, confidence, self-motivation and an (often renewed) enthusiasm for learning.

At the local level

In South Australia, the Alexandrina Community's eLearning Project, officially known as the Milang Old School House Community Centre, targets people in the Alexandrina Council region who have little access to traditional education settings and are disadvantaged through isolation (little or no public transport), low incomes and lack of childcare facilities. The Learning Communities Catalyst website states that the 'Milang Project aims to deliver elearning opportunities to the target population through a partnership between TAFE, Eastern Fleurieu School, Alexandrina Council, Fleurieu Regional Development Inc, Milang & Clayton Traders Association, Strathalbyn & District Commerce Association and Milang Progress Association Inc'.

The Community Leader and volunteer facilitator coordinate the project across the region and promote the programme through development of a website and inventory of e-learning links and courses. An online environment known as *Byte-on* has been created using Moodle to support the Alexandrina Community's eLearning Project [http://byte-on.org.au/]. A strategy of giving people a CD-Rom that connects to the site has been adopted and this is designed for people who are not familiar with computers. In explaining the philosophy behind *Byte-on* the Project Coordinators write:

Some people in the community haven't got time, money, or opportunity to go to school or TAFE to do training or courses. So we set up Byte-On for people who want to retrain, upgrade their skills or just have some fun with others who might like belly dancing or photography or...

Volunteer mentors support learners and they can access the resources of the Milang Old School House Community Centre, Strathalbyn Internet Centre, Eastern Fleurieu School – Milang, Langhorne Creek and Ashbourne Campuses and Alexandrina Library at Goolwa. This supported method of study is claimed to benefit students and the community alike both socially and economically. The Learning Communities Catalyst website concludes that it helps to:

Enable the target group to learn new skills which will allow them to enter or re-enter the workforce in fields where there is a local shortage of workers. It will also encourage new employment opportunities in the region through microbusiness start-ups and social enterprise opportunities.

Transferability to the New Zealand Context

This is a very promising local initiative from a New Zealand perspective. It shows how a local group has taken responsibility for their own community-based education by providing opportunities for formal, non-formal and informal learning through the coordination of existing resources, augmented by new developments in e-learning. In particular, the use of an open source online community along with schools as learning centres for hands-on computer training has obvious transferability to New Zealand. That said, the initiative appears to rely heavily on volunteer support and the level of commitment required may not be sustainable on a long-term basis without the provision of ongoing resources. Moreover, in comparison to the

case study of an Australian Rural Transaction Centre contained in Rennie, Greller and Mackay's (2002) Review of International Best Practice in Service Delivery to Remote and Rural Areas the Milang Project may be too narrow in its scope. This review suggests there is considerable potential in expanding the focus from e-learning to (e)development per se. Rural Transaction Centres provide access to basic government, financial and other services, which may have been lost or never available to a community. For example:

- Centrelink
- Medicare
- Easyclaim
- **Taxation Office**
- Financial services
- Insurance services
- Employment services
- State and local government services
- Post, phone, fax, Internet and video conference
- Rooms for seminars, training and community group meetings
- Facilities for visiting professionals (accountants, medical practitioners, lawyers)
- Courier service (prescriptions, photo developing, dry cleaning etc.)

A recurrent theme of the review of best practice is the recognition of the need for a physical centre within the rural community, around which the services can be supported. To some extent the Milang Old School House Community Centre provides this single point of contact but the delivery of services is far more limited than those offered by Rural Transaction Centres. This is a very advanced example of public-private partnership for service provision in rural and remote areas, with the ability to "bolt-on" a wide range of community and government services, including greater accessibility to education. The key point, however, is that the most successful services have secured an ongoing commitment from government towards the costs of service provision (Rennie, Greller, & Mackay, 2002).

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Scotland – Connected Communities

Background

The Scottish Executive has been working towards an ambitious goal of rolling out broadband to every community in Scotland by the end of 2005. This is part of the Executive's £24 million Broadband for Scotland's Rural and Remote Areas Initiative. It has been the largest project of its kind in the UK. In December 2005 the Scottish Executive were able to confirm that they had met the target and every community in Scotland is now able to access broadband services.

The broadband initiative worked on the premise of aggregated procurement, where public sector players such as schools, the health service and local authorities band together and with the assistance of the Scottish Executive are able to bring broadband to their local community. Taking this collective approach where the purchasing power of these agencies is pooled ensures that rural and remote communities get access to a centralised broadband service. In the past each of the public sector agencies would have brought in broadband on an ad hoc basis as and when they needed it.

The Scottish Executive decided to start the roll out of broadband where the challenges were the greatest: the Highland and Islands and the South of Scotland. Frank Rennie from the University of the Highlands and Islands Millennium Institute conducted the research project *Broadband: a solution for rural e-learning* in the Western Isles of Scotland just prior to the rollout of the *Connected Communities* broadband network in the area. Frank Rennie has provided some local insight into this initiative.

Brief description

Connected Communities is the local broadband initiative to enable wireless network access for the remote areas of the Islands of Scotland. This actually falls outside the Scottish Executives £24 million land-based broadband initiative. Due to the geography of the area both land-based and wireless technologies have been used. The Connected Communities initiative focuses on the wireless network for the more isolated communities. A community-based solution has been implemented to ensure the benefits of the initiative are not short lived. The initiative has been lead by the Local Authority and Local Enterprise Company (a Scottish Government economic development quango).

Rationale for the specific policy rationale

In simple terms the rationale is to realise the benefits of a high-speed Internet network to improve the quality of life in the Western Isles through enabling innovations in business, education, and the public and private sectors.

In addressing the issue of the digital divide evident between urban areas and rural and remote areas there was a government pledge to ensure there is no social exclusion on uptake of broadband technology. The intention here is that people have the skills and IT equipment to take advantage of broadband regardless of their geographical location. For many of these areas it would not have been commercially viable for any telecommunications company to install broadband in these remote areas with small populations.

The Scottish Executive is aware of the unique challenges that the geography of Scotland presents in providing the infrastructure for broadband services. The Highlands and Islands presented greater challenge than most areas.

The final rationale that featured in supporting documentation of the Scottish broadband initiatives is that economic prosperity for rural and remote areas depends on access to 'always on' fast, reliable internet access. It is anticipated that it will assist with business efficiency and allows businesses to promote their products and services.

Target audience for the initiative

Initially the Connected Communities network will enable access for schools, the heath service and council offices in the area. As the network develops the rest of the community will gradually gain access. This will include all residents and businesses/organisations in the Western Isles. The area covered by the Connected Communities initiative are the five main populated islands of Lewis and Harris, North Uist, Benbecula, South Uist and Barra. Community plays a crucial role. To make this initiative a reality community coordinators have been identified to provide leadership and support at a local level.

Anticipated outcomes of the initiative

Mason and Rennie (2004) present the initial findings of their ongoing study of broadband in the Western Isles. The study asked residents about their current Internet use. They were also asked to speculate how the introduction of broadband would impact on their use of various Internet services.

There was an anticipated rise from the local residents responding to the survey that their use of the Internet to obtain: news and information; information from public agencies and educational materials were all likely to increase with the introduction of broadband. Respondents also anticipated that use of the Internet for taking some form of distance learning course would increase.

This study from Mason and Rennie looks at the anticipated outcomes for individuals but does not suggest what the outcomes might be for the rural communities themselves. It is important to note that this study is one of very few before and after studies that analyse the situation before starting to make changes. Rennie and Mason hope to revisit the study in a couple of years to find out what actually happened.

To focus on education in particular, the Broadband Stakeholders Group (BSG) highlight five main areas of potential added value in their report Opportunities and Barriers to the use of Broadband in Education. These are:

- Transforming the learning experience
- Improving inter-institutional collaboration
- Achieving new possibilities
- Improving efficiencies in existing provision
- Widening access to education

Processes for monitoring the policy implementation

With the rollout of the broadband services throughout rural Scotland a clear timeline appears to have been in place to ensure that the Executive's pledge of broadband for all communities by the end of 2005 was kept.

The project has established its own development and monitoring team. Frank Rennie sees that the monitoring team appear to be effective in promoting the service, though they have a higher profile in some areas particularly where public agencies are involved as opposed to the areas where it is reliant on private individuals.

Rennie and Mason (2005) have already noted that considerable energy has been directed at deploying broadband while far less consideration has been given to the possible applications of broadband once a user has access.

Actual outcomes from the initiative

The only evident outcome from the initiative to date is that the Scottish Executive has met its self-imposed target of enabling access to broadband services for all Scottish communities. But as Mason and Rennie (2004) warn "a range of services must be developed in parallel with the technology implementation. E-learning opportunities, both formal and informal, are a key part of this 'solution' for the Western Isles."

Lessons learnt

Two of the recurring lessons that seem to arise are:

- Broadband initiatives need to continue on past the infrastructural stages consideration needs to be given to what happens once the technology is operational. Frank Rennie adds that simply putting in the technology is not enough in itself. It needs to be combined with awareness-raising, business packages, training opportunities and the like.
- Community involvement is key to the success of initiatives for rural and remote communities.

In their 2005 paper Bits and Baubles: The opportunities for broadband to add value to education and learning, Rennie and Mason highlight two clear lessons from the international research on broadband deployment to date:

- Simply transferring off-line business or learning practices to an online format is of little use without a re-appraisal of the culture of the organisation and/or purpose of the activity. Businesses and educational activities that identify the strengths of broadband and the online medium, then re-design their working practices to capitalise on the new media appear to be most successful.
- 2. The opportunities that may be realised by activities that adopt such a culture-shift demonstrate levels of innovation and entrepreneurial activities that are both rapidly changing and unpredictable.

The 2006 report on Broadband diffusion in remote and rural Scotland from Howick, Tookey and Whalley concludes that "Whilst it is clear that progress has been made in encouraging the diffusion of broadband in rural and remote parts of Scotland, the first conclusion that can be drawn is that broadband availability does not lead to its adoption." Finally, from involvement in the initiative itself Rennie notes that everything always takes much longer than anticipated.

An example at the local level

A brief example of the operation of this initiative at the local level is the establishment of a series of Learning Centres. These centres total more than 100 across the Highland and Islands. There is a pronounced variance in the type of centre in each area. In some cases it is little more than a computer for public use in the corner of an office. In other areas the Learning Centre is a large custom-built high-tech centre. There is a growing awareness that putting initiatives in place that enable residents to access learning opportunities in their local community will alleviate the need for them to move to urban areas to access training and

learning opportunities. Coupled with this there is a realisation that on-line learning can also offer learning opportunities for those in rural and remote communities.

As more households are connected to the local broadband service questions are raised about whether these Learning Centres will be needed or used in the same way. Rennie anticipates that there will be a dramatic change in the function of these local centres in the next few years. He sees a shift from the current model of them being a place to access high technology for learning to either changing to become places for social learning or disappearing completely as more people acquire access to high technology at home or at work.

The next steps for this initiative will be encouraging people to exploit the broadband network. There are currently several initiatives being developed including: rural health initiatives, Gaelic culture, tourism, renewable energies and green building design. The common link is learning and collaborative working on high-speed internet networks.

Transferability to the New Zealand context

There is already some transfer of this type of broadband rollout to the New Zealand context. Project Probe is in operation, delivering broadband to isolated, rural schools. But this does not address the other local users like health services, local authorities, businesses and individuals. The Scottish remote broadband initiative sees the health, education and local authorities working together to bring broadband to their community. Once it is in operation other groups and individuals are able to gain access to it.

More in keeping with the Highlands and Islands Connected Communities initiative is the Connecting Rural Communities (CRCnet). This is a wireless broadband initiative for New Zealand rural and remote communities that has emerged from the University of Waikato and the WAND network research group.

The fundamental difference between the Scottish initiative and the New Zealand broadband initiatives is the extent of local level support. In Scotland, community co-ordinators play a lead role in the coordination and support for the Connected Communities project. These community co-ordinators are crucial as they identify the needs of their community and champion the cause. This moves away from the "if we build it, they will come" mindset evident in the adoption of many technological innovations. As with the Scottish initiative, New Zealand also needs to give consideration to the possible applications of broadband services once they are in operation.

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British Columbia – Network BC

Background

The genesis and nature of the Network BC project was outlined in a previous section of this report. To recap, the Premier's Technology Council, formed in 2001, focused on the provision of broadband access as a major initiative that the provincial government must undertake. The PTC has continued to emphasise this aspect of its work through to its most recent report. The form this initiative has taken is the project called Network BC.

Network BC was created to provide affordable broadband connectivity to all communities in the Province of British Columbia that have a school, library or health facility. The project built on previous provincial projects that had provided connectivity across much of the province, but was designed to ensure high-speed Internet access. The project had the goal of providing a community terminus for broadband connectivity, with last mile solutions being in the hands of the community itself, although the Network BC organisation has been active in promoting such solutions.

Web-sourced information about this project has been supplemented by information obtained via email interviews from two people engaged with this project. The first, Jerri Lynn Wilkins, Manager, Community Liaison with Network BC provided information about the initiative's rationale, implementation and intended outcomes. Her information focuses on the business-oriented rationale, implementation and outcomes associated with Network BC's focus solely on provision of broadband access. The second, Hans DeBruyn, is the Director of the BC Community Connectivity Cooperative (BC3). BC3 has been instrumental in assisting the provincial government to engage communities in last-mile connectivity. In particular, Mr. DeBruyn has championed last-mile systems in several communities and has knowledge of communities that have implemented last-mile systems. Where text from the interviews with these participants is quoted verbatim in the following sections of this case study it is followed by the name of the participant in parentheses.

Brief description of the initiative

A first stage of the project identified 366 communities, many in rural and remote areas that met the criteria of having a school, library or health facility. Identification of these communities and the provision to them of broadband would ensure that 92% of British

Columbians had broadband access. A key component of the broadband rollout strategy was aggregating network demand across the provincial government and broader public sector in a single collective purchase on the grounds that a competitive bidding process for provision to individual communities or regions would not adequately meet the requirement of affordable provision to all communities. This motivated the major telecommunications supplier to upgrade its networks in 334 of the 366 communities and provide high speed connectivity in 119 of the 334 communities that had no previous broadband access (referred to as 'un-served' communities). This result will be achieved by December 31, 2006. The remaining 32 of the 366 communities were connected via high speed satellite or through Federal government initiatives.

Rationale for the specific policy direction

The rationale for the project was described as follows "Connecting communities to affordable high speed Internet brings improved access to government services, business markets and information, which contributes to improving the education, economic and social foundation of the communities. This is particularly relevant given the evolution of the provincial economy from resource-based to knowledge-based. It also enables government to improve service delivery, particularly in rural and remote communities. Improved service delivery using electronic means is a separate and parallel government objective." (Willis).

The specific link between e-learning and broadband provision was spelt out in the PTC's fifth report. As we have already noted, the report stated "E-learning is reliant on a technology platform. Implementing a broadband infrastructure that connects all communities in BC will allow people in the province's remote or rural communities to cross the Digital Divide and to have access to vital services such as elearning" (PTC, 2004).

Target audience for the initiative

The initiative was a broad provincial initiative that aimed to provide broadband access to all citizens. To achieve that goal it aggregated groups of people into communities and identified 366 communities, comprising 92% of the province's population, that would be connected through the Network BC project.

Anticipated outcomes of the initiative

The direct outcomes for Network BC were framed in terms of business outcomes. One set of outcomes arising from a Master Competitive Services Agreement was aimed at consolidating and simplifying the set of telecommunications services supplied to communities across the province, providing savings to government and the broader public service and enhanced network services to support the enabling of e-services for government and the broader public sector, as well as for education, health and economic development across the entire network. A second set of outcomes focused on the nature of the connections at community level. The outcomes for communities are reported as follows:

- No investment of public money TELUS funds the \$110 million infrastructure build.
- Affordable high speed open network access services to 119 of the remaining 151 unconnected British Columbia communities to be in place by December 31, 2006. Of the remaining 32 communities, 29 will be connected by high speed satellite, and three will be

- connected as part of a federal government program (Broadband for Rural and Northern Development Pilot Program);
- Affordable access to open network access points for communities without access to broadband services (the 119 un-served communities);
- The Province and the telecommunications supplier pay the cost to connect a local ISP in each un-served community to the supplier's fibre infrastructure;
- A cost effective "utility" pricing model in un-served communities to enable local Internet Service Providers to supply last mile services at a scalable cost per user per month;
- Pricing for high speed open network access (10 Mbps minimum) in all 334 provincial communities covered by the contract is based on the price for similar services in the more densely populated Lower Mainland (southwest corner of the Province). Length of contract, volume of business and other factors will determine final cost; and,
- The Network BC project team worked with two community-based organizations the British Columbia Community Connectivity Co-operative and the First Nations Technology Council to provide fifty \$20,000 grants to communities to aid them with last mile costs. These funds benefit early adopter communities that have projects now underway (Willis)

Processes for monitoring the policy implementation

Establishing an up-front schedule and deadlines, embedded in the contractual agreement, was an essential component of the monitoring process. This included the creation of a defined list of 334 communities where infrastructure upgrades were required and a schedule for connecting the portion of which are un-served (119). Regular communication of two types was essential to the success of the project. Quarterly status meetings were held between Network BC and the telecommunications supplier to resolve implementation issues. Network BC also engaged in ongoing communication with community internet service providers and community champions to ensure that community-level issues associated with connectivity were escalated to Network BC for discussion with the major telecommunications supplier.

Actual outcomes from the initiative

The program is still in operation with an end date of December 31, 2006. Outcomes so far include a new open access point of connectivity being established in 61 of the 119 un-served communities, with all but four to be done by December 31, 2006. The four remaining are unable to be connected due to circumstances beyond the control of the project (Willis).

Lessons learnt

From the perspective of Network BC the lessons learnt are associated with the issues of ensuring a large technically challenging information and communications technology project is completed on schedule. Willis noted four 'lessons' that focused predominantly on the relationship between Network BC and the major telecommunications supplier. She reports these as follows:

Develop a solid business case – From the outset, the joint provincial/service supplier project team were focused on developing two agreements that satisfied the objectives outlined by the Province. The telecommunications supplier needed both agreements for the deal to be economically sound and the government needed both agreements to ensure a solid partnership in the effort to meet the goal of bridging the digital divide.

Focus on long-term value – The Master Competitive Services Agreement is structured as an extension to an existing contract, but with very different terms and conditions. When coupled with negotiated improved service levels, the value of aggregating services across the broader public sector represents a significant financial benefit to the province, but the requirement for the supplier to develop and implement a Next Generation Network ensures continuous improvement in functionality.

Involve both executives and elected officials to ensure long-term support – The Premier and other senior elected officials have been involved in this process from the outset and the decision to negotiate directly with the telecommunications supplier received full Cabinet approval.

Good Governance – The governance model adopted by the Province and the supplier for the Network BC project consists of three major layers, sufficient to ensure appropriate accountability and simple enough to allow for transparency. The Executive Governance Committee provides strategic direction and ultimate dispute resolution. It is comprised of senior executives of the participating entities. The Alliance Management function is responsible for contract and relationship management (ensuring that the terms agreed to are realized). It is designed for rapid response and fast issue resolution and is managed by the Senior Contract Manager. In response to the need for public accountability, financial controls are clearly defined and include protection against excessive profit through biannual price reviews.

Collaborative and respectful relationship – It has proven essential for the core group of joint provincial/supplier team members to have a collegial, collaborative relationship, supported by senior management on both sides. It enables the tough issues to be discussed and resolved and/or escalated in a respectful, professional manner within the agreed-upon spirit of the contracts.

An example at the local level

Where the Network BC focus is on ensuring broadband access for communities as a business activity, the challenge at the local level is to ensure that the potential benefits of such access are known and the opportunities thus provided are taken advantage of by businesses and households and the people who comprise them. A community engagement strategy was developed as part of the Network BC project and provincial Network BC staff were available to work with TELUS and community champions to make sure that communities were ready to benefit from broadband when it arrived in their community.

The community champion played a pivotal role that had two distinct dimensions. The champion was fully engaged within the community developing the engagement strategy and ensuring that there was local support for the access project. In effect the champion was acting as advocate for broadband access and the Network BC project. The champion's role also had an external dimension in which the champion served as an advocate for the community, engaging with Network BC staff in attempts to secure funding and a priority place on the list of communities to be served by broadband.

The report from Hans DeBruyn brings into clear relief the nature of the enterprise at a local level. Mr DeBruyn was asked to focus on a specific community as he answered a series of

questions relating to activity at the local level. The remainder of this section reports and sometimes paraphrases DeBruyn's responses.

The community area chosen covered rural areas and smaller communities along 70km of valley floor. The project scope included:

- 1 Village, 6 Indian Reserves in 2 Bands, 3 Unincorporated communities in 2 Electoral **Districts**
- 4,632 people living in 2,474 dwellings
- 10 institutions and 126 businesses

Residents in the area had previously adopted the internet – more than 40% of households used dial-up service – but the internet had "changed gears" and moved from a text medium and 33Kbps transmission speeds to streaming media, shared audio files, and graphic-rich content, and broadband connectivity had become a basic prerequisite for the majority of internet applications, and the region had been campaigning for broadband access for some time. The south part of the community had been challenged in its ability to provide the required infrastructure by low population densities and difficult terrain, which made it impractical to run fibre or cable to every home and business. A fixed wireless network was therefore a practical solution for the region. The valley's geography dictated the need for of about a dozen towers to provide radio access points.

The range of community needs to be met by the broadband service was reported as:

- Improving the quality of health services to the region through improved access to remote resources and information sources
- Opening up access to the resources of the internet for the average rural family information, entertainment, shopping, and services
- Enabling a wide range of distance education offerings, both in formal post secondary education for our youth and in specific adult skill development
- Helping First Nations people to bridge the digital divide, by enabling economic diversification, cultural and language programs, and an enhanced sense of community
- Ensuring our farmers and ranchers have a competitive level of access to buyers and sellers and information resources and business tools
- Overcoming our geographic isolation through an enhanced sense of community using local portals, CAP sites, community events, and new communications channels
- Opening up new opportunities for E-commerce, web sites, business resources and productivity improvements for our small business owners
- Access to myriad new e-government services without travel to major centres
- Making it possible for retirees, high tech workers, and stay-at-home moms to work from home – to anywhere in the world wide economy

Asked about the success in meeting these needs, it was reported that:

We have not formally surveyed the network customers for their applications, so the information we have is anecdotal. From customer comments, we do know that subscribers are using the service for VoIP telephone applications, that on-line gaming is a popular application for the younger generation, and that a substantial number of users are taking distance learning and on-line education programs. The major uses for the network are of course the "standard" applications such as email, web browsing, on-line shopping, and government services.

As of December 29, 2005, 570 subscribers were using the community network. Users have been signing up for service at an average pace of about 20-30 new subscribers every month, starting from April of 2004, and that pace has continued over the past few months. This subscriber build-up is partly due to the staged build of the network, with new access points being added to the network gradually over the last 18 months, and partly due to the effect of word-of-mouth advertising as neighbours talk about the service with their friends. The only investigation into outcomes has been a survey that focused on the economic impact of the network that was undertaken in the summer of 2005. The report is available at http://www.7thfloormedia.com/broadbandimpact.

While the network to the community terminus was created as a public-private partnership, the service is operated as a commercial service with market rates (\$C34.95 / mo for a broadband connection). While this is competitive, it is still a burden for those on limited income, and this area is well below the provincial average in income, so there's a substantial portion of the population that is not able to take advantage.

When asked about particular lessons learnt during implementation within this community, DeBruyn indicated that training had been a concern:

We weren't sure if we would need to do training or workshops to help the users get the most out of the network. Since the network was built in stages we were adding subscribers gradually rather than with one throw of the switch, and thus there was no specific point at which we would start training. We found that people found their own way and picked their own applications without help – the internet is such a broad resource that people start using it quite easily and grow into their own comfort levels.

Lastly he noted that

... rather than providing broadband as a e-learning tool, just provide broadband period – e-learning is only one piece of a tool that is an information appliance, and the network should be treated as a ubiquitous utility for every community.

Transferability to the New Zealand context

Project Probe can be called the New Zealand equivalent to Network BC. One of Probe's primary objectives – to provide broadband services to provincial schools, local government and business interests – was achieved by the end of 2005 at which stage 891 schools could access broadband if they wished (State Services Commission, 2006). However the aspect of the Network BC project that seems to distinguish it from Project Probe is the emphasis on community involvement and last mile solutions.

The development of formal partnerships between communities, Network BC, and government agencies with considerable emphasis being placed on ongoing and effective communication between all parties appears to have provided the environment in which the project proceeds beyond network provision to a terminus. This engagement between community, government and providers would start when the community engagement strategy is developed, prior to the network reaching the community, continue through the implementation and also be part of last mile solutions.

As was noted in the Scottish case study, the role of communities and a community champion (Canada) or coordinator (Scotland) is central to the success of an access initiative at the local level. Although the Network BC project would have eventually provided all identified

communities with access to broadband, provision beyond the terminus is a community responsibility. The community champions ensure that, the community engagement strategy is pursued. Thus local level consultation and initiatives are part of the last mile solutions that connect individual enterprises, homes and individuals to the network enabling easier and more flexible access to activities such as e-learning.

While local engagement in a variety of ways is essential for ensuring adequate last mile solutions and long-term sustainable use of broadband access, government support has also been necessary. Network BC provided a number of grants for last mile solutions, and the Master Service Agreement was negotiated to secure affordability of access. The provision of a range of e-services by government is also a critical aspect of sustainability. Despite these attempts to ensure broadband access for all, areas of exclusion clearly remain. Given the links between local social and economic development and training and education, and an emphasis on e-learning as a primary mode of educational provision, such exclusion must be of concern.

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Conclusion

The documents identified in this section of the report were few in number, indicating the relative dearth of policy focused specifically on enhancing accessibility to e-learning for small and remote communities. The case studies focus on three useful examples of projects that go beyond provision of technical infrastructure and illustrate the importance of community involvement in ensuring enhanced access and uptake of the technology. While size and remoteness are factors associated with difficulty in supply of infrastructure – for technical or cost reasons – those factors seem not to be associated with the issue of uptake. If the goal of ensuring access to e-learning for small and remote communities is increased use of e-learning opportunities in the service of community, and individual, social and economic well-being, policy must focus on enabling demand as well as ensuring supply.

INTERVENTIONS IN E-LEARNING

Government interventions in e-learning

The area reports and case studies undertaken in previous sections of this project provide information about and insight into the nature of governmental interventions in e-learning. The purpose of this section is to synthesise those previous sections and provide an integrated picture of e-learning policy that draws on the experiences of governments – both national and state or provincial – and supra-national organisations. The policy and strategy documents located and analysed represent attempts to pursue certain policy directions. The reasons for those policy directions were not always clear from the documents themselves, although the aims or objectives set out in specific documents allow inferences as to the particular policy issues being addressed, and policy actions are clearly set out.

This section of the report first sets out the various rationales for government intervention in elearning. It argues for a gradually maturing set of policy rationales and draws on the templated documents to illustrate this argument. Subsequently we set out examples of approaches to intervention around e-learning that illustrate actions taken on the basis of the rationales discussed. A final part of this section comments briefly on New Zealand e-learning policy in comparison with the international examples. For an overview of major policy objectives and priorities matched against templated documents see Figure 1.

Phased policy development

During the time frame we considered in this study (2000-2005), policy directions mainly arose from responses to two major questions. One set of responses concerned the establishment of e-learning at tertiary levels; in this case policy direction arose from responses to the question "E-learning(?), and if so, how?" Policy directions in accord with a positive response here drew their rationale primarily from the call for development of 'information' or 'knowledge' societies. The second question arose where policy makers saw e-learning as an accepted part of the tertiary education landscape. In this case policy direction arises from attempts to respond to the question "How do we ensure we get quality education from e-learning?" This question is more complex. It deals with issues concerning the nature and delivery of e-learning as well as its effective management and support.

This division suggests a phased development of policy. The first occurs as governments act to make e-learning possible, the second as they work to integrate e-learning into the education system, effectively, to mainstream e-learning. Both phases are akin to normalising the technology and its related approaches and treating them as an additive component within the education system. A possible third phase in policy development is hinted at in recent policy documents. In this phase the potential impact of e-learning on the tertiary sector is gradually opened up to examination; a transformative role for e-learning is seen, with changes to views of learning and to the nature and operation of the tertiary institutions and the tertiary system. These phases do not appear uniquely. First and second phase policy objectives are commonly seen together as policy makers draw on the experience of early adopters of e-learning or on their experience of previous adoption of technology use in education. Similarly, second and third phase policy objectives co-exist in policy documents as policy makers continue to encourage the mainstreaming of e-learning and enhancement of its quality, while seeing the potential for sector efficiencies and the need for policy alignment.

The various objectives and priorities presented in policy and strategy documents provide some sense of the overt reasons governments give for intervention in the development of elearning. Policy documents arising during early stages of government involvement in elearning policy tend to draw on matters concerning the issues that drive policy toward engagement with e-learning while those arising later are likely to draw their rationale from concerns about matters associated with the enabling of e-learning at an institutional level and then its potential transformative role at a national or state/provincial level.

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Figure 1. Major Policy Objectives and Priority Areas for Templated Documents.

Reasons for intervention

The changing nature of society drives engagement

The early stages of government involvement in e-learning often drew upon claims associated with the concept of a 'knowledge' or 'information' society, or more generally an increasingly global and technological society. The consistent theme was that society was changing under a raft of global pressures and governments had to respond to those changes. The e-learning documents we surveyed that used the notion of an information society, implicitly or explicitly, did not explore the concept of an information society. However, the move toward such a society was seen to be creating conditions or developing opportunities that required engagement with e-learning.

The Scandinavian countries have followed this notion of 'information' society most diligently and it has informed ongoing policy development. For example, the Finnish strategy document (Template E_Fin_1) draws on the notion that "To meet the increasing knowledge and skills requirements of the information society, learning environments will be developed to improve the quality of learning … (and within *networked* learning environments) … Students will also practice their skills of communicating, acquiring and managing information." The Swedish document (Template E_Swe_1) declares that "If Sweden is to become an information society for all, everyone must have the means and ability to use the technology" (p. 10) and goes on to note that "Swedish Net University Agency, was established on 1 March 2002 to promote accessibility to IT-supported distance learning in higher education and to boost the range of courses" (p. 11).

Documents that drew on this rationale had an emphasis on accessibility to and flexibility of tertiary education delivery. For example, noting that changes in society had created "new and increased pressures for learning systems to be adaptable, accessible and flexible" the Council of Ministers of Education, Canada (CMEC) said "The enhanced accessibility, flexibility and responsiveness made possible by on-line learning technology make it well-suited to support lifelong learning, whether used in conjunction with and as an enhancement to traditional models of education or as a stand-alone option" (CMEC, 2001b, p. 1).

Three documents paid particular attention to access for specific groups of learners. *Harnessing technology* (Template A#3) from the UK noted the need to engage 'hard to reach' learners; the Saskatchewan *Technology Enhanced Learning Action Plan* (Template C#4) had as goals the need to enhance Metis and First Nations peoples' education and training, and the need to advance education and training in rural and northern communities; finally, the Australian *Flexible Learning Framework Implementation Plan 2004* (Template F#3)had amongst its priority areas the needs to provide a range of flexible learning solutions to meet the needs of first, Indigenous Australians, and second, people in rural and remote communities. Two others, the New Brunswick strategy (Template C#3) and the Icelandic strategy (Template E_ICE_#2) noted the special needs of small and remote communities.

The goal of improving accessibility and flexibility to meet the changing nature of society is seen in the objectives of e-learning policy and strategy documents from all areas surveyed. This goal is a response to the driving issues of learner needs, the demands of other educational stakeholders such as tertiary institutions and employers, and career opportunities. Improvements to accessibility and flexibility were operationalised primarily through projects

that developed a hardware infrastructure for broadband access to the Internet. Ensuring access to and flexibility of a potential supply of e-learning opportunities is an important first step.

Ensuring the quality of e-learning

Enabling access and flexibility is not sufficient to ensure good quality e-learning. Where first steps in e-learning policy responded to issues that drove change in the direction of e-learning. those steps had to be accompanied, or followed closely by steps to ensure that the quality of the e-learning opportunities was of a sufficiently high standard. Four major objectives for elearning policy emerged as primary enablers of quality e-learning. These objectives are effectively part of the initial phase of e-learning policy:

- 1. Provision of support, information and guidance for learners
- 2. Professional development and support for tertiary teachers
- 3. Leadership development
- Development of high quality e-learning content

Although appearing early in e-learning policy development, these objectives appear in policy and strategy documents developed across the timeframe considered in this project. Their ongoing appearance indicates that the process of developing an e-learning environment is an extended one. A significant characteristic of the two approaches that were evaluated – the Australian VET experience and the Saskatchewan TEL Action Plan – was the commitment to professional development for faculty and support for learners. These features of both plans might normally be considered to be part of institutional level planning, but both featured strongly in what were evaluated as effective approaches to the implementation of e-learning.

Moving to a system approach

While institutions, their staff, and learners benefit from policy involvement in the areas discussed to this point, there are obvious constraints to ongoing development system-wide. Supporting the four major enablers discussed above were several policy objectives that enabled a more systemic approach to e-learning. The move to a systemic approach signals a turn to the second phase of e-learning policy development.

Most obviously, considerable emphasis was placed on the need to develop collaboration and cooperation between the institutions comprising the tertiary system in order to obtain benefits for the system as a whole. At least one policy document from each region we considered invoked this as a major policy priority. This higher order objective was accompanied by more focused policy objectives. Establishing technical interoperability standards and bedding them in across the system and developing systems for the sharing of online content enabled particular forms of collaboration.

While these enablers continued to build the supply side of e-learning, policy makers have recognised that there is a need to ensure an awareness of the benefits of e-learning and to continue to build demand for e-learning services. That lack of demand for e-learning is a potential constraint to e-learning adoption is noted in documents from the UK, the US and Canada and serves to illustrate that the 'information' society is not yet a reality for some segments of the population.

Research-based information about the efficacy of e-learning is seen as necessary for ongoing development and informed decision making at a system level. Such research enables better

targeting of e-learning policy and builds the research base that can be drawn on in support of professional and leadership development. Policy objectives that supported research initiatives and policy evaluation can be seen in documents from the UK, the US, Canada, the Scandinavian countries and Australia.

Embedding e-learning and aiming for sector efficiencies

The e-learning environment is becoming increasingly mature, entering a third phase of policy development. In some areas there are policy moves to embed e-learning by making it integral to broader strategies for teaching and learning. The recent Canadian examples of reviews that integrate e-learning into a more encompassing consideration of higher education, along with the national emphasis on lifelong learning, match European approaches that view e-learning as being integrated into society generally. The UK has moved in this direction with its HEFCE Strategy for e-learning (Template A6).

Embedding e-learning in this way brings problems of its own. Demand-side issues are gaining more attention as governments strive to come to terms with questions of cost-effectiveness and sustainability. The issue is not just one of providing access in a technical sense, as in providing broadband services to remote areas, it is also one of ensuring uptake once the physical access issues are resolved. The case study of British Columbia drew attention to this policy goal and it is also evident in the objectives of several of the supra-national documents.

The possibility of sector efficiencies of various forms is seen as information systems become more integrated and has emerged as a driver of policy. This particular driver derives from calls for sustainability of e-learning and concerns about affordability. Policy of this type is exemplified by the Business Plan for the 2005 Australian Flexible Learning Framework (Template F2) where policy themes relate to three aspects of e-learning: sustainability of practices; development of synergies between activities; and, a call for a strong accountability focus.

The separate area reviews have also shown that tensions between various levels of governance can exist as institutions, nations and supra-national organisations each attempt to pursue their own agendas for e-learning. The study of the EU demonstrates this particularly clearly in a supra-national national environment, while the Canadian experience suggests similar issues arise between federal and provincial governments. The Australian experience in the VET sector runs counter to this, but the previous strength and integration of the TAFE sector may account for the successful development and implementation of that Flexible Learning Framework. Strengths in developing collaboration between stakeholders and openness in dissemination of knowledge and resources associated with e-learning appear to be features of effective implementations of e-learning.

The need for policy alignment also has arisen in relation to concerns over intellectual property and copyright. Questions of ownership and use have been particularly concerning in relation to the development and dissemination of digital resources for e-learning. Attempts to engage in policy and strategy alignment can be seen in the UK, the US and Australia.

Approaches to intervention

Analysis of policy documents within each of the geographical areas revealed key action points that were seen as necessary to enact the policy objectives. Further analysis of this

information collected from policy documents gave additional insight into the types of interventions that were proposed to operationalise these e-learning policies.

It has been argued above that policy development for e-learning appears to be phased, with three possible. Within this subsection of the report we adopt the notion of three phases of elearning policy and describe approaches within each phase that illustrate the nature of policy initiatives. Thus this sub-section highlights a range of interventions that have been proposed or implemented as a result of government policy direction.

Phase One approaches to intervention

Developing infrastructure: Developing infrastructure that enables universal access in a physical sense was a key action point that many of the policy documents recommended. By way of example, the Australian Flexible Learning Framework (Template F#1) promotes three strategies related to infrastructure:

- Conducting ongoing review, update and communication of preferred standards and guidelines in Vocational Education and Training (VET) sector.
- Forge strategic partnerships to advocate for: reduced communications costs for VET; access by all VET providers and learners to adequate levels of bandwidth; and access to VET online services from workplaces and homes.
- Facilitate ready affordable access for VET staff and students to the technology infrastructure necessary to increase the quality and quantity of VET services available through flexible learning methodologies.

The Iceland policy: Advantage for the Future (Template E_ICE_#1) was more specific in identifying the actions that would be taken to ensure improved access and flexibility in regards to e-learning. There was a focus on high-speed networks for secondary schools, universities and continuing education organisations. Wireless networks were also promoted as a potential solution to some of the networking issues that educational institutions in Iceland were facing. A major Canadian initiative to improve access was Network BC, which concerned itself with ensuring high speed internet access to provincial communities across British Columbia.

Ensuring quality: Overall quality of e-learning is a key area driven by the efforts to mainstream e-learning. Within the scope of quality development and assurance we see links with learner support, (high-quality) content development, professional development and support, and leadership development. All of these will potentially have an impact on overall quality of e-learning when considered as an integral part of e-learning policy.

Learner support. The first area to consider is support for learners engaged in e-learning at a tertiary level. The UK HEFCE strategy (Template A#6) for e-learning identifies student support, progression and collaboration as one of the seven strands for the implementation of e-learning in higher education to focus on. The action points developed recommend: the development of integrated e-learning environments for lifelong learning; utilisation of elearning for delivery and support of foundation degrees; the development of lifelong learning networks on a national and regional basis; encouraging e-based systems of describing learning achievement and personal development planning. At an operational level this includes collaboration among institutions, investigating the use of e-portfolios to support learner achievement and progression, and exploring the issues surrounding the use of e-learning in the delivery of foundation degrees.

Creating digital content. Under the umbrella of improving the general quality of e-learning we see the move to ensure creation of high quality shareable content for e-learning. This largely involves learning object development. The USA report to the President and Congress on the Power of the Internet for Learning (Template B#2) advocates that institutions join forces to develop content and applications for online learning. This also includes removing barriers that block full access to online learning resources, courses and programs.

Content development is also evident in the policies and strategies of other nations. The Technology Enhanced Learning Plan (TEL) from Saskatchewan (Template C#5) highlights the need for content development. The intention was to forge relationships with public and private sector agencies in order to develop this content. Another report from Canada, the CANARIE report (Template C#2) advocated high quality e-learning content as one of its four major themes. The Australian Flexible Learning Framework for the VET system (Template F#1) endorses the need for the development of content. They take a step further in advocating 'World-class online content development, applications and services'. The strategy they put in place to ensure this involved: developing a significant body of nationally developed online content that is flexible, interoperable nationally and is informed by and informs developments in other education and training sectors. A related approach can be seen in the development of 'tools' to assist tertiary teachers and designers with the development of digital content. Typical here is the Australian Flexible Learning Toolbox initiative for the VET sector.

Professional development. Enabling training and development of skills and awareness and knowledge among tertiary teachers is also identified as a contributing factor to the overall quality of e-learning. Professional development initiatives are evident in Saskatchewan where lack of faculty development and support was identified as a potential barrier to the adoption of TEL. The 2000 action plan (Template C#5) recommends that no TEL initiatives be developed and implemented without the active support of faculty. Saskatchewan institutions were mindful of the importance of an open dialogue with faculty to address the legitimate concerns, such as, the quality of teaching, workloads, and intellectual property rights, copyright and royalties. The strategies to overcome these barriers were four-fold: develop resources in instructional design and TEL in teaching, establish networks to provide workshops and training, provide media production and technical support services for implementing TEL, and undertake research and evaluation of TEL and disseminate the findings.

Building leadership. In order to build leadership in e-learning at institutional management and governance levels the Australian Flexible Learning Framework (Template F#1) sees emphasis being placed on quality leadership in the flexible learning area. A cohort of Flexible Learning Leaders has been chosen each year since 2000. They comprise of managers, practitioners, specialists and representatives from enterprise, advisory bodies and industry. The Flexible Learning Leaders are charged with leading and managing change at both an institutional and state level. Their work focuses on the pedagogical, technical and managerial aspects of flexible learning and is concerned with expanding the choices on what, when, where and how people learn.

Phase Two approaches to intervention

This second phase has a focus on working to support the enablers of good quality e-learning in order to mainstream it. It sees the technology being used as an addition to normal teaching and learning practices.

<u>Collaboration</u>: Collaboration and cooperation between institutions is a key enabler of elearning. This collaboration largely focuses on the systems that the institutions can share. The Harnessing Technology strategy from the UK (Template A#3) promotes the development of common systems for learning, teaching, research and administration within the education sector. There is a need to ensure that the institutions adhere to some common standards to ensure interoperability, accessibility and quality.

BCcampus was the British Columbian response to institutional collaboration. This initiative was seen as a way of overcoming some of the issues of duplication across institutions while also providing staff access to tools for course development and collaboration. BCcampus would allow students the opportunity to transfer between institutions and to access all student support services online. This approach to e-learning in the post-secondary sector in British Columbia aims to ensure a more unified and more efficient and flexible tertiary sector.

Awareness and demand: Building awareness and creating demand for e-learning alternatives amongst current and potential students is an enabler for the mainstreaming of e-learning. The Western Isles of Scotland initiative to rollout broadband to all communities sees the increase in awareness and demand for e-learning across these rural and remote communities. Local Learning Centres have been integral in delivering and supporting this initiative and have helped to build awareness and create demand for e-learning. A central part of this type of initiative – noted also in the Network BC case study – is that commitment to the provision of a range of services alongside e-learning is essential for satisfactory uptake within communities.

Research: Research into e-learning to ensure effective pedagogical practice is evident in the Welsh e-learning strategy (Template A#1) and was called for in policies from the UK, the US and Sweden. The Welsh strategy realises the importance of continuous research on both global and local e-learning initiatives and advocates for the development of a "national observatory to facilitate the intelligence gathering, research and dissemination needed to champion national and international best practice in e-learning". Through the observatory a cohesive approach to seeking and interpreting global research and best practice in e-learning could be developed. The observatory would also disseminate the research findings and best practice evidence widely across the sector. The information gathered through the observatory could also inform future policy on learning in Wales. By creating a centralised resource it would also be possible to identify the gaps in knowledge about e-learning in Wales and would highlight areas where further research is necessary or pilot projects could be undertaken. This initiative demonstrates a more systemic approach to e-learning research and policy evaluation.

Phase Three approaches to intervention

This final phase sees e-learning begin to shape and influence views of learning and the practices of tertiary institutions.

<u>Policy alignment</u>: Policy/strategy alignment is starting to emerge across a number of countries. The Australian VET sector is one example where institutions work together to alleviate some of the burdens of dealing with the legal and regulatory framework involved in flexible learning. An expert advisory group was established to identify, prioritise and respond to the legal and regulatory issues that arise. A strategy was also developed to communicate research related to legal and regulatory issues to VET providers (Template C#1).

Embedding e-learning: Transforming Teaching and Learning is focused on firmly embedding e-learning within the wider educational context. The UK is moving towards this with their e-strategy for learning: *Harnessing Technology* (Template A#3). The first stated aim of the strategy centres on this and the key action points all go some way to make this happen. A number of system actions have been set in place to ensure these transformations occur. These actions include: developing and implementing a common approach to personal records across education and children's services; encouraging all organisations to support a personal online space for learners; promote a common approach to assessment across sectors to support personalised progression; enabling practitioners to create, adapt, re-use and share resources through common access to digital resources for e-learning; reviewing and updating the curriculum and qualifications to reflect the impact of technology on learning. Particularly through this last action, it is evident that this will mean transformation of teaching and learning to more firmly embed e-learning.

Sector efficiency: Many of the policy and strategy documents reviewed highlight the need to make the tertiary sector more efficient. The Canadian ACOL report: *The e-learning e-volution in colleges and universities* (Template C#1) promoted the notion of a unified pan-sector action plan for online learning. The third of three areas of priority advocated encouraging the creation of synergies and greater critical mass within post-secondary education. In order to achieve this, a pan-Canadian Learning Service was recommended. This service would have three main functions: supporting learners; supporting faculty and institutions in online course and programme development; providing marketing support.

The report of the UK Learning and Skills Council (Template A#5) also concerned itself with sector efficiency. But unlike the Canadian report the UK report set about to reduce the bureaucracy for both learners and providers through harmonising the electronic systems in place. The Learning and Skills Council also supports the establishment of unique personal learner identifiers. These action points follow from the guiding principle that the Learning and Skills Council's approach to e-learning should accept that well managed collaboration and cooperation are now essential in the diverse area of e-learning they intend to take a lead role.

How does New Zealand compare?

As an extension of the original proposal for research this section provides a high-level comparison of state, national and supranational e-learning policy developments with those in New Zealand. However, the following comparisons are in the absence of a detailed and comprehensive analysis of the New Zealand policy literature subject to an external validity process.

Background to Policy

In 2000 the New Zealand government released the Tertiary Education Strategy 2002/07 (Ministry of Education, 2000) and established the Tertiary Education Commission (TEC) along with an E-Learning Advisory Group.

In March 2002, the E-Learning Advisory Group released their report, *Highways and Pathways: Exploring New Zealand's E-Learning Opportunities*. A key recommendation of the Report was that 'the Government provides proactive leadership in the development of an e-learning strategy for the tertiary sector (E-Learning Advisory Group, 2002, p. 8). In acting on this recommendation, in October and November 2003 the Ministry of Education consulted

across the sector to get a picture of what was happening 'on the ground' (Ministry of Education, 2004a, p. i). In March 2004, the Government released an *Interim Tertiary e-Learning Framework* (Ministry of Education, 2004a) stating that an Action Plan would be developed over the course of April to July 2004. The intention was foreshadowed for the *Interim Tertiary e-Learning Framework* to be superseded by an integrated, pan-sector e-learning strategy that would encompass early childhood through to tertiary education. The Interim Framework stated:

The aim will be to develop one overarching vision and set of principles for e-learning in New Zealand, and to map dependencies and synergies between capability development initiatives within each of our three education sectors (Ministry of Education, 2004a, p. 17).

An abridged version of the original Framework was published in October 2004 with an updated schedule for the framework's implementation (Ministry of Education, 2004b). According to the abridged version, a public consultation exercise would take place throughout 2005 contributing to the development of the integrated strategy.

The *Digital Strategy* (New Zealand Government, 2004) runs parallel to the *Interim Tertiary e-Learning Framework*. In June 2004, a *draft Digital Strategy* was released for public feedback with the final version of *The Digital Strategy* being launched in May 2005.

Points of Comparison

This section reports some of the main points of comparison that standout from an analysis of state, national and supranational e-learning policy developments.

Definition of e-learning

In comparison to most of the countries reviewed, New Zealand has a reasonably precise definition of e-learning. However, it is noteworthy that the definition of e-learning remains fluid as it has changed from one iteration of policy to the next. For example, in *Highways and Pathways* e-learning was defined as:

Learning that takes place in the context of using the Internet and associated web-based applications as the delivery medium for the learning experience (E-Learning Advisory Group, 2002, p. 7).

At the time this definition differed from the one provided for the compulsory schooling sector. In *Digital Horizons* e-learning was stated as:

Flexible learning using ICT resources, tools, and applications, and focusing on interactions among teachers, learners, and the online environment. E-learning usually refers to structured and managed learning experiences, and may involve use of the internet, CD-roms, software, other media, and telecommunications (Ministry of Education, 2002, p. 5).

Subsequent definitions of e-learning appearing in the *Interim Tertiary e-Learning Framework* and the *Glossary of Key Terms* developed to support *The Digital Strategy* slightly different but largely analogous.

The point is to highlight that like many of the policy texts reviewed, New Zealand does not have a singularly agreed definition, and by implication commonly accepted understanding, of

what is meant by e-learning even though this has been the focus of considerable policy development.

Policy alignment

In a similar manner to many other countries, New Zealand has developed a separate elearning policy—although like the United Kingdom there is a move to embed the growth of elearning in a more integrated pan-sector framework. In New Zealand, e-learning policy developments also refer to and come under the Tertiary Education Strategy 2002/07. Although there is a link between the recommendations contained in *Highways and Pathways* and the Tertiary Education Strategy 2002/07, there is appears to be a lack of overall policy alignment. The competing definitions of e-learning illustrate this point. Another example is the lack of connection between the enablers of *The Digital Strategy* (Content, Confidence and Connection) and the *Interim Tertiary e-Learning Framework*.

On the other hand, poor alignment is a common problem throughout the state, national and supranational policy documents we reviewed, and there does not appear to be an easy resolution. When e-learning is embedded in policies that are more general, there is reason to believe that it may get lost amongst a raft of other reforms. Ontario is a case in point. Therefore, New Zealand is not alone in this problem and the development of a pan-sector elearning strategy may go some way to address the matter.

Competing visions

Another tension exists between competing visions of the purpose of e-learning from a wider social, economic and cultural perspective. Europe is the best example of where on the one hand the vision is to create a knowledge economy through economic and political union and free mobility between independent nation-states. On the other hand, the vision in some of the Scandinavian countries we reviewed was to use e-learning in the education system to promote a knowledge society, protect cultural identity and foster a sense of nationhood. In this regard, a strong emphasis is placed on education for citizenship. Thus, the question is whose vision is being promoted and for what purpose?

However, the *Interim Tertiary e-Learning Framework* is one of the few policy documents to recognise that 'there are many different views about e-learning' and 'the vision is therefore a basis for ongoing discussion' (Ministry of Education, 2004a, p. 7). In this respect, there are important implications in terms of treating policy as an educative process in which vision emerges from the consultative process.

Collaboration

New Zealand policy has not actively promoted international alliances and nor has it sought to integrate the local tertiary sector in the British Columbian manner. Instead, collaboration in New Zealand still occurs within a competitive funding model through a limited portal and initiatives such as the e-Learning Collaborative Development Fund (eCDF). The risk of this partnership approach is that competition for students may undermine the true extent of collaboration and do little to reduce the duplication that was recognised as not serving the wider public interest. While the Interim Tertiary e-Learning Framework talks of flexible learning pathways and seamless access to education content and services from multiple providers, it is a challenging prospect to achieve this under a competitive funding model.

Demand for e-learning

A common theme throughout the policy texts is an emphasis on infrastructure and the supply side of e-learning at the expense of the demand side. Almost all of the state, national and supranational policy initiatives focus on building infrastructure with the assumption that this will be used when it is available. British Columbian and Japanese policy documents stand out as an alternative, recognising the need to create public awareness of the potential value of 'connectedness'.

In a similar vein, some New Zealand policy documents have a strong supply side flavour. This point is illustrated in the three enablers identified in *The Digital Strategy* where the assumption is that with the right Content, Confidence and Connection people will make full use of the infrastructure to help New Zealand become a world leader in using ICT to realise our economic, social environmental and cultural goals.

The argument ignores some of the deeper structural barriers to promoting life chances and the wider uptake of educational opportunities. Although the vision is to build 'a networked, flexible tertiary education system offering accessible, relevant, high quality learning opportunities to all New Zealand' (Ministry of Education, 2004a, p. 7), there is no guarantee that such a system will address traditional barriers to social exclusion. Recognising this, the *Interim Tertiary e-Learning Framework* calls for, as possibly its most challenging key action area, the exploration of e-learning opportunities for groups that currently have least access to tertiary education.

Emphasis on formal aspects of tertiary education

A focus on formal tertiary education as opposed to informal and non-formal e-learning experiences is a common theme across all of the policy texts. For instance, the role of e-learning within in-house and distributed workplaces is not widely recognised. While in New Zealand the *Interim Tertiary e-Learning Framework* acknowledges the potential of on-the-job training through online, part-time formal courses there is little acknowledgment of the way in which e-learning might transform existing non-formal in-house training practices.

In terms of other policy initiatives for informal and non-formal learning in the tertiary sector, the *E-learning Creative Community Partnerships* project under the Australian Flexible Learning Framework illustrates how community-based education can occur through the coordination of existing resources augmented by e-learning. Similar initiatives are foreshadowed for marginalised learners and small and remote communities in the *Interim Tertiary e-Learning Framework*.

The key point of difference with initiatives such as *NetworkBC* and *Connected Communities* in the Islands of Scotland is the manner in which these projects have involved community participation. This local participation appears to be crucial to their long-term success from a demand-side. A wider emphasis on e-development is required to expand offerings and avoid a "bolt-on" approach to the provision of existing services.

Ensuring quality

The four major initial enablers of good quality e-learning recorded in this report as being consistently seen across all jurisdictions, are all recognized as part of the New Zealand tertiary e-learning landscape. These four:

- 1. Provision of support, information and guidance for learners
- 2. Professional development and support for tertiary teachers
- 3. Leadership development
- 4. Development of high quality e-learning content can be noted as areas funded through eCDF projects while the first is recognised within the Interim Tertiary e-Learning Framework as a key action area.

Use of research evidence

The value of e-learning research as a guide to future policy developments is recognised in the Interim Tertiary e-Learning Framework. This recognition is consistent with the policy objectives of nation states in all of the regions we included in this analysis. While the international e-learning research base is growing, the Framework also recognises the need for research activity and findings based in the New Zealand e-learning context.

It is apparent that many state, national and supranational e-learning policies are disconnected from the distance education literature. There is a sense in which e-learning is a new educational approach and therefore requires a new way of thinking about the provision of tertiary education. While there is an argument supporting this conception of e-learning in some of the documents reviewed, the danger is they overlook the experiences and lessons learnt from extensive research and practice in the field of distance education. The gap, and thus this concern, is equally apparent in the New Zealand policy literature.

Emphasis on Treaty responsibilities

Highways and Pathways called for explicit recognition of issues facing Maori learners in elearning environments. The importance of addressing the unique needs of tangata whenua does not receive the same attention in the he Interim Tertiary e-Learning Framework. Rather, the Framework acknowledges that there is recognition of the so-called digital divide and the need to tackle this problem for Maori and Pacific peoples, along with those unemployed, on low incomes and so on, within the Government's Connecting Communities Strategy (Department of Labour, 2002). It then indicates that issues of e-learning access must be worked on in conjunction with the ICT access issues being addressed through Connecting Communities initiatives.

This potential limitation aside, a fundamental tension exists in policy initiatives for an indigenous culture such as Maori, as e-learning is a response to 'the challenges of globalisation, accelerating technological change and the networked knowledge society' (Ministry of Education, 2004a, p. 1). The forces of globalisation create tension between the goal of participating in a new global knowledge economy and the aim of protecting local identity and cultural heritage. While elearning offers tremendous potential for Maori, and other marginalised learners, in the global policyscape it is problematic for countries such as New Zealand to forge their own e-learning vision, 'with a confident indigenous dimension' (E-Learning Advisory Group, 2002, p. 19). This suggests the Government's role in steering and monitoring the delicate balance between the way people affect and are affected by the growth of ICT in a networked knowledge society is one of the great challenges facing policy-makers.

Issues emerging from Policy Initiatives

This section concludes the report. It recognises that New Zealand e-learning policy has largely taken account of the many lessons provided by the experience of overseas jurisdictions. From that perspective it highlights a number of more general issues that have emerged through consideration of both the country reports and case studies on e-learning policy and accessibility, and serves to integrate and summarise the data-driven themes that emerged during the project.

1. Conceptions of e-learning

An international comparison of policy in the area of e-learning is problematic as, both within and across national borders, there is no generally accepted definition of the concept. This point is illustrated clearly by the many variations of spelling and the way e-learning and online learning seem to be synonymous in some policy texts. Often the conception of e-learning is very broad and in many cases, no explicit definition was provided in policy documentation. In the case of Europe the terms *telematics* and *infomatics* predate the concept of e-learning and countries such as Finland use the term *virtual education* as they maintain a strong link to historical initiatives in the areas of adult, open and distance education. The idea of blended learning also appears more recently in some policy texts but there is a danger of seeing this concept as largely business as usual. It is noteworthy, however, that poorly defined conceptions of e-learning are not entirely a bad thing as there is reason to suggest that in some countries this may have helped to avoid setting up a policy framework that does not align with other education initiatives. In other words, the lack of an explicit definition may have encouraged the embedding of e-learning within existing policy texts.

2. Supply of and demand for e-learning

There is emphasis on providing supply by building infrastructure rather than focusing on why there would be demand in the first place. The assumption has been that if the right infrastructure is built, students will follow. The fact is that some groups have not made use of the infrastructure to access tertiary education and other services. There is little evidence, across the countries reviewed, of any attempt to find out what it is that disadvantaged groups and students studying at a distance actually want in support of their educational aspirations. This point also raises questions about some of the deeper structural barriers to promoting wider access to tertiary education that have largely been ignored by e-learning policy. The key point is that provision of access is a complex issue and in the current move to personalise learning more attention is required on understanding the demand side of tertiary education.

3. Strategies for disadvantaged and under represented groups

A common feature of the policy texts was few specific strategies for disadvantaged and under represented groups. In a majority of policy documents, there was little or no reference to such groups and even fewer evaluations that specifically focused on disadvantaged groups. This is somewhat surprising given acknowledged gender bias associated with the role of technology in society and the number of minority and indigenous cultures spread across the different countries involved in this study.

4. Current emphasis on e-learning is restrictive

When reflecting on the policy initiatives as a whole, there is a sense in which the current emphasis on e-learning is too narrow. The Milang Old School House Community Centre project within the wider *E-learning Creative Community Partnerships* initiative is a case in point. Unlike the Rural Transaction Centres described by Rennie, Greller and Mackay (2002) this e-learning initiative took little advantage of the opportunities to widen access to basic government, financial and social services, which may have been lost or never available to many small and remote communities. To ensure uptake, e-learning needs to be embedded within a more comprehensive package of initiatives that allows access to a range of services and addresses issues of social exclusion and access for all. Thus, there is a sound argument for expanding the policy focus beyond e-learning to a wider strategy for (e)development.

5. Engagement with research

Although policy initiatives support research based in the practice of e-learning, notable feature of most e-learning policy is the disconnection with the rich and long tradition of the distance education literature. With the notable exception of some European countries and one or two Canadian provinces, open and distance education using new technology is presented as a completely new phenomenon. In the context of life-long learning the European Open and Distance Learning Liaison Committee go so far as to state that it is as if the two movements have been kept separate deliberately. Finland is a notable exception. Adult education has a long tradition in Finland and it would appear that e-learning is building on this tradition rather than replacing it. The disconnection with the traditional academic literature between e-learning and open and distance learning suggests a basic confusion and tension between the purpose and perceived value of e-learning within the policy discourse.

A distinction made by Bates (2001) is helpful when considering this disconnection. According to Bates there are three main types of uses of e-learning: (a) technology-enhanced classroom teaching, (b) distance education and (c) distributed or flexible learning. The first refers to technological innovations in existing face-to-face settings. The separate category of distance education recognises the need to make provision for access to educational services for students studying at a distance or for those who cannot attend face-to-face courses for other reasons. The third category recognises how e-learning makes it possible to offer more flexible forms of delivery than traditional classroom teaching. The key point is that flexible learning does not serve the same purpose as distance education and this distinction has not been well articulated in most policy texts.

6. Quality assurance processes

There is a lack of quality assurance processes consistent with some of the issues raised about formal evaluations. In many ways the issue of quality assurance appears to be 'tacked on' to e-learning policy initiatives and there is a fundamental problem of what constitutes quality in a field such as e-learning.

7. Emergence of consortia, partnerships and alliances

The emergence of consortia, partnerships and alliances is another important feature of recent e-learning policy. There have been several initiatives such as BCcampus and the Swedish Netuniversity where governments have responded to the new e-learning environment by

creating single portals in which institutions collaborate to maintain the sustainability of their programmes. In Europe, there have been efforts to stimulate new cross-institutional and cross-border consortia and most, if not all, European universities appear to have made use of the funding opportunities to promote collaboration, and other mobility related initiatives. Commercial partners are a strong theme across the policy texts and the concept of partnership extends to local community groups as illustrated in the accessibility case studies.

8. Maturity of the policy landscape

In comparison to the compulsory schooling sector, the provision of e-learning policy for tertiary education is relatively immature. A notable feature of initiatives in this area is the short shelf life of policy. This point is evidenced by the fact that most policies operate on a two or three-year cycle. While the 10-year timeframe of the latest pan-sector approach in the UK is an exception, it seems that a truncated policy cycle is an outcome of the need to be responsive to the rapid pace of technological change. This leads to a number of problems.

In terms of evaluation, there is reason to suggest that research has not always been acted on or used to inform the next iteration of policy, as the new policy cycle is often already underway by the time findings of any evaluation have been published. Another problem is that while there has been a shift away from infrastructure to a stronger focus on learning in a number of policy texts, infrastructure keeps changing and technological developments continue to shape the nature of e-learning.

There is a concern that questions of what citizens truly want from e-learning are not addressed in a short policy cycle. Largely the benefits of e-learning are taken-for-granted and few, if any, cases were found where governments engaged in wide ranging consultation to establish the type of society and education system people might want to create through the use of new digital technology. In this regard, policy has been conceptualised as a lever for change rather than an educative process.

9. Distinction between integrated and standalone policies

A clear distinction exists between integrated and standalone policy initiatives. In the US, the use of ICT is integrated generally in State's Higher Education Plans. In a similar vein, in Canada both Ontario and New Brunswick have consciously integrated e-learning within a wider policy framework. Finland simply has a National Strategy for Education, Research and Training in the Information Society. The question remains whether the specific challenges and opportunities that e-learning presents will be adequately addressed in this integrated approach. The obvious danger is that e-learning is lost amongst a raft of other policy initiatives and the potential for greater access and quality of tertiary education goes unrealised.

In contrast, Australia and the UK have developed a number of standalone e-learning and flexible learning policies that focuses on quite specific aspects of tertiary education. The issue here is that this standalone focus may be at the expense of developing a comprehensive set of policy initiatives that ready the tertiary education environment to fully realise the potential of e-learning. Hence, there is increasing recognition of the need to align these e-learning policies with other more general initiatives, such as the HEFCE *Teaching and Learning Strategy* in the UK and *Shaping our Future: Australia's National Strategy for Vocational Education and Training 2004-2010*. Both integrated and standalone approaches offer advantages and

disadvantages and it remains unclear whether specific e-learning policies lead to greater access and level of uptake of tertiary education.

10. Policy alignment

The lack of alignment between policies remains a vexed issue. For example, where a specific e-learning policy exists there is often little or no reference to ICT in other policies targeted at the tertiary sector. This point is illustrated in Europe where at the supranational European Union level there have been a number of specific e-learning initiatives. The limited impact of these initiatives on policy at large is evident in both the *Action Plan on Promoting Language Learning and Linguistic Diversity 2004-2006* and the *Action Programme in the Field of Lifelong Learning 2007-2013*. The issue of alignment extends to the relationship between institutional policies in individual tertiary providers as well as foundational policies that define the very essence of the nation-state. This is particularly the case in Scandinavian countries where there is a strong emphasis on the concept of the Information Society. In the case of Norway, the overriding aim is to create an information society for all. It is also notable that the Norwegian government has attempted to address the problem of alignment by identifying key actions across ministries and reporting on these and revising them on a six monthly basis. Ultimately the whole issue of alignment is neatly encapsulated in the question of whether there is a need for an e-learning policy or rather a policy for e-learning.

11. Distinction between centralised and decentralised policies

Another feature of the policy texts is the distinction between centralised and decentralised policy initiatives. In this respect, England and Scotland have taken different approaches with a far less centralised model of policy development in the latter. In Australia policy for the VET sector is quite centralised while universities have continued to operate independently. The Swedish government has established the Netuniversity portal, where 35 tertiary institutions collaborate to offer 2700 courses. Sweden has a long tradition of distance education and a strong commitment to the goal of creating an 'information society for all' that makes this initiative far less problematic. BCcampus operates similarly in British Columbia, in service of a more integrated approach to tertiary education, but is in competition with the online offerings of individual institutions. In the case of Asia, the adoption of a centralised approach to e-learning policy is partly reflection of the nature of the respective education systems and the scale of implementation required in some of these large developing nations. No clear advantage for either centralised or decentralised model is yet apparent.

12. Tension between state, national and supranational policy initiatives

While federal governments have seen the need to develop e-learning policy a tension exists between central initiatives and those at the local state level, as well those operating across nation-state boundaries on a supranational basis. Canada provides an excellent example of a country where early federal initiatives to develop a pan-Canadian e-learning strategy were overtaken by local provincial government initiatives where responsibility for public education resides. As mentioned previously in the point above, Australia has a balance of responsibility between federal and state governments but this has not been without its own problems.

Beyond individual nation-states, there is considerable tension between a number of supranational policy initiatives and those that already exist within countries. The best example of this is evident in Europe where despite major e-learning policy initiatives at the European

Union (EU) level over a sustained period, there is little or no requirement for individual member states to act on these in their own country.

13. Economic imperative underpinning e-learning policy

A strong economic imperative is common to many e-learning policy initiatives. As President Bush is cited as saying in the US country report, 'Education is America's best tool in building an increasingly competitive global economy'. The economic rationale for investing in e-learning is particularly evident in Australia, Canada, United Kingdom and the European Union where the common goal is to create a competitive and dynamic knowledge-based economy through the adoption of new digital technologies. While the goals of economic growth and developing a high quality tertiary education system are not mutually exclusive, there is evidence from the European Open and Distance Learning Liaison Committee to suggest that the economic discourse has been counterproductive to promoting the wider adoption of e-learning.

14. Shift in the provision of tertiary education

Throughout the policy initiatives, there is general recognition that a fundamental shift is taking place in the provision of tertiary education. While the investment in e-learning may not have impacted upon practice as many techno-advocates predicted, in most countries there has been an important change to the government's approach to tertiary education. This point is demonstrated clearly by the recent change to the 50% and 12 hour rule in the United States, which previously restricted financial assistance to students on the basis of 50% of courses having to take place in brick-and-mortar locations or not falling below 12 hours of classroom instruction per week. With the decision to remove this rule, there is a predicted boom in online programmes at traditional colleges, as well as the creation of for-profit businesses specialising in online education (Carnvale, 2006). Another example of a fundamental change to the provision of tertiary education is evident in British Columbia with the launch of BCcampus as a central access point to post-secondary distance learning resources and services.

In stark contrast, the province of Ontario has chosen to integrate e-learning within a wider policy initiative opening the education system to foreign competition. As reported in the relevant case study, this decision has allowed Australia's Charles Stuart University to establish a branch campus in Ontario. One of the key drivers is the belief that competition will lead to better quality, at a lower price, and this approach to tertiary education will help to prepare Ontario to better exploit the new global education market.

15. Greater emphasis on formal aspects of tertiary education

With some notable exceptions, such as Australia, the vast majority of policy texts appear to focus on formal academic tertiary education as opposed to post-secondary vocational training and non-formal e-learning experiences. The European Open and Distance Learning Liaison Committee shares this view and identifies the focus on formal education as an important weakness of policy. This does not mean that e-learning is not happening in less formal learning contexts. There is evidence to suggest that private training organisations and large multi-national corporations use e-learning regardless of government policy. An emphasis on national e-learning policy may fail to recognise these kinds of private corporations and organisations with reasonably large initiatives in the area of e-learning.

16. A global education market

Many of the drivers for e-learning are linked to the forces of globalization and the movement to create a global education market. This is illustrated by Ontario's policy response to e-learning and tertiary education in general. Although Governments have policy choices, the ability of individual nation-states to establish local policies that protect cultural heritage, strengthen national identity, and build social cohesion is increasing problematic within a global policyscape.

17. Lack of debate and critical dialogue

Finally, a consistent theme across the policy texts is the lack of debate and critical dialogue surrounding the risks of the investment in e-learning. The value of e-learning is never questioned and typically, the discourse is removed from any deeper consideration of educational policy. The missing question in policy is what kind of education do we want e-learning to help deliver? With notable Scandinavian exceptions there is rarely any consideration of what type of widely accessible tertiary education system a country might want to create. Most of the policy texts do not explain 'why' an investment in e-learning will help to meet the commonly agreed goals of education—such as equity, fairness and social justice. In this respect, the alternative futures available to us are not made explicit and e-learning policy is rarely openly self-reflexive.

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APPENDICES

Appendix A: Low risk ethics application letter of approval



24 April 2006

Dr William Anderson
Department of Learning and Teaching
PN900

Dear William

Re: Global Picture Local Lessons: E-Learning Policy and Accessibility

Thank you for your Low Risk Notification which was received on 24 April 2006.

Your project has been recorded on the Low Risk Database which is reported in the Annual Report of the Massey University Human Ethics Campus Committees.

Please notify me if situations subsequently occur which cause you to reconsider your initial ethical analysis that it is safe to proceed without approval by a campus human ethics committee.

A reminder to include the following statement on all public documents:

"This project has been evaluated by peer review and judged to be low risk. Consequently, it has not been reviewed by one of the University's Human Ethics Committees. The researcher(s) named above are responsible for the ethical conduct of this research.

If you have any concerns about the conduct of this research that you wish to raise with someone other than the researcher(s), please contact Professor Sylvia Rumball, Assistant to the Vice-Chancellor (Ethics & Equity), telephone 06 350 5249, e-mail humanethicspn@massey.ac.nz".

Please note that if a sponsoring organisation, funding authority or a journal in which you wish to publish requires evidence of committee approval (with an approval number), you will have to provide a full application to a Campus Human Ethics Committee. You should also note that such an approval can only be provided prior to the commencement of the research.

Yours sincerely

Sylvia V Rumball (Professor)

Chair, Human Ethics Chairs' Committee and Assistant to the Vice-Chancellor (Ethics & Equity)

cc Prof Bill Tunmer, Acting HoD
Department of Learning and Teaching
PN900

Ms Caroline Teague Graduate School of Education PN900

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Appendix B: Interview schedule – Project member

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Global picture, local lessons: e-learning policy and accessibility

Acce	essibility Phase – Question Schedule
1.	Can you provide a brief outline or description of the initiative?
2.	What is the rationale for the specific initiative?
3.	Who is the target audience for the initiative?
4.	What are/were the anticipated outcomes of the initiative?
5.	What processes are there for monitoring implementation? Could you comment on their effectiveness?
6.	What have been the actual outcomes from the initiative? Is a formal evaluation report available?
7.	What lessons (formal and informal) have you learnt from the initiative?
8.	Is there a person in a small or remote local community at an implementation level (e.g. a community champion) whom we could contact to build a picture of the initiative at the local level?

Appendix C: Interview schedule – Community member

The following interview schedule was that used with the community informant in the British Columbia case study. Interview schedules at this level differed slightly to account for the differences of each project.

MASSEY UNIVERSITY College of Education

Global picture, local lessons: e-learning policy and accessibility

Accessibility Phase

Please answer these questions in relation to one particular community with which you have worked to provide 'last mile' solutions. The actual name of the community will not be used in the final report.

- 1. What is the name of the community and how would you describe it in geographical/physical terms?
- 2. Can you provide a brief description of the community demographically and socially?
- 3. What community needs is the project meeting?
- 4. How successful has the project been in meeting local needs?
- 5. What have been some of the actual outcomes from the initiative for the community intended and unintended?
- 6. What have been some of the barriers to the success of the initiative?
- 7. What lessons (formal and informal) have you learnt during the process that can be applied within other communities?
- 8. Is there anything else you would like to tell us about this project?

Appendix D: Verified templates

Templates that follow are listed by region and numbered sequentially within each region. The group of templates for each area was compiled by one team member and verified by a second.

Area A: UK (England, Scotland, Ireland, Wales)

Area B: US (national and selected states)

Area C: Canada (national and selected provinces)

Area D: Asia (Japan, Singapore, Thailand and Malaysia)

Area E: EU (supranational policies plus selected countries)

Area F: Australia

Area G: Supranational organisations (UNESCO, Commonwealth of Learning, OECD)

MASSEY UNIVERSITY College of Education

Global Picture, Local Lessons: (e)Learning Policy and Accessibility

Template No: A#1

1	Name	An e-learning strategy for Wales
2	Reference	Education and Learning Wales. (2005). An e-learning strategy for Wales. Retrieved 24 November, 2005 from http://www.cymruarlein.wales.gov.uk/fe/fileupload_getfile.asp?filePathPrefix=369&fileLanguage=e.rtf
3	Date	2005
4	Country	Wales
5	Ministry of Education Identifiers	 ✓ Policy □ Desired Outcomes □ Accessibility ✓ Infrastructural Support □ Actual Outcomes □ Lessons Learnt □ Barriers and Enablers □ Small and Remote Communities ✓ Bilingual and Multi-cultural Comments (if necessary):
6	Major Themes	Lifelong learners, Learning communities, Bilingualism, Sustainable development
7	Category of Document	✓ Policy □ Background
8	Type of Document	 □ Policy □ Strategy □ Action Plan ✓ Draft Strategy/Policy/Action Plan ✓ Discussion Paper □ Evaluation Report □ Background Paper □ Book □ Journal Article □ Conference Paper □ Website
9	Scale of Project	 □ Local □ Regional ✓ National □ Supranational
10	Budget/Funding	No funding mentioned
11	Timeframe	No timeframe mentioned

13 14 15	Sponsoring Agency Author Contact Details	□ Early Childhood □ Compulsory Schooling ✓ Post Compulsory Schooling ✓ Higher Education ✓ Vocational Education ✓ Community-based Education □ Small and Remote N/A Welsh Assembly Government e-learning strategy c/o Sandra Bevan Cymru Ar-lein Welsh Assembly Government Cathays Park Cardiff CF10 3NQ
16	C. A. d.	Email: info.age@wales.gsi.gov.uk
16 17	Co-Authors Aims/Objectives	N/A
		 Place effective learning development, distribution, delivery and access as central goals; Establish a clear framework within which all involved in the development, distribution and delivery of learning can identify their roles, opportunities and priorities; Identify, fund and disseminate excellence, and encourage the pursuit of excellence; Facilitate an environment of innovation, experiment and application; Agree and monitor sensible and realistic impact measures; Identify appropriate opportunities for economies of scale and specialisation, including through procurement of goods and services on a national scale; and Review progress continually to ensure that the objectives remain relevant, and are being addressed appropriately.
18	Definition or Conception of (e)Learning	 ☐ Unstated ✓ Broad ☐ Precise Comments (if necessary): "The use of electronic technology to support, enhance or deliver learning"
19	Areas of Priority	Thirteen objectives are listed: • Create a national integrated e-learning network through which all learners can receive high quality advice and guidance, participate in lifelong learning and experience seamless transition and progression.

20		 Provide a high quality delivery infrastructure with the capacity and technical support to enable all people wishing to participate in e-learning to do so at a location of their choice. Enable the local construction, or national procurement of, high quality e-learning programmes from content sourced nationally and internationally, and the application of electronic resource discovery tools. Promote interoperability compatible with the emerging international guidelines and quality standards. This is to enable high quality learning experiences, and learning software which combines functionality with adaptability needed for different methods of learning. Ensure that participating learners receive high quality support which underpins progress, maintains motivation and addresses specific learning needs. Introduce a national programme of people development which ensures that all people involved in the development, distribution and delivery of e-learning can meet appropriate skills needs. Exploit the opportunities e-learning can offer for Welsh economic growth derived from high quality Welsh elearning products and services. Introduce a national programme of public understanding of the benefits of e-learning. Create a national observatory to facilitate the intelligence gathering, research, and dissemination needed to champion national and international good practice in e-learning. Develop a national and inclusive centre of excellence, which will promote networks to lead the development, distribution and delivery of e-learning in Wales. Develop competence in Wales in instructional design, graphics design, and programming which enables production of high quality web-enabled materials. Ensure that e-learning fully recognises the benefits to a bilingual nation in the design and delivery of learning. Introduce a national plan to raise the ICT skills levels in Wales.
20	Key Action Points	For each of the thirteen objectives there are a series of action points designed to ensure that the priorities are met. These thirteen objectives are listed under four themes: Connectivity, Content, Confidence and Competence,
21	Procedures and Responsibility for Implementation	The Welsh Assembly Government is responsible for the consultation process and the release of the 2006 e-learning strategy.
22	Procedures and Responsibility for Monitoring and Evaluation	Draft strategy - no formal procedures are in place for the monitoring and evaluation.

23	Partnerships with Others Regarding Implementation	Draft strategy – no partnerships established as yet.
24	Relationship to Other Policies	This draft strategy arises out of other major strategies for Wales such as: A Winning Wales and the National Council's Corporate Strategy
25	Summary of Document	The document is presented as a draft strategy for all learning in Wales and has three major themes running through it: - Lifelong learning - Economic development and - Technology.
26	Relevance to Aotearoa/NZ Context	 □ Low ✓ Medium □ High Explanation: The bilingual aspect has a strong link with New Zealand.
27	Actions/Strategies Related to Ministry of Education Identifiers	 ✓ Policy □ Desired Outcomes □ Accessibility ✓ Infrastructural Support □ Actual Outcomes □ Lessons Learnt □ Barriers and Enablers □ Small and Remote Communities ✓ Bilingual and Multi-cultural Comments (if necessary): One of the areas of priority was to ensure that e-learning fully recognises the benefits to a bilingual nation in the design and
28	Actions/Strategies Identified for other Sub-groups	delivery of learning. Gender Ethnicity Indigenous People Socio-economic Status Diverse Learners Other [include details] Comments (if necessary):
29	Evaluative Comment	An interesting document, although only in draft form. When the consultation period is complete and the final strategy is released in March 2006 it would be worth examining. While the document suggests a pan-sector approach by preparing a strategy for all learning, it is not yet evident how the various sectors will work together to achieve this.
30	Other	
31	Cross References	

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Global Picture, Local Lessons: (e)Learning Policy and Accessibility

Template No: A #2

1	Name	The Future of Higher Education
2	Reference	Department for Education and Skills. (2003). White Paper: The Future of Higher Education. Retrieved 20 October from: http://www.dfes.gov.uk/hegateway/hereform/
3	Date	January 2003
4	Country	England. Some issues also affect Scotland, Wales and Northern Ireland, these are clearly identified in the document.
5	Ministry of Education Identifiers	 ✓ Policy ✓ Desired Outcomes ✓ Accessibility ✓ Infrastructural Support □ Actual Outcomes □ Lessons Learnt □ Barriers and Enablers □ Small and Remote Communities □ Bilingual and Multi-cultural Comments (if necessary):
6	Major Themes	Expansion of Higher Education; Capability and access; Delivering excellence in teaching; Funding and Higher Education; Strengthening Higher Education and business links.
7	Category of Document	□ Policy ✓ Background
8	Type of Document	 □ Policy ✓ Strategy □ Action Plan □ Draft Strategy/Policy/Action Plan □ Discussion Paper □ Evaluation Report □ Background Paper □ Book □ Journal Article □ Conference Paper □ Website
9	Scale of Project	 □ Local □ Regional ✓ National □ Supranational
10	Budget/Funding	Proposed £1.25billion increase in funding for research Proposed £90m per annum increase to the Higher Education Innovation Fund Proposed changes to student fees, grants and loans

11	Timeframe	Three phase strategy:
		Phase One: Short term (2003-2005)
		Phase Two: Medium term (2005-2007)
		Phase Three: Longer term (2007 and beyond)
12	Target Audience	 □ Early Childhood □ Compulsory Schooling □ Post Compulsory Schooling ✓ Higher Education □ Vocational Education □ Community-based Education □ Small and Remote
13	Sponsoring Agency	Department for Education and Skills
14	Author	Presented to Parliament by the Secretary of State for Education and Skills
15	Contact Details	Department for Education and Skills – Consultation Unit Tel: 01928 794888 CM5737 http://www.dfes.gov.uk/highereducation/hestrategy
16	Co-Authors	N/A
17	Aims/Objectives	Bring major improvements to the funding of research and knowledge transfer, boost world class excellence and strengthen the work of universities in supporting the regional economies; Improve and reward excellent teaching; Enable more people to enter higher education, benefiting both individuals and the economy's need for higher level skills; Support those from disadvantaged backgrounds by restoring grants, helping with fee costs, and abolishing up-front tuition fees for all students. This will support our programme for increasing attainment and aspiration; Allow universities to secure a contribution of between £0 and £3,000 per year to the cost of each course – paid fairly when graduates are in work linked to their ability to pay; and Give universities long term financial certainty by helping them build up endowment funds.
18	Definition or Conception of (e)Learning	 ✓ Unstated □ Broad □ Precise Focus of the document is on reforming higher education. Very limited focus specifically on (e)learning.
19	Areas of Priority	The need for reform
		Research excellence

		Higher education and business
		Teaching and Learning
		Expanding higher education to meet our needs
		Fair access
		Freedoms and funding
20	Key Action Points	A series of action points relating to the areas of priority (above) are outlined in the document. See chapters 2-7 for details.
		Annex A lists some of the key action points across the three phases of the reforms. No specific mention of (e)learning in any of the key action points.
		In direct relation to e-learning the document notes that: It is important that opportunities for part-time and flexible study, including e-learning continue to increase.
		To put this into action the HEFCE (Higher Education Funding Council for England) has set up the UK e-Universities project to encourage Higher Education Institutions to work together and make the development of e-learning more affordable, sharing the development costs of e-learning materials to reduce the barriers to market entry. HEFCE will now work with partners on plans to embed e-learning in a full and sustainable way within the next ten years.
21	Procedures and Responsibility for Implementation	Annex A (p. 95-97) outlines the phases of delivery of the strategy.
	Implementation	Phase One: short term (2003-2005)
		Phase Two: medium term (2005-2007)
		Phase Three: longer term (2007 and beyond)
22	Procedures and Responsibility for Monitoring and Evaluation	No procedures for monitoring these initiatives were mentioned in this document.
23	Partnerships with Others Regarding Implementation	Partnerships between Government and higher education agencies will be required in order to implement these proposed actions. The HEFCE will be responsible for the funding provisions for many of the key action points of this strategy.
24	Relationship to Other Policies	The HEFCE strategy for e-learning would have stemmed from this strategy.
25	Summary of Document	This document sets out the strategy for higher education reform in England. A vision for higher education forms an integral part of this document. Greater explicit differentiation, greater freedom and greater collaboration are seen as the keys to delivering further improvements in quality in the higher education system.

26	Relevance to Aotearoa/NZ Context	 □ Low ✓ Medium □ High Explanation: Reform of the higher education sector in a similar country with similar education system to NZ.
27	Actions/Strategies Related to Ministry of Education Identifiers	 ✓ Policy ✓ Desired Outcomes ✓ Accessibility ☐ Infrastructural Support ☐ Actual Outcomes ☐ Lessons Learnt ☐ Barriers and Enablers ☐ Small and Remote Communities ☐ Bilingual and Multi-cultural Comments (if necessary):
28	Actions/Strategies Identified for other Sub-groups	 ☐ Gender ☐ Ethnicity ☐ Indigenous People ☐ Socio-economic Status ☐ Diverse Learners ☐ Other [include details] Comments (if necessary):
29	Evaluative Comment	This document outlines the reforms underway in the higher education sector in England. It covers every facet of higher education including student grants and allowances through to research. E-learning receives only a small mention, but the document is useful to show the wider context of higher education in England.
30	Other	
31	Cross References	

Global Picture, Local Lessons: (e)Learning Policy and Accessibility

1	Name	Harnessing technology: Transforming learning and children's services
2	Reference	Department for Education and Skills. (2005). Harnessing technology: Transforming learning and children's services. Retrieved 22 October from http://www.dfes.gov.uk/publications/e-strategy
3	Date	2005
4	Country	United Kingdom
5	Ministry of Education Identifiers	 ✓ Policy □ Desired Outcomes ✓ Accessibility ✓ Infrastructural Support □ Actual Outcomes □ Lessons Learnt □ Barriers and Enablers □ Small and Remote Communities □ Bilingual and Multi-cultural Comments (if necessary):
6	Major Themes	ICT, e-Learning, Leadership, Strategic
7	Category of Document	✓ Policy □ Background
8	Type of Document	 □ Policy ✓ Strategy □ Action Plan □ Draft Strategy/Policy/Action Plan □ Discussion Paper □ Evaluation Report □ Background Paper □ Book □ Journal Article □ Conference Paper □ Website
9	Scale of Project	 □ Local □ Regional ✓ National □ Supranational
10	Budget/Funding	No indication - but can be met within existing budgets.
11	Timeframe	2005-2010

12	Target Audience	 ✓ Early Childhood ✓ Compulsory Schooling ✓ Post Compulsory Schooling ✓ Higher Education □ Vocational Education □ Community-based Education □ Small and Remote
13	Sponsoring Agency	Department for Education and Skills
14	Author	Department for Education and Skills
15	Contact Details	DfES Publications PO Box 5050 Sherwood Park Annesley Nottingham NG15 0DJ. Tel: 0845 60 222 60 Fax: 0845 60 333 60 Textphone: 0845 60 555 60 dfes@prolog.uk.com ref:1296-2005DOC-EN
16	Co-Authors	
17	Aims/Objectives	 The strategy encourages a strategic approach to the future development of ICT in education. It has four broad aims: Transform teaching, learning and help to improve outcomes for children and young people, through shared ideas, more exciting lessons and online help for professionals Engage 'hard to reach' learners, with special needs support, more motivating ways of learning, and more choice about how and where to learn Build an open accessible system, with more information and services online for parents and carers, children, young people, adult learners and employers; and more crossorganisation collaboration to improve personalised support and choice Achieve greater efficiency and effectiveness, with online research, access to shared ideas and lessons plans, improved systems and processes in children's services, shared procurement and easier administration.

18	Definition or Conception of (e)Learning	 ☐ Unstated ✓ Broad ☐ Precise Comments (if necessary): Vague – Using ICT to change how we learn
19	Areas of Priority	 There are six priorities: an integrated online information service for all citizens integrated online personal support for all children and learners a collaborative approach to transforming teaching and learning a good quality training and support package for practitioners a leadership and development package for organizational capability in ICT
		a common digital infrastructure to support transformation and reform
20	Key Action Points	There are six key action points: PRIORITY 1: Provide an integrated online information service for all citizens System actions Develop the internet as a key delivery channel for the Department and its partners, by providing online information and services to citizens through Directgov, and to employers through BusinessLink. Develop the internet as a key delivery channel to education and children's workforces through tailored portals. Develop the 'MyGuide' solution for making education and government online services accessible to a wide range of users and to disabled groups. Post 16 Ensure that information and services for young people and their parents, and for lifelong learning, are well represented within Directgov.
		Develop a workforce web portal for information, advice and guidance on e-learning.
		Higher Education
		Ensure that information and services for HE students and their parents are embedded in Directgov and that wider opportunities to streamline administration are considered. PRIORITY 2: Ensure integrated online personal support for children and learners
		System actions
		Support children's and learners' transition and progression by developing and implementing a common approach to personal records across education and children's services, including

public and private organisations and industry.

Encourage all organisations to support a personal online learning space for learners.

Promote a common approach to assessment across sectors to support personalised progression.

Provide seamless support for assistive technologies for learners' and children's special needs.

Post 16

Develop better opportunities for extending access from socially-excluded groups.

Promote portability of assessment to support personalised progression.

Provide a personalised online learning space for every learner that can encompass a personal portfolio.

Higher Education

Encourage strategic development of a collaborative approach to learner progression.

PRIORITY 3: Develop a collaborative approach to personalised learning activities

System actions

Enable practitioners to create, adapt, re-use and share resources through common access to digital resources for e-learning.

Promote innovation by developing flexible learning activity design tools, ensuring that e-learning products are based on robust evidence of effective learning and teaching.

Review and update the curriculum and qualifications to reflect the impact of technology on learning.

Post 16

Ensure that the post-16 sector implements a content strategy consistent with the system-level aims.

Embed e-learning in workplace and work-based learning.

Higher Education

Understand and meet market needs in e-skills for employment.

PRIORITY 4: Provide a good quality ICT training and support package for practitioners

System actions

Provide initial training, professional development, and appropriate access to support the high quality use of ICT by the education and children's workforce.

Support subject-based collaboration across sectors.

Encourage transfer of good practice in evaluating the use of ICT to improve learning and teaching across the education inspectorates.

Encourage and recognise good practice in the use of ICT through accreditation.

Post 16

Enhance practitioner e-learning pedagogical skills.

Ensure ICT access for every practitioner and provide an online service for e-learning.

Exploit the potential of e-learning for workplace and work-based learning.

Higher Education

Ensure that research in e-learning and the pedagogy of subject teaching is given full recognition.

Incorporate the use of online learning into new staff courses and other staff development programmes to encourage the wider use of ICT to promote individual learning.

PRIORITY 5: Provide a leadership and development package for organisational capability in ICT

System actions

Encourage partnerships and collaboration among institutions and organisations through the use of ICT.

Build a development programme for leaders that brings together the good practice from across all sectors in leading organisational change incorporating the use of ICT.

Develop leaders and managers in planning and managing the strategic embedding of ICT across the activities of their organisation.

Post 16

Promote effective use of ICT through existing monitoring mechanisms.

Ensure leaders are equipped to lead the adoption and effective use of ICT.

Support leadership collaboration on the strategic role of elearning.

Higher Education

Support leaders in the deployment of ICT and e-enabled learning processes.

Promote effective management of the use and deployment of ICT in HE.

Establish a national e-learning advisory and support centre for HE.

Provide common collaborative development support for institutions offering remote e-learning opportunities.

PRIORITY 6: Build a common digital infrastructure to support transformation and reform

System actions

Maintain and develop an integrated network for the learning, teaching, assessment, research, and administrative functions of the education sectors.

Deliver a best value scheme for ICT infrastructure and services for education and children services.

Develop a common systems framework for the learning,

		teaching, assessment, research, and administrative functions of the education sectors.
		Contribute to the development of common open standards and specifications for interoperability, accessibility, quality of service and safety.
		Post 16
		All post-16 sectors with relevant access to broadband.
		Ensure work-based learning and ACL is not disadvantaged by comparison with institution-based learning.
		Strengthen regional support for embedded e-learning for ACL and workplace learning.
		Higher Education
		Continued dialogue with the sector to ensure JANET network remains leading edge and meets the evolving needs of the sector.
		Trial a state-of-the-art network for next generation internet to support HE research and teaching.
21	Procedures and Responsibility for Implementation	Clearly identified milestones for each action. The development and implementation of the e-strategy entail responsibilities at four different levels: strategic direction, policy development, coordinating the delivery strategy and delivery itself. The first two responsibilities lie with the DfES (Department for Education and Skills) itself, advised by Becta (British Educational Communication and Technology Agency) and JISC (Joint Information Systems Committee), the Department's lead strategic partners. Responsibility for coordinating the delivery strategy will lie with Becta and JISC. Responsibility for delivery itself lies with a wider range of partners, including Becta and JISC for specific elements.
22	Procedures and Responsibility for Monitoring and Evaluation	A combination of customer surveys and outcome data will be used to test the extent to which the strategy has achieved its main objectives.
23	Partnerships with Others Regarding Implementation	The DfES will work with a number of partners. For example, responsibility for co-ordinating the delivery of the strategy will lie with Becta and JISC. Regional structures and industry links are also important.
24	Relationship to Other Policies	The DfES Strategy is the overarching policy for the following sector based actions:
		ICT in Schools Strategy
		Post 16 e-learning Strategy
		HEFCE e-learning Strategy
		Every Child Matters
25	Summary of Document	This strategy seeks to develop a more strategic and collaborative approach to (e)learning on a sector-wide basis. It aims to overcome the previous 'patchy' approach to the investment in technology in education by clearly defining milestones for six key priority areas. Overall the strategy

		addresses a number of system-level actions coupled with several sector-specific actions.
26	Relevance to Aotearoa/NZ Context	 □ Low □ Medium ✓ High Explanation: This policy initiative illustrates how the UK is attempting to adopt a strategic pan-sector approach to (e)learning.
27	Actions/Strategies Related to Ministry of Education Identifiers	 ✓ Policy □ Desired Outcomes ✓ Accessibility ✓ Infrastructural Support □ Actual Outcomes □ Lessons Learnt □ Barriers and Enablers □ Small and Remote Communities □ Bilingual and Multi-cultural Comments (if necessary):
28	Actions/Strategies Identified for other Sub-groups	 □ Gender □ Ethnicity □ Indigenous People □ Socio-economic Status □ Diverse Learners □ Other [include details] Comments (if necessary): Few details – emphasis on personalised support for learners.
29	Evaluative Comment	This is a very interesting policy initiative for the New Zealand context as it provides an example of how a pan-sector approach has been adopted to e-learning from a UK perspective. When read in combination with the HEFCE strategy for e-learning it illustrates how such policies can be aligned to achieve a common purpose. The table on page 15 provides a useful overview of such alignment and the manner in which the pan sector strategy is linked to a number of sector specific initiatives.
30	Other	
31	Cross References	HEFCE Strategy for e-learning (2005)

Global Picture, Local Lessons: (e)Learning Policy and Accessibility

1	Name	Success for All: Reforming further education and training
2	Reference	Department for Education and Skills. (2002). Success for All: Reforming further education and training. Retrieved 22 November from: http://www.successforall.gov.uk/
3	Date	November 2002
4	Country	England (No mention of the applicability of this strategy to Scotland Wales or Northern Ireland)
5	Ministry of Education Identifiers	 ✓ Policy □ Desired Outcomes □ Accessibility □ Infrastructural Support □ Actual Outcomes □ Lessons Learnt □ Barriers and Enablers □ Small and Remote Communities □ Bilingual and Multi-cultural Comments (if necessary):
6	Major Themes	Big Picture, Strategic, Reform, Skills, Leadership, Quality Based on the Prime Minister's four key principles: expand choice; promote devolution and delegation; provide the ability and incentives; high standards and accountability.
7	Category of Document	✓ Policy □ Background
8	Type of Document	 □ Policy ✓ Strategy □ Action Plan □ Draft Strategy/Policy/Action Plan □ Discussion Paper □ Evaluation Report □ Background Paper □ Book □ Journal Article □ Conference Paper □ Website
9	Scale of Project	 □ Local □ Regional ✓ National □ Supranational
10	Budget/Funding	Major investment package to implement these reforms. Difficult to determine an actual amount but £1 billion of new money will be invested in these reforms.

11	Timeframe	2002-2006
12	Target Audience	 □ Early Childhood □ Compulsory Schooling ✓ Post Compulsory Schooling ✓ Higher Education—institutions providing further education ✓ Vocational Education □ Community-based Education □ Small and Remote
13	Sponsoring Agency	Department for Education and Skills
14	Author	Department for Education and Skills
15	Contact Details	Department for Education and Skills Tel: 0114 2593313
16	Co-Authors	N/A
17	Aims/Objectives	This reform strategy identifies four key elements:
		Meeting needs, improving choice by improving the responsiveness and quality of provision in each area to meet learner, employer and community needs;
		Putting teaching, training and learning at the heart of what we do by establishing a new Standards Unit to identify and disseminate best practice, which will guide learning and training programmes; Developing the leaders, teachers, lecturers, trainers and support staff of the future including setting new targets for full and part-time college teachers to be qualified, and developing strong leadership and management through a new leadership college; and
		Developing a framework for quality and success by establishing a new planning, funding and accountability system, based on greater partnership and trust, including three year funding agreements.
18	Definition or Conception of (e)Learning	☐ Unstated ✓ Broad ☐ Precise Comments (if necessary): The use of electronic technology to deliver, support and enhance teaching and learning
19	Areas of Priority	 enable providers to focus on their strengths and ensure sufficient breadth of provision locally; enhance quality and improve choice for learners through
		 enhance quality and improve choice for <i>learners</i> through Strategic Area Reviews;
		• improve the responsiveness of all providers to sectoral, regional and local skill and labour market needs; and
		• improve <i>collaboration</i> between providers to meet our 14–19 goals, improve progression to higher education, and to meet the needs of adult learners (including those with basic skills needs, those who are disadvantaged, or have

		other learning difficulties or disabilities) and employers.
		• identify those <i>teaching and training methods</i> which have proved effective in the learning and skills sector, disseminate information about these, encourage their use, and provide appropriate training for teachers and trainers;
		 develop new teaching and learning frameworks to support teachers, lecturers and trainers, including improved delivery methods, assessment methods, programme content, and teaching and training techniques;
		 provide a large-scale programme of training for teachers, lecturers and trainers, workplace supervisors and support staff with ongoing supporting learning materials; and
		 develop a coherent national e-learning strategy.
		• to raise the number of <i>qualified lecturers</i> , <i>teachers</i> , <i>trainers and managers</i> and increase access to continuing professional development;
		• to develop with employers in the learning and skills sector a <i>Sector Skills Council</i> to assess the workforce development priorities for the sector and develop solutions;
		• to establish a new <i>leadership college</i> for the sector to set up development programmes for the leaders and managers of today and of the future; and
		• to address the recruitment and retention difficulties in some parts of the sector and ensure <i>better rewards linked</i> to performance for staff in further education colleges, sixth form colleges and other providers.
		• a <i>new framework of targets</i> linked to success measures including, where possible, <i>value-added measures</i> ;
		• support and intervention to give under-performing colleges and other providers the opportunity to improve;
		• greater <i>autonomy</i> and <i>recognition</i> for successful providers.
20	Key Action Points	The strategy clearly outlines the key action points that will be required in order to meet the objectives of:
		 meeting needs, improving choice,
		 putting teaching, training and learning at the heart of what we do
		 developing the leaders, teachers, trainers, and support staff of the future
		 developing a framework for quality and success
		Pages 18-46 give the specific details of these action points.
21	Procedures and Responsibility for	There are two distinct stages in the implementation of the strategy:
	Implementation	A development stage, where the design and development of supporting models and frameworks occurs and an

		implementation stage , where elements of the strategy will be implemented.
		A delivery plan is available on the Success for All website: http://www.dfes.gov.uk/successforall/ This updates progress and implementation of the strategy.
		Budget and reporting milestones are clearly articulated in the strategy.
22	Procedures and Responsibility for	The Success for All strategy has been evaluated annually since its publication in 2002.
	Monitoring and Evaluation	There have been three annual reports published (2003, 2004, 2005) on the Success for All website: http://www.dfes.gov.uk/successforall/
23	Partnerships with Others Regarding Implementation	The Department for Education and Skills and The Learning + Skills Council will implement this strategy in partnership with the learning and skills sector.
24	Relationship to Other Policies	A co-ordinated implementation plan for e-learning will be developed. The plan will take into account the recommendations from The Post 16 e-learning Strategy Task Force Report (Get on with IT) and the report from the Learning + Skills Council's Distributed and Electronic Learning Group
25	Summary of Document	This document sets out the joint plans of the <i>Department for Education and Skills</i> and the Learning and Skills Council to build a more effective and responsive learning and skills sector. It takes forward the proposals set out in the discussion document that this strategy is based on in order to reform the learning and skills sector and raise standards.
26	Relevance to Aotearoa/NZ Context	☐ Low ✓ Medium ☐ High Explanation: As a strategy document with a focus on academic and skills programmes that are designed to provide opportunities for progress to higher education and skilled employment this is of interest. However, it does focus on tertiary institutions and higher education.
27	Actions/Strategies Related to Ministry of Education Identifiers	 ✓ Policy □ Desired Outcomes ✓ Accessibility □ Infrastructural Support □ Actual Outcomes □ Lessons Learnt □ Barriers and Enablers □ Small and Remote Communities □ Bilingual and Multi-cultural Comments (if necessary):

28	Actions/Strategies Identified for other Sub-groups	☐ Gender ☐ Ethnicity ☐ Indigenous People ☐ Socio-economic Status ☐ Diverse Learners ☐ Other [include details] Comments (if necessary):
29	Evaluative Comment	The Success for All document presents a reform and investment strategy for further education and training. The focus is on learning and leadership rather than on infrastructure. When combined with the other reform documents from the various sectors it gives the bigger picture of the educational reforms in the UK and the part e-learning plays in these reforms.
30	Other	
31	Cross References	Links with:
		Get on with IT: The Post-16 E-Learning Strategy Task Force Report.
		Harnessing Technology: Transforming Learning and Children's Services.

Global Picture, Local Lessons: (e)Learning Policy and Accessibility

1	Name	Report of the Learning and Skills Council's Distributed and Electronic Learning Group
2	Reference	Learning and Skills Council. (2002). Report of the Learning and Skills Council's Distributed and Electronic Learning Group. Retrieved 28 November 2005 from http://www.lsc.gov.uk/National/Documents/SubjectListing/LearningCultures/DistributedandElectronicLearning/Report-DELG.htm
3	Date	2002
4	Country	United Kingdom – not clearly defined
5	Ministry of Education Identifiers	 □ Policy ✓ Desired Outcomes ✓ Accessibility ✓ Infrastructural Support □ Actual Outcomes □ Lessons Learnt ✓ Barriers and Enablers □ Small and Remote Communities □ Bilingual and Multi-cultural Comments (if necessary):
6	Major Themes	Provision of teaching and learning support; Sustainability and targeting effort; e-learning provision and rationalization; sustaining e-learning.
7	Category of Document	□ Policy✓ Background
8	Type of Document	 □ Policy ✓ Strategy □ Action Plan □ Draft Strategy/Policy/Action Plan □ Discussion Paper □ Evaluation Report □ Background Paper □ Book □ Journal Article □ Conference Paper □ Website
9	Scale of Project	□ Local□ Regional✓ National

	☐ Supranational

10	Budget/Funding	Suggests an additional £20m per year to enhance e-learning. Annex D contains recommendations for the <i>future funding of distributed and e-learning</i> .
11	Timeframe	2002-2010. Vision that by 2010 'young people and adults in England will have knowledge and productive skills that match the best in the world'
12	Target Audience	 □ Early Childhood □ Compulsory Schooling ✓ Post Compulsory Schooling ✓ Higher Education ✓ Vocational Education ✓ Community-based Education □ Small and Remote
13	Sponsoring Agency	Learning and Skills Council
14	Author	Learning and Skills Council's Distributed Learning Group
15	Contact Details	http://www.lsc.gov.uk
16	Co-Authors	N/A
17	Aims/Objectives	Create an accessible infrastructure which makes ICT universally available to learners Make ICT integral to our learning processes and to stimulate the development and acceptance of new ways of learning and Create, implement and support a dynamic framework for ICT skills and a corresponding framework for teachers
18	Definition or Conception of (e)Learning	 ✓ Unstated □ Broad □ Precise Comments (if necessary):
19	Areas of Priority	To deliver quality e-learning:
20	Key Action Points	The main recommendations relate to: vision and strategy, the learner, learning provision, management of learning, supporting learners, quality, assessment and accreditation, funding. Specific e-learning initiatives related to these action points included: expertly supported e-learning; identifying

21		contribution that can be made by e-learning to local strategies; promoting e-learning that addresses life skills; invest in research or e-learning pedagogy and cost effectiveness; develop minimum standards for quality of e-learning. See para. 10 for a summary of recommendations and para. 122-154 for further explanation
21	Procedures and Responsibility for Implementation	Recommendation that LSC Director of Policy and Development be tasked with producing a phased and costed implementation plan.
22	Procedures and Responsibility for Monitoring and Evaluation	No clear procedures for monitoring and evaluation
23	Partnerships with Others Regarding Implementation	Recommendations require partnership action with other agencies and bodies active in this field. Partnerships with Department for Education and Skills (DfES), Joint Information Systems Committee (JISC), National Learning Network, Ufi Limited. Suggestion to Post-16 E-Learning Task Force that it should encourage the development of effective mechanisms through which Government can coordinate its own e-learning efforts and those of the principal agencies acting to deliver policy in this area. Recommendation that the LSC (Learning Skills Council) requires its local LSCs to establish e-learning/ICT strategies for their own areas, fully integrated into their normal planning processes and produced in collaboration with local partners.
24	Relationship to Other Policies	Recommendations of this report align with DfES aims for elearning and reflect recommendations of the Post-16 e-learning Task Force.
25	Summary of Document	The report represents analysis of the implications, challenges and opportunities occasioned by the growing use of information and communication technologies (ICT). It also includes a series of recommendations to the LSC on how best to give leadership and shape to these developments.
26	Relevance to Aotearoa/NZ Context	 □ Low ✓ Medium □ High Explanation: Provides an overview of challenges and opportunities afforded by the use of ICT in a context similar to New Zealand.

27	Actions/Strategies Related to Ministry of Education Identifiers	 □ Policy ✓ Desired Outcomes ✓ Accessibility ✓ Infrastructural Support □ Actual Outcomes □ Lessons Learnt ✓ Barriers and Enablers □ Small and Remote Communities □ Bilingual and Multi-cultural Comments (if necessary):
28	Actions/Strategies Identified for other Sub-groups	☐ Gender ☐ Ethnicity ☐ Indigenous People ☐ Socio-economic Status ☐ Diverse Learners ☐ Other [include details] Comments (if necessary):
29	Evaluative Comment	This report has a series of recommendations but does not have an implementation plan to follow it up. Annex C has an interesting matrix of Government ICT initiatives that includes the programme, target group and milestones for each.
30	Other	
31	Cross References	

Global Picture, Local Lessons: (e)Learning Policy and Accessibility

1	Name	HEFCE strategy for e-learning
2	Reference	Higher Education Funding Council for England. (2005). HEFCE strategy for e-learning. Retrieved 10 October from http://www.hefce.ac.uk/pubs/hefce/2005/05 12/
3	Date	March 2005
4	Country	England
5	Ministry of Education Identifiers	 ✓ Policy □ Desired Outcomes □ Accessibility □ Infrastructural Support □ Actual Outcomes □ Lessons Learnt □ Barriers and Enablers □ Small and Remote Communities □ Bilingual and Multi-cultural Comments (if necessary):
6	Major Themes	Big picture, quality, funding
7	Category of Document	✓ Policy □ Background
8	Type of Document	 □ Policy ✓ Strategy □ Action Plan □ Draft Strategy/Policy/Action Plan □ Discussion Paper □ Evaluation Report □ Background Paper □ Book □ Journal Article □ Conference Paper □ Website
9	Scale of Project	 □ Local □ Regional ✓ National □ Supranational
10	Budget/Funding	No monetary value is attributed to this strategy, but the HEFCE have committed to implementing these initiatives.
11	Timeframe	10 years. To be kept under constant review, especially in terms of the activities in the implementation plan.
12	Target Audience	☐ Early Childhood

		 □ Compulsory Schooling □ Post Compulsory Schooling ✓ Higher Education ✓ Vocational Education □ Community-based Education □ Small and Remote
12	Concession and Concess	
13	Sponsoring Agency	Higher Education Funding Council for England Joint Information Systems Committee
		Higher Education Academy
		Inglier Education reademy
14	Author	Higher Education Funding Council for England (HEFCE)
15	Contact Details	Liz Franco
		Email: <u>l.franco@hefce.ac.uk</u>
		Tel: 0117 931 7335
		Ref:2005/ 12
16	Co-Authors	Joint Information Systems Committee
		Higher Education Academy
17	Aims/Objectives	This document sets out HEFCE's strategy and implementation plan for supporting e-learning in higher education institutions. The key aims are: 1. aim to support the HE sector as it moves towards embedding
		e-learning appropriately, using technology to transform higher education into a more student-focused and flexible system, as part of lifelong learning for all who can benefit.
		2. to enable institutions to meet the needs of learners and their own aspirations for development
		3. to ensure that e-learning is integral to institutions' broader strategies for learning and teaching, and to work with the grain of a 'whole institution' approach to embedding e-learning,
		4. to support institutions in the strategic planning, change management and process development that are necessary to underpin their development and embedding of e-learning.
		5. to promote learning research, innovation and development that begin with a focus on student learning rather than on developments in technology per se, enabling students to learn through and be supported by technology.
		6. to support lifelong learning by joining up our strategy with those of other sectors of education, enabling connections between academic learning and experiential learning in the workplace and other aspects of life.
		7. to implement principles using partnerships, building an investment and using review processes.

18	Definition or	— III
10	Conception of	☐ Unstated✓ Broad
	(e)Learning	□ Precise
		The document states that the definition of e-learning should be sufficiently broad to encompass the many uses of ICT that individual universities and colleges decide to adopt in their learning and teaching missions. Deliberately kept broad so as not to curb exploration or restrict
		diversity.
19	Areas of Priority	Seven strands were identified for the implementation of the strategy to focus on:
		Strand 1 Pedagogy, curriculum design and development
		Strand 2 Learning resources and networked learning
		Strand 3 Student support, progression and collaboration
		Strand 4 Strategic management, human resources and capacity development
		Strand 5 Quality
		Strand 6 Research and evaluation
		Strand 7 Infrastructure and technical standards.
20	Key Action Points	Key action points related to the aims:
		Aim One:
		1.1 Reward excellence and promote and encourage innovation in e-learning.
		1.2 Encourage the design of technology for students to manage their own individual and shared learning.
		1.3 Encourage the use of technology to enable electronic assessment.
		1.4 Produce and disseminate models of good e-learning practice including assessment
		1.5 Encourage the effective use of technology to enable work-based learning.
		Aim Two:
		2.1 Develop a comprehensive and coherent approach to the development and use of resources for learning and teaching, including digital resources and discovery tools.
		2.2 Enhance the quality of digital resources and tools for learners provided by JISC, and sources for teaching, learning, research and innovation.
		2.3 Promote the sharing of learning technology and resources across the HE sector and between sectors.
		Aim Three:
		3.1 Develop integrated learning environments for lifelong learning.
		3.2 Utilise e-learning for delivery and support of foundation degrees.

		3.3 Develop lifelong learning networks on a regional and national basis.
		Aim Four:
		3.4 Encourage e-based systems of describing learning achievement and personal development planning (PDP).
		4.1 Seek to promote organisational change and technological risk management at a strategic level in the sector.
		4.2 Encourage co-ordinated strategic management approaches to development of e-learning - through joining up learning and teaching, human resources, IT, and estates strategies - to maximise the benefits of technology across all HEI business activities
		4.3 Encourage strategic management of IPR in HEIs in order to exploit e-learning.
		4.4 Address skills, knowledge and competencies for elearning in training and continuing professional development for learning and teaching staff, including learning technologists
		4.5 Review the human capacity in the HE sector to deliver future e-learning growth.
		Aim Five:
		5.1 Contribute to understanding of the assurance and enhancement issues for quality and standards raised by elearning.
		Aim Six:
		6.1 Contribute to the sector's understanding and appreciation of the wider issues posed by e-learning.
		6.2 Evaluate and disseminate national and international good practice in e-learning
		6.3 Evaluate ongoing relevance of the e-learning strategy to the work of the sector by means of benchmarking.
		Aim Seven:
		7.1 Increase capacity and usage of the network to support high quality e-learning programmes and applications
		7.2 Provide capital to sustain and develop virtual learning environments (VLEs) and managed learning environments (MLEs).
		7.3 Increase opportunities for interoperability of materials through common standards in order to promote sharing and progression.
21	Procedures and Responsibility for Implementation	The implementation plan clearly sets out how each of the action points (above) will be implemented and identifies the agency that has responsibility for each. See pages 10-17
22	Procedures and	HEFCE intend to evaluate their strategy every three years in
_ _	Responsibility for Monitoring and Evaluation	conjunction with JISC and the Higher Education Academy, and in the context of their broader learning and teaching strategy. See page 9 for the Measures of Success.

23	Partnerships with Others Regarding Implementation	HEFCE, JISC and the Higher Education Academy will all take an active role in implementing the strategy.
24	Relationship to Other Policies	Focus on 'embedding e-learning in a full and sustainable way' comes from the Government's White Paper 'The future of higher education'. Link with HEFCE Learning and Teaching strategy which is now under review in an attempt to embed e-learning within it.
25	Summary of Document	This document sets out the strategy and implementation plan for supporting higher education institutions to develop and embed e-learning over the next 10 years. It reflects responses from the consultation process and sets out the aims, objectives and principles that will be adopted. A detailed implementation plan is included, which was developed jointly by the Higher Education Funding Council for England, the Higher Education Academy and the Joint Information Systems Committee.
26	Relevance to Aotearoa/NZ Context	☐ Low ☐ Medium ✓ High Explanation: Provides specific strategy details and an implementation plan for a context similar to New Zealand.
27	Actions/Strategies Related to Ministry of Education Identifiers	 ✓ Policy □ Desired Outcomes □ Accessibility □ Infrastructural Support □ Actual Outcomes □ Lessons Learnt □ Barriers and Enablers □ Small and Remote Communities □ Bilingual and Multi-cultural Comments (if necessary):
28	Actions/Strategies Identified for other Sub-groups	☐ Gender ☐ Ethnicity ☐ Indigenous People ☐ Socio-economic Status ☐ Diverse Learners ☐ Other [include details] Comments (if necessary):
29	Evaluative Comment	An important document to come from the UK. It complements the e-strategy <i>Harnessing Technology</i> . This document clearly sets out the implementation of the strategy.
30	Other	
31	Cross References	Harnessing Technology Success for All White paper: The Future of Higher Education

Global Picture, Local Lessons: (e)Learning Policy and Accessibility

Endnote No: A#7

1	Name	Get on with IT: The post-16 e-learning strategy task force report
2	Reference	Department for Education and Skills. (2002). <i>Get on with IT: The post-16 e-learning strategy taskforce report.</i> Retrieved 22 November from: http://ferl.becta.org.uk/display.cfm?resID=3939
3	Date	July 2002
4	Country	England
5	Ministry of Education Identifiers	 □ Policy □ Desired Outcomes ✓ Accessibility ✓ Infrastructural Support □ Actual Outcomes □ Lessons Learnt ✓ Barriers and Enablers □ Small and Remote Communities □ Bilingual and Multi-cultural Comments (if necessary):
6	Major Themes	ICT, Acquisition of Skills, Lifelong Learners
7	Category of Document	✓ Policy □ Background
8	Type of Document	 □ Policy ✓ Strategy □ Draft Strategy/Policy ✓ Discussion Paper □ Evaluation Report □ Background Paper □ Book □ Journal Article □ Conference Paper
9	Scale of Project	 □ Local □ Regional ✓ National □ Supranational
10	Budget/Funding	Current funding levels are mentioned but not proposed levels of funding for the recommendations of this report.
11	Timeframe	2002-2010

		Recommend that by 2010 everyone should have access to ICT as a basic skill as an entitlement. The ICT entitlement should
		include an e-learning skills component.
12	Target Audience	 □ Early Childhood □ Compulsory Schooling ✓ Post Compulsory Schooling □ Higher Education ✓ Vocational Education □ Community-based Education □ Small and Remote
13	Sponsoring Agency	Department for Education and Skills
14	Author	Post-16 Task Force
15	Contact Details	http://www.dfes.gov.uk/elearningstrategyunit
16	Co-Authors	
17	Aims/Objectives	Three main aims are identified:
		• For everyone to have free entitlement to all ICT user skills. This entitlement should include e-learning user skills.
		• E-learning offers the post-16 sector the opportunity to delivery their learning online.
		• Provision of a personal roadmap from course selection to completion.
18	Definition or Conception of (e)Learning	 Unstated Broad ✓ Precise Comments (if necessary):
		E-learning is seen as learning with the help of information and communication technology tools. These tools may include the internet, intranets, wireless networking, PC (personal computer) based technologies, handheld computers, interactive TV, and also e-technology to support traditional delivery for example using electronic whiteboards and video conferencing.
19	Areas of Priority	The task force report realizes that funding for infrastructure has been the focus for e-learning to date. This report promotes:
		• the acquisition of ICT skills for all
		 high quality relevant learning materials available online
		 the development of a single learning-to-work support and guidance route map
20	Key Action Points	The report makes a number of recommendations and the steps necessary to implement them. Pages 14-27 outline both the immediate and the longer term steps that will be taken in implementing these recommendations.

21	Procedures and Responsibility for Implementation	The Task Force have made recommendations that the Government would be responsible for implementing.
22	Procedures and Responsibility for Monitoring and Evaluation	Monitoring and evaluation of the recommendations is not evident in the report.
23	Partnerships with Others Regarding Implementation	As this is a task force report the task force have made recommendations for the Government to implement. But it does not identify specific agencies that will be responsible for implementing these recommendations.
24	Relationship to Other Policies	Links with the Success for All: Reforming further Education and Training document. There is a Post-16 section to the Harnessing Technology strategy.
25	Summary of Document	The Post 16 E-Learning Strategy Task Force Report is largely a strategy for ICT use in the post –16 sector. The strategy is aimed at senior secondary, the workforce and the unemployed. The focus of the report is on acquisition of skills rather than on infrastructure.
26	Relevance to Aotearoa/NZ Context	✓ Low ☐ Medium ☐ High Explanation: Not tertiary sector.
27	Actions/Strategies Related to Ministry of Education Identifiers	 □ Policy □ Desired Outcomes ✓ Accessibility □ Infrastructural Support ✓ Actual Outcomes □ Lessons Learnt ✓ Barriers and Enablers □ Small and Remote Communities □ Bilingual and Multi-cultural Comments (if necessary):
28	Actions/Strategies Identified for other Sub-groups	☐ Gender ☐ Ethnicity ☐ Indigenous People ☐ Socio-economic Status ☐ Diverse Learners ☐ Other [include details] Comments (if necessary):

29	Evaluative Comment	An interesting document in that it is for post-16 learners whether they are in the workforce, at school or unemployed. The report does not consider higher education. A key difference from many other reports is the emphasis on the acquisition of skills rather than on funding infrastructure.
30	Other	
31	Cross References	Harnessing Technology Success for All

Global Picture, Local Lessons: (e)Learning Policy and Accessibility

Endnote No: A #8

1	Name	Joint SFEFC/SHEFC E-Learning Group: Final Report
2	Reference	Scottish Further Education Funding Council & Scottish Higher Education Funding Council (2003). Joint SFEFC/SHEFC E-Learning Group: Final Report. Retrieved May 4, 2006 from http://www.sfc.ac.uk/publications/pubs_other_sfefcarchive/joint_elearning_report_july_2003.pdf
3	Date	2003
4	Country	Scotland
5	Ministry of Education Identifiers	 □ Policy ✓ Desired Outcomes □ Accessibility ✓ Infrastructural Support □ Actual Outcomes □ Lessons Learnt □ Barriers and Enablers ✓ Small and Remote Communities □ Bilingual and Multi-cultural Comments (if necessary):
6	Major Themes	Pedagogical issues, Economics of e-learning, Markets for e-learning
7	Category of Document	□ Policy✓ Background
8	Type of Document	 □ Policy ✓ Strategy □ Draft Strategy/Policy ✓ Discussion Paper □ Evaluation Report □ Background Paper □ Book □ Journal Article □ Conference Paper
9	Scale of Project	 □ Local □ Regional ✓ National □ Supranational
10	Budget/Funding	No funding mentioned in this report

11	Timeframe	Released in 2003 with the recommendation to review the issue again in 18 months time.
12	Target Audience	 □ Early Childhood □ Compulsory Schooling ✓ Post Compulsory Schooling ✓ Higher Education ✓ Vocational Education □ Community-based Education □ Small and Remote
13	Sponsoring Agency	Scottish Further Education Funding Council and the Scottish Higher Education Funding Council.
14	Author	The e-learning group of the joint SFEFC/SHEFC
15	Contact Details	Scottish Further and Higher Education Funding Council Donaldson House 97 Haymarket Terrace Edinburgh EH12 5HD
16	Co-Authors	N/A
17	Aims/Objectives	The purpose of this report from the e-learning group is to advise the sectors and the Councils about their approaches to the development of e-learning.
18	Definition or Conception of (e)Learning	 ☐ Unstated ✓ Broad ☐ Precise Comments (if necessary): The report suggested that there were many possible definitions of e-learning and highlights a need to further unpack these definitions.
19	Areas of Priority	The areas of priority that the e-learning group report highlights are: Pedagogical Issues Economics of e-learning Markets of e-learning Supply-side issues Role for the funding councils

20	Key Action Points	The report concludes that:
		 e-learning is fundamentally about learning and not about technology. Strategic development of e-learning should be based on the needs and demands of learners and the quality of their educational experience;
		 the economics of e-learning mean that progress is likely to require collaborative approaches to create sufficiently large cohorts of students;
		 the Councils need to help to create an environment within which institutions can develop their approaches to learning, using ICT based approaches where they add value, by continuing to invest in institutional and national infrastructure, strategic and collaborative developments and ensuring that quality assurance and improvement arrangements support e- learning approaches; and
		 that e-learning has the scope to transform how institutions operate and serve the needs of Scotland, but if this is to happen it will require a fundamental shift in how they organise the development of courses and support for learners.
21	Procedures and Responsibility for Implementation	No clear outline of what e-learning initiatives will be implemented
22	Procedures and Responsibility for Monitoring and Evaluation	Recommendation made that the issue of e-learning be revisited in 18 months time.
23	Partnerships with Others Regarding Implementation	Partnerships between the Funding councils, national agencies that support learning and institutions will need to be established in order to implement any outcomes that result from this report.
24	Relationship to Other Policies	Makes reference to: Scottish Parliament's Enterprise and Lifelong Learning Committee 2002 Report on Lifelong Learning
25	Summary of Document	The Scottish Funding Councils have not developed an explicit e-learning strategy but instead received this report from their e-learning group in July 2003 which led to the funding councils setting out their own approach to e-learning.
26	Relevance to Aotearoa/NZ Context	☐ Low ✓ Medium ☐ High Explanation: The report highlights a number of issues that are important for elearning policy makers to consider.

27	Actions/Strategies Related to Ministry of Education Identifiers	 □ Policy ✓ Desired Outcomes □ Accessibility □ Infrastructural Support □ Actual Outcomes ✓ Lessons Learnt ✓ Barriers and Enablers □ Small and Remote Communities □ Bilingual and Multi-cultural Comments (if necessary):
28	Actions/Strategies Identified for other Sub-groups	 ☐ Gender ☐ Ethnicity ☐ Indigenous People ☐ Socio-economic Status ✓ Diverse Learners ✓ Other [include details] Comments (if necessary): The report suggests that e-learning in Scotland should be market-oriented rather than technology-led. It identifies overseas students; rural, remote and under-represented students; students with special needs; continuing professional development, conventional campus based students; FE-HE transitions: and informal learning as markets where e-learning may have a potential role to play.
29	Evaluative Comment	The report highlights issues and asks questions pertaining to what the implications of e-learning are for Scotland. This was a report from the E-learning Group to the Scottish funding councils, as such it speculates what the future of e-learning in Scotland might hold and highlights a number of issues that will need to be addressed along the way. It does not concern itself with identifying specific action points relating to e-learning implementation.
30	Other	
31	Cross References	

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1	Name	National Education Technology Plan
2	Reference	U.S. Department of Education. (2005). Toward a New Golden Age in American Education: How the Internet, the Law and Today's Students are Revolutionizing Expectation The National Education Technology Plan, January 2005, retrieved 5 th Dec 2005 from http://www.nationaledtechplan.org/background.asp
3	Date	Jan 2005
4	Country	USA
5	Ministry of Education Identifiers	 □ Policy □ Desired Outcomes □ Accessibility □ Infrastructural Support □ Actual Outcomes □ Lessons Learnt □ Barriers and Enablers □ Small and Remote Communities □ Bilingual and Multi-cultural Comments (if necessary): School level – background paper on school policy leading to tertiary education.
6	Major Themes	Internet, Educational Technology, Nation at Risk, No Child Left Behind, Leadership, Innovation
7	Category of Document	☐ Policy ✓ Background
8	Type of Document	 □ Policy □ Strategy ✓ Action Plan □ Draft Strategy/Policy/Action Plan □ Discussion Paper □ Evaluation Report □ Background Paper □ Book □ Journal Article □ Conference Paper □ Website
9	Scale of Project	 □ Local □ Regional ✓ National □ Supranational

10	Budget/Funding	No indication
11	Timeframe	No indication
12	Target Audience	 □ Early Childhood ✓ Compulsory Schooling □ Post Compulsory Schooling □ Higher Education □ Vocational Education □ Community-based Education □ Small and Remote
13	Sponsoring Agency	The U.S. Department of Education, in partnership with the U.S. Department of Commerce and NetDay
14	Author	The U.S. Department of Education, in partnership with the U.S. Department of Commerce
15	Contact Details	The Office of Educational Technology 400 Maryland Avenue FB6 - 7E222 Washington, DC 20202 Phone - (202) 401-1444 Fax - (202) 401-3941 feedback@nationaledtechplan.org
16	Co-Authors	
17	Aims/Objectives	The National Education Technology Plan aims to help motivate and incite technology-driven transformation. It is intended to help achieve the goals of <i>No Child Left Behind</i> , which aims over 10 years 'to abolish illiteracy and bring millions of children currently "lost" to the educational system into the mainstream of learning and achievement' (p.11).
18	Definition or Conception of (e)Learning	 ✓ Unstated □ Broad □ Precise Comments (if necessary): It is notable that a capitalised form of 'E-Learning' is adopted throughout the document.
19	Areas of Priority	To help states and districts prepare today's students for the opportunities and challenges of tomorrow, a set of seven action steps and accompanying recommendations have been developed. • Strengthen Leadership • Consider Innovative Budgeting • Improve Teacher Training • Support E-Learning and Virtual Schools • Encourage Broadband Access

Move Toward Digital Content **Integrate Data Systems** 20 **Key Action Points** Recommendations include:

Strengthen Leadership

- Determine the total costs for technology as a percentage of total spending.
- Invest in leadership development programs to develop a new generation of tech-savvy leaders at every level.
- Retool administrator education programs to provide training in technology decision making and organizational change.
- Develop partnerships between schools, higher education and the community.
- Encourage creative technology partnerships with the business community.
- Empower students' participation in the planning process.

Consider Innovative Budgeting

- Determine the total costs for technology as a percentage of total spending.
- Consider a systemic restructuring of budgets to realize efficiencies, cost savings and reallocation. This can include reallocations in expenditures on textbooks, instructional supplies, space and computer labs.
- Consider leasing with 3-5 year refresh cycles.
- Create a technology innovation fund to carry funds over yearly budget cycles.

Improve Teacher Training

- Improve the preparation of new teachers in the use of technology.
- Ensure that every teacher has the opportunity to take online learning courses.
 - Improve the quality and consistency of teacher education through measurement, accountability and increased technology resources.
- Ensure that every teacher knows how to use data to personalize instruction. This is marked by the ability to interpret data to understand student progress and challenges, drive daily decisions and design instructional interventions to customize instruction for every student's unique needs.

Support E-Learning and Virtual Schools

- Provide every student access to e-learning.
- Enable every teacher to participate in e-learning training.
- Encourage the use of e-learning options to meet No Child Left Behind requirements for highly qualified teachers, supplemental services and parental choice.
- Explore creative ways to fund e-learning opportunities.
- Develop quality measures and accreditation standards for e learning that mirror those required for course credit.

Encourage Broadband Access

• Thoroughly evaluate existing technology infrastructure and access to broadband to determine current capacities and explore ways to ensure its reliability.

		 Encourage that broadband is available all the way to the end-user for data management, online and technology-based assessments, e-learning, and accessing high-quality digital content. Encourage the availability of adequate technical support to manage and maintain computer networks, maximize educational uptime and plan for future needs. Move Toward Digital Content
		 Ensure that teachers and students are adequately trained in the use of online content. Encourage ubiquitous access to computers and connectivity for each student. Consider the costs and benefits of online content, aligned with rigorous state academic standards, as part of a systemic approach to creating resources for students to customize learning to their individual needs.
		 Integrate Data Systems Establish a plan to integrate data systems so that administrators and educators have the information they need to increase efficiency and improve student learning. Use data from both administrative and instructional systems to understand relationships between decisions, allocation of resources and student achievement. Ensure interoperability. For example, consider School Interoperability Framework (SIF) Compliance Certification as a requirement in all RFPs and purchasing decisions. Use assessment results to inform and differentiate instruction for every child (pp. 39-44).
21	Procedures and Responsibility for Implementation	Responsibility appears to largely reside with states, districts and individual schools but no clear indication is given.
22	Procedures and Responsibility for Monitoring and Evaluation	Appears to largely come under the umbrella of the <i>No child left behind</i> policy initiative. Some ongoing national research is also mentioned.

23	Partnerships with Others Regarding Implementation	The U.S. Department of Education and other agencies across the federal government are promoting the use of technology in education through the Working Group on Advanced Technologies for Education and Training. The purpose of the interagency Advanced Technologies Working Group is to foster and promote the development, application, and deployment of advanced technologies in education and training in the United States. The Group convenes under the aegis of the President's National Science and Technology Council. The Department of Education's Director of Educational Technology and the Under Secretary of Commerce for Technology serve as co-chairs. It is unclear from the information available whether the Group continues to meet on a regular basis.
		Other members include: U.S. Department of Agriculture, U.S. Department of Defense, U.S. Department of Energy, U.S. Department of Health and Human Services, U.S. Department of Homeland Security, U.S. Department of the Interior, U.S. Department of Labor, Institute of Museum and Library Services, Library of Congress, National Aeronautics and Space Administration, National Endowment for the Arts, National Endowment for the Humanities, National Science Foundation, National Security Agency, and the White House Office of Science and Technology Policy.
24	Relationship to Other Policies	The Education Technology Plan is linked tightly to the <i>No child left behind</i> initiative.
25	Summary of Document	The report and related plan includes numerous details of successful initiatives and partnerships developed at the state level by school districts and by individual schools. It concludes with a series of recommendations for enhancing the use and benefits of new technologies, and places them within the context of long-term, systemic transformation, covering such issues as leadership, management, teacher training and funding.
26	Relevance to Aotearoa/NZ Context	✓ Low ☐ Medium ☐ High Explanation: School level but background to tertiary
27	Actions/Strategies Related to Ministry of Education Identifiers	 □ Policy □ Desired Outcomes □ Accessibility □ Infrastructural Support □ Actual Outcomes □ Lessons Learnt □ Barriers and Enablers □ Small and Remote Communities □ Bilingual and Multi-cultural Comments (if necessary): Not relevant in light of focus in compulsory schooling.

28	Actions/Strategies Identified for other Sub-groups	☐ Gender ☐ Ethnicity ☐ Indigenous People ☐ Socio-economic Status ☐ Diverse Learners ☐ Other [include details] Comments (if necessary):
29	Evaluative Comment	The report provides an overview of recent developments in the US within the compulsory schooling sector and is useful background reading for understanding the complex and fragmented policy landscape at the tertiary level. A standout feature of the Plan is the strong economic imperative as evidenced by the following conclusion: There is no dispute over the need for America's students to have the knowledge and competence to compete in an increasingly technology-driven world economy (p.45).
30	Other	
31	Cross References	No child left behind http://www.ed.gov/nclb/landing.jhtml

Global Picture, Local Lessons: (e)Learning Policy and Accessibility

1	Name	The power of the Internet for learning: Moving from promise to practice
2	Reference	Report of the web-based education commission to the President and the Congress of the United States. (2000). <i>The power of the Internet for learning: Moving from promise to practice</i> . Retrieved 12 November, 2005 from http://www.ed.gov/offices/AC/WBEC/FinalReport/Preface.pdf
3	Date	December 2000
4	Country	USA
5	Ministry of Education Identifiers	 □ Policy ✓ Desired Outcomes ✓ Accessibility ✓ Infrastructural Support ✓ Actual Outcomes ✓ Lessons Learnt ✓ Barriers and Enablers □ Small and Remote Communities □ Bilingual and Multi-cultural Comments (if necessary): Report calling for policy action
6	Major Themes	Internet, Web-based learning, e-learning, broadband, digital divide, online content, regulatory barriers The report, the most comprehensive ever written on the impact of web-based learning on education, establishes a "policy roadmap" that will help education and policy officials at the local, state, and national levels better address the critical "digital age" challenges brought about by the Internet and other emerging technologies. The publicity surrounding the report claims it was enthusiastically embraced by the public and endorsed by education and policy leaders, and organizations around the nation. It was the subject of a Congressional hearing held by the House Subcommittee on 21st century competitiveness.
7	Category of Document	□ Policy✓ Background
8	Type of Document	 □ Policy □ Strategy □ Action Plan □ Draft Strategy/Policy/Action Plan

9	Scale of Project	✓ Discussion Paper
10	Budget/Funding	
11	Timeframe	No indication
12	Target Audience	 ✓ Early Childhood ✓ Compulsory Schooling ✓ Post Compulsory Schooling ✓ Higher Education □ Vocational Education □ Community-based Education □ Small and Remote
13	Sponsoring Agency	The President and Congress of the United States
14	Author	Web-based Education Commission
15	Contact Details	Jay Noell US Department of Education jay_noell@ed.gov Or web_commission@ed.gov http://www.hpcnet.org/webcommission
16	Co-Authors	
17	Aims/Objectives	The bipartisan, congressional Web-based Education Commission set out to discover how the Internet is being used to enhance learning opportunity for all learners from pre-kindergarten through high school, at postsecondary colleges and universities, and in corporate training (p.iii).
18	Definition or Conception of (e)Learning	 ☐ Unstated ✓ Broad ☐ Precise Comments (if necessary): A precise definition of e-learning is not provided.
19	Areas of Priority	The real promise of the Internet in education was identified according to its potential: • To center learning around the student instead of the classroom; • To focus on the strengths and needs of individual learners; • To make lifelong learning a practical reality.

		Accordingly, the Commission issues a call to action to:
		 Make powerful new Internet resources, especially broadband access, widely and equitably available and affordable for all learners. Provide continuous and relevant training and support for educators and administrators at all levels. Build a new research framework of how people learn in the Internet age. Develop high quality online educational content that meets the highest standards of educational excellence. Revise outdated regulations that impede innovation and replace them with approaches that embrace anytime, anywhere, any pace learning. Protect online learners and ensure their privacy. Sustain funding—via traditional and new sources—that is adequate to the challenge at hand (pp. iii-iv).
20	Key Action Points	The key recommendations include:
		 to make the extension of broadband access for all learners a central goal of telecommunications policy. to work with educational institutions and the private sector to support the continuous growth of educators through the use of technology. to create a comprehensive research, development, and innovation framework for learning technology. to join forces in developing high quality content and applications for online learning. to remove barriers that block full access to online learning resources, courses, and programs while ensuring accountability of taxpayer dollars. to develop and adopt privacy and protection safeguards to assure that learners of all ages are not exploited while participating in online learning activities. to expand funding initiatives and to develop new models to bring these policies to reality (pp.iv).
21	Procedures and Responsibility for Implementation	No specific details but the success of any initiative is recognized as a collaborative effort between policymakers at the federal, state, and local levels; students and educators; parents; communities; and the private sector.
22	Procedures and Responsibility for Monitoring and Evaluation	No specific details are given but there is a call upon the federal government to create a comprehensive research, development, and innovation framework for measuring the returns and benchmarking the investment in new technology.
23	Partnerships with Others Regarding Implementation	The report does not extend to the period of implementation. The Commission was established by Congress to develop policy recommendations geared toward maximizing the educational promise of the Internet for pre-K, elementary, middle, secondary, and postsecondary education learners. Starting in November 1999, the 16 members of the

		Commission-appointed by President Clinton, Education Secretary Richard Riley, and the Democratic and Republican leadership of Congress-met with hundreds of education, business, policy, and technology experts. However, the legislative authority for the Commission expired in March 2001.
24	Relationship to Other Policies	Unclear
25	Summary of Document	The Web-based Commission was charged with identifying the key barriers that were preventing the Internet from realizing its full potential for enhancing education. The report helps to better understand these barriers and offers recommendations for addressing them. Based on their findings the Commission believes a national mobilization is necessary, one that evokes a response similar in scope to other great American opportunities—or crises. The Commission therefore tries to make good on the Internet's power for learning and by moving from promise to practice. It calls upon the new Congress and Administration to embrace an "e-learning" agenda as a centerpiece of federal education policy (p. iv).
26	Relevance to Aotearoa/NZ Context	☐ Low ✓ Medium ☐ High Explanation: Although a dated initiative the report provides a comprehensive 'big picture' of the risks and rewards of the investment in (e)learning.
27	Actions/Strategies Related to Ministry of Education Identifiers	 ✓ Policy ✓ Desired Outcomes ✓ Accessibility ✓ Infrastructural Support □ Actual Outcomes □ Lessons Learnt ✓ Barriers and Enablers □ Small and Remote Communities □ Bilingual and Multi-cultural COMMENTS (IF NECESSARY):
28	Actions/Strategies Identified for other Sub-groups	☐ Gender ☐ Ethnicity ☐ Indigenous People ✓ Socio-economic Status ✓ Diverse Learners ☐ Other [include details] Comments (if necessary):
29	Evaluative Comment	The report is dated but it remains valuable in terms of being national and across education sectors. There is a strong

		economic imperative throughout the findings interwoven with the learning rationale, as evidenced by the call for greater partnerships between the private and public sector. The recognition of the need for multi-level action is interesting and this point is still valid today. While the Commission produced a set of comprehensive recommendations, it is unclear how these were acted on at the state and/or federal level.
30	Other	
31	Cross References	Web-based Commission
		http://www.hpcnet.org/webcommission

Global Picture, Local Lessons: (e)Learning Policy and Accessibility

1	Name	The state of E-Learning in the States, National Governors Association
2	Reference	National Governors Association (2001). <i>The State of E-Learning in the States</i> . Retrieved 11 November, 2005, from http://www.nga.org/cda/files/060601ELEARNING.pdf
3	Date	2001
4	Country	USA
5	Ministry of Education Identifiers	□ Policy □ Desired Outcomes □ Accessibility □ Infrastructural Support ✓ Actual Outcomes □ Lessons Learnt □ Barriers and Enablers □ Small and Remote Communities □ Bilingual and Multi-cultural Comments (if necessary): 'These findings and observations come from a National Governors Association (NGA) Center for Best Practices' e-learning survey of states conducted in April 2000. The survey sought information on what measures and programs states are planning and implementing with regard to postsecondary and adult work-related e-learning and what challenges they are finding. The survey results are illustrative rather than statistically representative. A list of questions posed to states, a summary table of findings by state, and a list of state e-learning contacts are provided in appendixes' (p. 7 para. 3).
6	Major Themes	E-learning, access, quality, delivery systems, governance, economic development
7	Category of Document	□ Policy✓ Background
8	Type of Document	 □ Policy □ Strategy □ Action Plan □ Draft Strategy/Policy/Action Plan □ Discussion Paper ✓ Evaluation Report □ Background Paper

		 □ Book □ Journal Article □ Conference Paper
		☐ Website
9	Scale of Project	 □ Local □ Regional ✓ National □ Supranational
10	Budget/Funding	Not stated
11	Timeframe	Study conducted in April 2000
12	Target Audience	 □ Early Childhood □ Compulsory Schooling ✓ Post Compulsory Schooling ✓ Higher Education □ Vocational Education □ Community-based Education □ Small and Remote
13	Sponsoring Agency	National Governors Association
14	Author	National Governors Association (Lead writer of this report was Chris Thompson).
15	Contact Details	National Governors Association Hall of the States 444 N. Capitol St. Washington, D.C. 20001-1512 Phone: (202) 624-5300 Fax: (202) 624-5313 http://www.nga.org/portal/site/nga Note: Appendix 3 contains detailed contact information on names, organizations, phone, fax email for all 39 states.
16	Co-Authors	Lead writer of this report was Chris Thompson. Evelyn Ganzglass and Martin Simon provided additional written contributions, suggestions, and editing. Karen Krause, Mary Lou Bruno, Melissa Ducat, and Christina Jewett provided assistance with survey tasks and gathering examples. John Thomasian, Richard Varn, and attendees at the NGA Workforce Policy Forum 2000 provided helpful comments on earlier drafts.
17	Aims/Objectives	This four-year initiative sought to elevate national and state dialogue on postsecondary education and to equip governors and their advisors with the ability to diagnose problems, conceptualize issues, identify policy options and implement new public policy (p.3). The National Governors Association (NGA) conducted a Center for Best Practices' e-learning survey of states in April 2000. The survey sought information on what measures and programs states are planning and implementing with regard to postsecondary and adult work-related e-learning and what challenges they are finding.

10	D - 6""4"	□ Unstated
18	Definition or Conception of	✓ Broad
	(e)Learning	□ Precise
	(C)Learning	Comments (if necessary):
		"E-learning"—instructional content or learning experiences by electronic technology—is expanding rapidly, and this technology is transforming how and where students learn. (p. 8)
		This definition is taken from the report by the American Society for Training and Development and the National Governors Association, A Vision of E-Learning for America's Workforce: Report of the Commission on Technology and Adult Learning (Washington, D.C.: American Society for Training and Development and National Governors Association, June 2001).
		E-learning that covers adult-centered and work-related training and postsecondary education is designed to increase workers' knowledge and skills so they can become more productive, find and keep high-quality jobs, advance in their careers, and have a positive impact on their employers, families, and communities. What distinguishes this segment of e-learning from the more familiar "distance education" are its adult work- related focus and its greater flexibility, interactivity, and versatility by virtue of its emphasis on the electronic medium (p. 8).
19	Areas of Priority	The initiative focuses on three priorities:
		1) increasing access, learning and attainment;
		2) building and sustaining seamless learning pathways; and
		3) fostering economic development (p.3).
20	Key Action Points	The main conclusions or action points revolve around the response to the following questions:
		• Should duplicative and costly programs be restructured in light of students' growing anytime, anywhere access to high-quality content that may come from out-of-state providers?
		• What incentives may be needed to stimulate private-sector involvement in e-learning courseware to improve the productivity of low-skill, low wage workers, which otherwise yields lower returns on investment than courseware for higher-paid, already-educated, technologically sophisticated employees?
		How can states help integrate the best content and delivery from both the public and private sectors to increase access to

		state-of-the-art elearning?
		• How can states best pursue their legitimate public interest in consumer protection and quality assurance, while not stifling the rapid evolution of e-learning and the entry of dynamic new providers? (p.31)
21	Procedures and Responsibility for Implementation	A strong emphasis appears to be placed at the state and local level.
22	Procedures and Responsibility for Monitoring and Evaluation	In the main local states and organizations appear to be responsible for monitoring and evaluation – although clearly the National Governors Association consider they have a role in this regard.
		There is some evidence to show that professional organizations that span across states are also involved in this process (e.g., The Accrediting Commission for Community and Junior Colleges Western Association of Schools and Colleges).
23	Partnerships with Others Regarding	A number of partnerships between state, industry and professional groups are provided.
	Implementation	For example, <i>Michigan Virtual University (MVU)</i> was founded in 1998 by the Michigan Economic Development Corporation in collaboration with several major industries in the state, using a \$30-million investment from the Michigan Renaissance Fund. MVU aims to provide high-quality, convenient, and cost-effective education and training to employees to equip them for high-tech, high-demand jobs. MVU does not develop courses or grant degrees itself. It brokers these through the state's colleges, universities, and private training providers to offer the state's best academic and technical courses remotely, using the Internet, CD-ROMs, interactive television, and other distributive learning devices (p.11).
		A key finding of the report is that states are implementing multiple strategies to develop and expand postsecondary Elearning opportunities.
24	Relationship to Other Policies	Numerous state policy initiatives are cited and many of these are worthy of further investigation. The list of contacts provided in Appendix 3 is noteworthy in this regard.
25	Summary of Document	Main Findings:
		States and their postsecondary education institutions systems are engaged in facilitating new e-learning delivery systems, expanding capacity, upgrading infrastructure and instructor skills, promoting access, and shaping the regulatory environment. Many of the examples highlighted in this report are innovative and bold in their pursuit of the opportunities new

		a learning technologies offer for adult work related advection
		e-learning technologies offer for adult work-related education and training.
		The state of e-learning in the US is that most of these measures:
		 Developing delivery systems Promoting access to e-learning through infrastructure investments Assuring the quality of e-learning Exploring governance issues to bring e-learning into a coherent system
		are being implemented in most states. States are beginning to take advantage of the myriad of options made possible by new learning technologies, as they develop and expand their capacity to enhance the skills of a workforce preparing for the knowledge economy. Although states are engaged in developing these elearning opportunities, they also keenly recognize the challenges of bringing about such significant transformations across so many systems in such a short period. Current challenges frequently identified by states are the costs of developing content and training instructors, the necessary enlargement of infrastructure capacity, the quality of courses and content, agreements on articulation and residency, the responsiveness of traditional institutions, and issues of privacy and intellectual property rights. States rank quality issues as their highest concern (p.6).
26	Relevance to	
20	Aotearoa/NZ Context	 □ Low ✓ Medium □ High Explanation: Although dated and largely descriptive many of the state level initiatives are worthy of follow up investigation to obtain more up-to-date information.
27	Aotearoa/NZ	✓ Medium ☐ High Explanation: Although dated and largely descriptive many of the state level initiatives are worthy of follow up investigation to

		distance technology skills to prepare them for using such technology in the workplace. The center will increase the availability of qualified teachers, with an emphasis on placing student teachers in rural areas, and will ensure all public school students have access to the courses they need to prepare for higher education regardless of where they attend school' (p.15).
28	Actions/Strategies Identified for other Sub-groups	☐ Gender ☐ Ethnicity ☐ Indigenous People ✓ Socio-economic Status ☐ Diverse Learners ☐ Other [include details] Comments (if necessary): In the case of socio-economic status, a 'joint venture between the University of Maryland's University College and Goodwill Industries of the Chesapeake provides free online education to former welfare recipients and working poor individuals who have completed one of Goodwill's job-readiness courses and entered the workforce (p.20).
29	Evaluative Comment	Although this report is not a policy document, the summary of state level developments in 39 states contains some very interesting accounts of early (e)learning initiatives. The real value of this report is twofold. First, the finding that individual states are implementing multiple strategies to develop and expand postsecondary (e)learning opportunities. Second, the report acts as a valuable point of reference for follow up research on what has happened to these initiatives since the original survey was undertaken.
30	Other	
31	Cross References	Education Reform Policy http://www.nga.org/portal/site/nga/menuitem.8358ec82f5b198 http://www.nga.org/portal/site/nga/menuitem.8358ec82f5b198 http://www.nga.org/portal/site/nga/menuitem.8358ec82f5b198 http://www.nga.org/portal/site/nga/menuitem.8358ec82f5b198 http://www.nga.org/portal/site/nga/menuitem.8358ec82f5b198 http://www.nga.org/portal/site/nga/menuitem.8358ec82f5b198 http://www.nga.org/portal/site/nga/menuitem.8358ec82f1b091010VgnVC

Global Picture, Local Lessons: (e)Learning Policy and Accessibility

1	Name	A vision of e-learning for America's workforce
2	Reference	Report of the Commission on Technology and Adult Learning. (2001). A vision of e-learning for America's workforce Retrieved 15 February, 2006, from http://www.masie.com/masie/researchreports/ELEARNINGREPORT.pdf
3	Date	2001
4	Country	USA
5	Ministry of Education Identifiers	 ✓ Policy ✓ Desired Outcomes ✓ Accessibility ☐ Infrastructural Support ☐ Actual Outcomes ☐ Lessons Learnt ✓ Barriers and Enablers ☐ Small and Remote Communities ☐ Bilingual and Multi-cultural Comments (if necessary):
6	Major Themes	Digital Economy, Economic Growth, High Quality Education, Assessment and Certification, and Access.
7	Category of Document	□ Policy√ Background
8	Type of Document	 □ Policy □ Strategy □ Action Plan □ Draft Strategy/Policy/Action Plan √ Discussion Paper □ Evaluation Report □ Background Paper □ Book □ Journal Article □ Conference Paper □ Website
9	Scale of Project	 □ Local □ Regional √ National □ Supranational
10	Budget/Funding	No specific information
11	Timeframe	2000 to 2001

12	Target Audience	 □ Early Childhood □ Compulsory Schooling □ Post Compulsory Schooling √ Higher Education √ Vocational Education □ Community-based Education □ Small and Remote
13	Sponsoring Agency	American Society for Training and Development (ASTD) and the National Governors Association (NGA)
14	Author	Commission on Technology and Adult Learning
15	Contact Details	ASTD Policy and Public Leadership 1640 King Street, Box 1443 Alexandria, Virginia, 22313-2043 Telephone: 703/683-8152 National Governors Association Center for Best Practices Hall of the States 444 North Capitol Street, Suite 2 267 Washington, DC Telephone: 202/624-5300 http://www.www.nga.org
16	Co-Authors	None
17	Aims/Objectives	The mission was to define and encourage a technology-enabled learning environment that would result in an engaged citizenry and a skilled workforce for the digital economy. The Commission set out to establish 'a vision for America's elearning future while outlining the actions needed to make this vision come to life (p2).
18	Definition or Conception of (e)Learning	 ☐ Unstated ✓ Broad ☐ Precise Comments (if necessary): Defined as instructional content or learning experiences enabled by electronic technology (p.4).
19	Areas of Priority	The Commission identified three priority areas for action, focusing on the issues of quality, assessment and certification, and access (p5). In particular, the Commission calls on public and private sector leaders to work together to: 1. Create the high-quality e-learning experiences possible; 2. Implement new measures and methods for assessing and certifying what individuals know and are able to do; 3. Ensure broad and equitable access to e-learning

		opportunities (p.5).
20	Key Action Points	opportunities (p.5). Achieving the commission's vision calls for concerted action by both the public and private sectors in three priority areas (p.5). The recommended actions include: **Quality** Promote a greater emphasis on outcomes to assure the quality of e-learning. Establish public and private partnerships to conduct research and development on how adults learn and how to measure learning. Provide reliable and universally accessible consumer information about the quality of e-learning content, services, and providers. Enhance the abilities and skills of educators to create and deliver high-quality e-learning. Develop policies and practices to ensure the privacy of information about individual's work performance and learning outcomes (p.6).
		 Assessment and certification Develop and promote outcome-based measures of what people know and are able to do. Develop fair and reliable assessment and certification methods. Create a universal and widely accessible electronic system that allows individuals and organizations to document learners' knowledge and skills (p.6).
		 Access Adopt common technical standards aimed at promoting open and equitable access while reducing development costs. Create conditions that favor e-learning and eliminate barriers that inhibit people from engaging in e-learning. Provide incentive and foster public-private partnerships to promote broader access to e-learning among underserved communities. Provide leadership in demonstrating the power of e-learning for individuals and communities. Use the bully pulpit to speak out on behalf of e-learning (p.6).
21	Procedures and Responsibility for Implementation	No concrete details but both the public and private sectors are expected to work together. The report states, 'By acting together now, government, business and education have the opportunity to shape America's e-learning future' (p.5).

22	Procedures and Responsibility for Monitoring and Evaluation	No specific information but outcomes require strong public-private partnerships.
23	Partnerships with Others Regarding Implementation	Again, requires strong public-private partnerships but there is no indication of how these will be achieved apart from examples of existing initiatives.
24	Relationship to Other Policies	No obvious relationship except the references to a number of existing local and state initiatives.
25	Summary of Document	This document presents a vision for the future and describes what a best-case e-learning environment would look like, and how it would impact individuals, organizations and communities.
		The vision for America's e-learning future is that 'The commission foresees a future in which e-learning becomes a continuous process of inquiry and improvement that keeps pace with the speed of change in business and society. E-learning offers learners convenient, just-in-time access to needed knowledge and information, with small content objects assembled and delivered according to their specific needs.
		The commission anticipates increased reliance on new means of assessing and certifying learning results that emphasize individual skills and knowledge rather than courses taken or credit hours earned. It also sees the continued rise of an elearning market based on common technical standards, open design, and the widespread sharing of information across states and sectors about successful and innovative approaches' (p.4)
26	Relevance to Aotearoa/NZ Context	 √ Low ☐ Medium ☐ High Explanation: Highly US specific
27	Actions/Strategies Related to Ministry of Education Identifiers	 □ Early Childhood □ Compulsory Schooling □ Post Compulsory Schooling √ Higher Education √ Vocational Education √ Community-based Education Small and Remote Comments (if necessary):

29	Actions/Strategies Identified for other Sub-groups Evaluative Comment	 □ Gender □ Ethnicity □ Indigenous People √ Socio-economic Status □ Diverse Learners □ Other [include details] Comments (if necessary): There is brief reference to the Riverside Computer Investment Program that makes technology available to low-income households (p.24). A strong economic imperative runs throughout this vision document but this is also couched in the language of removing barriers that restrict access to the benefits of (e)learning and promoting industry self-regulation while balancing citizens' interests and needs. There is a clear tension in this language and the overriding impression is that (e)learning lies at the core of a successful competitive economy.
30	Other	
31	Cross References	American Society for Training and Development http://www.astd.org/astd National Governors Association http://www.nga.org

Global Picture, Local Lessons: (e)Learning Policy and Accessibility

1	Name	Master plan for higher education
2	Reference	Commonwealth of Pennsylvania State Board of Education. (September 2005). <i>Master plan for higher education</i> . Retrieved Dec 2005 from http://www.pde.state.pa.us/stateboard_ed/cwp/view.asp?A=3&Q=115321
3	Date	September 2005
4	Country	Pennsylvania, USA
5	Ministry of Education Identifiers	 ✓ Policy □ Desired Outcomes □ Accessibility □ Infrastructural Support □ Actual Outcomes ✓ Lessons Learnt ✓ Barriers and Enablers ✓ Small and Remote Communities □ Bilingual and Multi-cultural Comments (if necessary): The Master Plan addresses regulations and policies that impede the development of distance learning opportunities (e.g., the HEA funding restrictions based on the 50% and 12 hour rule).
6	Major Themes	Access and affordability, accountability, remedial education, distance learning, articulation and transferability of credits The Plan is a response to the fact that distance education has become a permanent part of the postsecondary landscape, and yet its potential is only just beginning to be realized. Educators and regulators in Pennsylvania recognize the need to review current policies and practices related to the use of distance education. There is an effort to review and revise where necessary regulations and policies that impede the development of distance learning opportunities such as the HEA funding restrictions based on the so-called 50% rule.
7	Category of Document	✓ Policy □ Background
8	Type of Document	✓ Policy □ Strategy

		 □ Action Plan □ Draft Strategy/Policy/Action Plan □ Discussion Paper □ Evaluation Report □ Background Paper □ Book □ Journal Article
		☐ Conference Paper☐ Website
9	Scale of Project	 □ Local ✓ Regional □ National □ Supranational
10	Budget/Funding	Various monies related to specific projects
11	Timeframe	5 years
12	Target Audience	 □ Early Childhood □ Compulsory Schooling ✓ Post Compulsory Schooling ✓ Higher Education □ Vocational Education □ Community-based Education □ Small and Remote
13	Sponsoring Agency	Commonwealth of Pennsylvania State Board of Education
14	Author	Commonwealth of Pennsylvania State Board of Education
15	Contact Details	State Board of Education 333 Market Street Harrisburg, PA 17126-0333 Voice: 717-787-3787 E-Mail 00statbd@psupen.psu.edu http://www.pde.state.pa.us/stateboard_ed/site/default.asp
16	Co-Authors	The State Board of Education acknowledges and recognizes a number of individuals for their contributions and leadership in support of creating the Master Plan for Higher Education (p. 3).
17	Aims/Objectives	The plan largely focuses on the critical issues identified by the Board through its outreach to stakeholders over a number of years. Included in the plan are recommendations for the General Assembly to amend the legislation that describes the content of the Master Plan. The State Board believes that the current requirements for the State Board to address enrollment levels, facility and equipment needs, methods of governance and other issues in the Master Plan are no longer appropriate.
18	Definition or Conception of (e)Learning	 ☐ Unstated ✓ Broad ☐ Precise Comments (if necessary): The term (e)learning is not mentioned in this plan and importantly face-to-face web-based education is not considered. However, distance learning is defined as: 'planned learning that normally occurs in a different

		place from teaching and as a result requires special techniques of course design, special instructional techniques, special methods of communication by electronic and other technology, as well as special organizational and administrative arrangements. While distance learning is most often associated with courses offered over the Internet, it may also include such methods as web quests, satellite teleconferences, electronic field trips and videoconferencing courses. Web-based components of on-campus classes and such other elements as the use of e-mail as a means of communication between students and faculty participating in an on-campus course, while certainly using techniques of distance technology, are for the purposes of this discussion not considered distance learning' (p. 26).
19	Areas of Priority	The main priority areas are:
		Access and affordability
		Accountability
		Remedial education
		Distance learning
		Articulation and transferability of credits
		Master plan requirements
20	Key Action Points	The following are the main action points that potentially relate to (e)learning:
		Access and Affordability
		 Fully implement the recommendations of the State Grant Task Force which are designed to improve the affordability of higher education, particularly the most vulnerable populations. Review all regulations and policies to determine those that, unintentionally, obstruct access to educational opportunities for potential students and, where possible, to reform those policies. Explore ways to expand statewide system of services, including Act 101, Upward Bound and analogous services, to support educationally and financially disadvantaged students to strive for a postsecondary education. Lawmakers and policymakers explore alternative funding models to more effectively use higher education allocations to accomplish established policy priorities (p.14).
		Accountability
		• Convene a major taskforce, including higher education leaders, legislators, businesspeople, students and representatives of the interested public, to initiate a public conversation throughout the state intended to identify a postsecondary priorities agenda, and to bring to the Governor and members of the Assembly a proposed accountability mechanism for higher education.

- Conduct an internal review of the current resources and the resources needed to provide meaningful review and analysis of higher education information for policymakers and the public.
- Over a five-year period the reallocate an agreed-upon sum of higher education funding to priority programs reflecting the economic and social needs of the Commonwealth identified by the Governor's task force on accountability (p.19).

Remedial Education

- The Pennsylvania Department of Education undertake an annual survey of remedial education across the sectors and across the state. At a minimum, this study should measure enrollments, types of students enrolled, credit hours generated, direct and indirect costs, effectiveness and the advantages and disadvantages of various delivery strategies.
- Based on the results of this study, efforts be made to ensure, to the greatest extent possible, that the lowest cost-effective methods be identified for different populations. This might include, as appropriate, moving all publicly-funded remediation to community colleges or even the contracting of educational services on competitive proposals.
- Separately identifiable funding for remedial education be provided to enable the Commonwealth more clearly to understand and evaluate its costs and the effectiveness of designated programs in building skills and knowledge.
- Concerted efforts be made at the local, regional and statewide levels to align high school curricula with postsecondary placement expectations, and to develop academically rigorous, college-preparatory high school core curricula (p.22).

Distance Learning

- Regulations and policies that impede the development of distance learning opportunities be reviewed and, where necessary, revised.
- Distance learning be promoted as one means to improve the efficiency and effectiveness of postsecondary education delivery in the Commonwealth. This might include the development of remedial education offerings, the ability to earn college credits in high school, and the expansion of learning options to rural and working adult populations (p.29).

Articulation and transferability of credits

- develop a comprehensive articulation agreement that will be applicable across the Commonwealth.
- The Pennsylvania Department of Education convenes the parties and takes responsibility to negotiate such an agreement (p.25).

Master Plan

	T	1
		 Every five (5) years, the Board shall adopt a master plan for higher education which shall be for the guidance of the Governor, the General Assembly, and all institutions of higher education financed from State appropriations. The master plan shall: (1) Describe the current higher education landscape in the Commonwealth; (2) Identify unmet needs and gaps with regard to career fields, geographic and financial access; (3) Identify emerging higher education issues and recommend strategies and options designed to address the issues; (4) Identify gaps and opportunities for collaboration with basic education, workforce development programs, economic development and other related systems; and, (5) Outline a plan for action by the State Board to revise/update its higher education regulations.
21	Procedures and Responsibility for Implementation	It is implicit that the responsibility largely falls on the Governor, the General Assembly.
22	Procedures and Responsibility for Monitoring and Evaluation	The follow up Master Plan appears to be the main way of monitoring and evaluating progress.
23	Partnerships with Others Regarding Implementation	All colleges, universities and training organizations would need to be involved in implementing the Master Plan.
24	Relationship to Other Policies	The main relationship is the federal Higher Education Act of 1965 (revised in 1992 to prevented colleges and universities with enrollments of more than 50 percent of their students via distance education from participating in federal student aid programs).
25	Summary of Document	The following extract from the Master Plan helps to summarise the document in the context of (e)learning and distance education. 'In Pennsylvania, as in most states, distance-learning opportunities grew at the grass-roots among individual institutions that saw a need
		Distance learning grew so quickly that there was an initial suspicion on the part of legislators and policymakers of the whole notion of online education. Terms like "any time, any place," which are popular among some practitioners, reinforced a sense that online education did not have the rigor or discipline of traditional on-campus face-to-face learning
		Certain regulations in Pennsylvania enforced both by the

		Department of Education and by PHEAA pertaining to distance education reflect those contained in the federal Higher Education Act of 1965, and those regulations in turn reflect this suspicion. More specifically, the HEA denied Title IV financial aid to students in online programs offered by institutions that did not offer at least 50 percent of their courses in brick-and-mortar locations (the "50% rules"), or that fell below a defined week of classroom instruction (the "12-hour rule"), or that deviated from the definition of a full-time student Washington in 1998 authorized what is called the "Distance Education Demonstration Program," to try to determine if easing these various restrictions would in fact lead to the types of abuses lawmakers feared. In 2003, the directors of that demonstration program issued an interim report that uncovered no evidence that waiving the 50% rules, or any of the other rules for which waivers were provided, has resulted in any problems or had negative consequences Based upon the experience gained to date the Department recognizes the need to amend the laws and regulations governing Title IV student financial assistance in order to expand distance education opportunities Staff within the Department of Education and PHEAA should begin a review of policies and practices currently in place that have the effect of disadvantaging students engaged in distance learning compared to others who are pursuing more traditional educational opportunities.
		This is of particular concern because distance learning at least in theory offers an effective alternative pathway for two Pennsylvania populations currently disadvantaged in their access to postsecondary education opportunities, adults working full time and residents of all ages living in rural communities unable to commute to traditional campuses (pp. 27-28).
26	Relevance to Aotearoa/NZ Context	✓ Low ☐ Medium ☐ High Explanation: Although highly specific to a regional context, the Master Plan does present a system-wide approach to higher education reform with a clear emphasis on rural and remote communities.
27	Actions/Strategies Related to Ministry of Education Identifiers	 □ Policy □ Desired Outcomes ✓ Accessibility □ Infrastructural Support □ Actual Outcomes ✓ Lessons Learnt ✓ Barriers and Enablers ✓ Small and Remote Communities

		☐ Bilingual and Multi-cultural
		Comments (if necessary)
28	Actions/Strategies Identified for other Sub-groups	 ☐ Gender ☐ Ethnicity ☐ Indigenous People ☐ Socio-economic Status ✓ Diverse Learners ☐ Other [include details] Comments (if necessary): A specific focus given to remedial education.
29	Evaluative Comment	There are two aspects of the Master Plan that are of particular interest. The first is how policy itself has restricted the use of (e)learning through the Higher Education Act of 1965, which when revised in 1992 denied financial aid to students in online programmes that did not offer at least 50 % of the course in brick and mortar locations (50% rule) or fell below 12 hours of classroom instruction. The second point of interest is the attempt to develop a system-wide strategy to reform of postsecondary education in which distance education is part of a much wider policy framework. In this sense, there is recognition of the need for changes to the system beyond the need to support new developments in technology.
30	Other	
31	Cross References	1998 Amendments to the Higher Education Act of 1965
		http://www.ed.gov/policy/highered/leg/hea98/index.html

Global Picture, Local Lessons: (e)Learning Policy and Accessibility

1	Name	California Postsecondary Education Commission Federal Education Update
2	Reference	California Postsecondary Education Commission (Dec 2004). California Postsecondary Education Commission Federal Education Update. Retrieved December 1, 2005, from http://www.cpec.ca.gov/completereports/2004reports/04-17.pdf
3	Date	Dec 2004
4	Country	USA - California
5	Ministry of Education Identifiers	 □ Policy □ Desired Outcomes □ Accessibility □ Infrastructural Support ✓ Actual Outcomes □ Lessons Learnt □ Barriers and Enablers □ Small and Remote Communities □ Bilingual and Multi-cultural Comments (if necessary): This update presents some of the major issues affecting education occurring at the national level Also included in the update is the text of President Bush's campaign plan for education during his next term
6	Major Themes	(To be revised)
		Statement on Bush's Campaign for a "Bold New Direction in Education"
		"President Bush believes that education is the key to opportunity and America's best tool in an increasingly competitive global economy. This means that every child deserves a world-class education and every worker deserves the support of a Government that makes a lifetime of learning a top priority. (pg 5) In terms of E-Learning: Eliminating Barriers to Distance Learning and Developing an eLearning Clearinghouse - The President's proposals enable greater access to web-based programs and virtual schools and expand the number of students who can be enrolled in distance education to help those in under-served areas.
		(pg 8)

7	Category of Document	□ Policy✓ Background
8	Type of Document	□ Policy □ Strategy □ Action Plan □ Draft Strategy/Policy/Action Plan □ Discussion Paper □ Evaluation Report □ Background Paper □ Book □ Journal Article □ Conference Paper □ Website
9	Scale of Project	 □ Local □ Regional ✓ National □ Supranational
10	Budget/Funding	-
11	Timeframe	-
12	Target Audience	 □ Early Childhood □ Compulsory Schooling □ Post Compulsory Schooling ✓ Higher Education □ Vocational Education □ Community-based Education □ Small and Remote
13	Sponsoring Agency	-
14	Author	California Postsecondary Education Commission
15	Contact Details	
16	Co-Authors	
17	Aims/Objectives	Advising on higher ed policy.
18	Definition or Conception of (e)Learning	 ✓ Unstated □ Broad □ Precise Comments (if necessary):
19	Areas of Priority	
20	Key Action Points	One sentence link to Eliminating Barriers to Distance

21	Procedures and Responsibility for Implementation	Learning and Developing an eLearning Clearinghouse The President's proposals enable greater access to web-based
22	Procedures and Responsibility for Monitoring and Evaluation	programs and virtual schools and expand the number of students who can be enrolled in distance education to help those in under-served areas. (pg 8)
23	Partnerships with Others Regarding Implementation	
24	Relationship to Other Policies	
25	Summary of Document	
26	Relevance to Aotearoa/NZ Context	✓ Low ☐ Medium ☐ High Explanation:
27	Actions/Strategies Related to Ministry of Education Identifiers	 □ Policy □ Desired Outcomes □ Accessibility □ Infrastructural Support □ Actual Outcomes □ Lessons Learnt □ Barriers and Enablers □ Small and Remote Communities □ Bilingual and Multi-cultural Comments (if necessary):
28	Actions/Strategies Identified for other Sub-groups	☐ Gender ☐ Ethnicity ☐ Indigenous People ☐ Socio-economic Status ☐ Diverse Learners ☐ Other [include details] Comments (if necessary):
29	Evaluative Comment	Very limited value. One sentence link to President Bush's goals of broadening access and providing opportunities for life-long learning and job training.
30	Other	
31	Cross References	

Global Picture, Local Lessons: (e)Learning Policy and Accessibility

1	Name	California distance learning policy: Status report update: AB 1123 Task Force
2	Reference	California Postsecondary Education Commission. (2001). California distance learning policy: Status report update: AB 1123 Task Force. Retrieved December 6, 2005, from http://www.cpec.ca.gov/Agendas/Agenda0107/Tab 10.pdf
3	Date	2001
4	Country	USA - California
5	Ministry of Education Identifiers	 ✓ Update on Policy □ Desired Outcomes □ Accessibility □ Infrastructural Support □ Actual Outcomes □ Lessons Learnt □ Barriers and Enablers □ Small and Remote Communities □ Bilingual and Multi-cultural Comments (if necessary): Status report update and some background on previous
		legislation and activity in e-learning Distance learning: The California Distance Learning Policy.
6	Major Themes	Overview of the some of the legislation and activities that have involved the Commission in the discussions surrounding higher education technology AB 1123 required the intersegmental working group on statewide funding priorities for technology in higher education. This is an update on these requirements of the bill.
		Appendix B outlines Bill number AB 1123 Distance learning: The California Distance Learning Policy
7	Category of Document	✓ Policy ✓ Background
8	Type of Document	 ✓ Policy □ Strategy □ Action Plan □ Draft Strategy/Policy/Action Plan □ Discussion Paper □ Evaluation Report □ Background Paper □ Book □ Journal Article

		☐ Conference Paper ☐ Website
9	Scale of Project	✓ Local – state of California ☐ Regional ☐ National ☐ Supranational
10	Budget/Funding	-
11	Timeframe	1999 - 2002
12	Target Audience	 □ Early Childhood □ Compulsory Schooling ✓ Post Compulsory Schooling □ Higher Education □ Vocational Education □ Community-based Education □ Small and Remote
13	Sponsoring Agency	
14	Author	California Postsecondary Education Commission *Presenter: Kathleen Chavira.*
15	Contact Details	
16	Co-Authors	
17	Aims/Objectives	To convene an intersegmental working group to facilitate the development of statewide funding priorities for technology in higher education. The Commission is directed to forward the recommendations of the intersegmental working group to the Legislature and the Governor by August 1, 2002. (pg 1)
18	Definition or	✓ Unstated ☐ Broad
	Conception of (e)Learning	☐ Precise Comments (if necessary):
19	_	Precise Comments (if necessary): The following points from the document are noted as relevant to
19 20	(e)Learning	Precise Comments (if necessary): The following points from the document are noted as relevant to areas 19 – 25
	(e)Learning Areas of Priority	 ☐ Precise Comments (if necessary): The following points from the document are noted as relevant to areas 19 – 25 (1) Development of a statewide infrastructure that provides compatible connectivity between all levels of education to reduce redundancy and increase efficiency.
20	(e)Learning Areas of Priority Key Action Points Procedures and Responsibility for	Precise Comments (if necessary): The following points from the document are noted as relevant to areas 19 – 25 (1) Development of a statewide infrastructure that provides compatible connectivity between all levels of education to reduce redundancy and increase efficiency. (2) Adherence to nationally and internally accepted protocols and standards. (3) Assurance that the standards for course and program quality applied to distance education are rigorous in meeting accreditation standards, Universal Design Standards, and
20 21	(e)Learning Areas of Priority Key Action Points Procedures and Responsibility for Implementation Procedures and Responsibility for Monitoring and	 ☐ Precise Comments (if necessary): The following points from the document are noted as relevant to areas 19 – 25 (1) Development of a statewide infrastructure that provides compatible connectivity between all levels of education to reduce redundancy and increase efficiency. (2) Adherence to nationally and internally accepted protocols and standards. (3) Assurance that the standards for course and program quality applied to distance education are rigorous in meeting

25	Summary of Document	 (5) Collaboration across departments, institutions, states, and countries in the use of technology. (6) Use of technology to contain costs, improve student outcomes, and enhance quality in instructional and noninstructional functions, such as student services, libraries, and administrative support. (pg 11 Appendix B)
26	Relevance to Aotearoa/NZ Context	 □ Low ✓ Medium □ High Explanation: Outlines elements of policy – but dated (pre 2002) and only one state of California
27	Actions/Strategies Related to Ministry of Education Identifiers	 ✓ Policy Status report update for California 2000 □ Desired Outcomes □ Accessibility □ Infrastructural Support □ Actual Outcomes □ Lessons Learnt □ Barriers and Enablers □ Small and Remote Communities □ Bilingual and Multi-cultural Comments (if necessary):
28	Actions/Strategies Identified for other Sub-groups	☐ Gender ☐ Ethnicity ☐ Indigenous People ☐ Socio-economic Status ☐ Diverse Learners ☐ Other [include details] Comments (if necessary):
29	Evaluative Comment	Limited value in terms of being one state (California), dated (pre 2002) and only a status update by the California Postsecondary Education Commission (CPEC) on the California Distance Learning Policy
30	Other	
31	Cross References	

Global Picture, Local Lessons: (e)Learning Policy and Accessibility

1	Name	The e-learning e-volution in colleges and universities
2	Reference	Advisory Committee for Online Learning (2001). <i>The elearning e-volution in colleges and universities</i> . Retrieved November `15, 2005 from http://www.cmec.ca/postsec/evolution.en.pdf
3	Date	2001
4	Country	Canada
5	Ministry of Education Identifiers	 □ Policy ✓ Desired Outcomes ✓ Accessibility ✓ Infrastructural Support □ Actual Outcomes □ Lessons Learnt ✓ Barriers and Enablers □ Small and Remote Communities □ Bilingual and Multi-cultural Comments (if necessary):
6	Major Themes	Culture of lifelong learning, harnessing the transformative power of new learning tools, Enhancing quality, Improving accessibility and flexibility. The report proposes a pan-Canadian action plan to accelerate the use of online learning in post-secondary education and in lifelong learning (p.5). As a federal document it acknowledges that provincial and territorial authorities have jurisdiction over education and recognizes the importance of collaboration between stakeholders in pursuing the plan. It stresses that "themes of inclusiveness pervade" (p.6) the action plan. Key aspects of the plan are to use e-learning to extend lifelong learning to all Canadians and to improve the quality of education.
7	Category of Document	□ Policy ✓ Background
8	Type of Document	 □ Policy □ Strategy ✓ Action Plan □ Draft Strategy/Policy/Action Plan □ Discussion Paper □ Evaluation Report □ Background Paper □ Book □ Journal Article □ Conference Paper □ Website

_	G I en	□ Local
9	Scale of Project	☐ Regional
		✓ National
		☐ Supranational
10	Budget/Funding	No budget is indicated. Numerous references to required sources
	200900200000	of funding for particular activities noted within the report are
		made throughout the document.
11	Timeframe	The report looks forward over a five year period (see p.7)
12	Target Audience	☐ Early Childhood
		☐ Compulsory Schooling
		☐ Post Compulsory Schooling✓ Higher Education
		✓ Vocational Education
		☐ Community-based Education
		☐ Small and Remote
13	Sponsoring Agency	Council of Ministers of Education, Canada
14	Author	Advisory Committee for Online Learning
15	Contact Details	Information Distribution Centre
		Communications Branch Industry Canada
		Room 268D, West Tower
		235 Queen Street
		Ottawa ON K1A 0H5
		Tel.: (613) 947-7466
		Fax: (613) 954-6436 E-mail: publications@ic.gc.ca
1.6	Co. Anthony	E-man. publications@ic.gc.ca
16	Co-Authors	
17	Aims/Objectives	• enhance the quality of the post-secondary learning experience through institutional strategies, expanding the amount of high
		quality online learning materials, and supporting learning
		research and learnware product development;
		• improve the accessibility and flexibility of post-secondary
		learning opportunities; and
		• create synergies and greater critical mass within post-secondary education in Canada.
18	Definition or	Unstated
10	Conception of	✓ Broad
	(e)Learning	☐ Precise
		Comments (if necessary):
		This document uses online learning and e-learning
		synonymously. It states 'Online learning can be defined as what
		occurs when education and training (typically credit but also non-
		credit) are delivered and supported by networks such as the Internet or intranets. Learners are able to learn any time and any
		place. In this report, we use the terms "online learning" and "e-
		learning" interchangeably' (p2).
19	Areas of Priority	1. Enhancing quality
		2. Improving accessibility and flexibility
		3. Creating pan-Canadian synergies and critical mass
	I	<u> </u>

20	Key Action Points	For (1) above:
20	Key Action I omits	• The development of institutional strategies to support e-
		learning
		 Expanding online learning materials and skills
		• Conducting learning research and learnware product
		development
		• Revise copyright laws to facilitate the development of online learning
		For (2) above:
		 Establish a high bandwidth learning network
		• Ensure affordability
		• Support learners
		 Achieve portability of learning credits
		For (3) above
		• Create a pan-Canadian Learning Service with three functions:
		a) Support learners
		b) Support faculty and institutions in online course and programme development
		c) Provide marketing support
		These action points are supported by a set of 39 recommendations.
21	Procedures and Responsibility for Implementation	This report was under the Committee's mandate to provide independent advice to the CMEC Consortium and Industry Canada on the means to maximize online education opportunities (p.ix)
22	Procedures and Responsibility for Monitoring and Evaluation	NA
23	Partnerships with Others Regarding Implementation	NA
24	Relationship to Other Policies	
25	Summary of Document	The document makes a case for the use of e-learning as a means to enhance the quality of education at the post-secondary level and as a way of fostering and supporting a culture of lifelong learning in Canadian society. It cites Canadian strengths (such as a growing learnware industry, its telecommunications infrastructure and the (then) current experience of many Canadian post-secondary institutions in e-learning) and obstacles (such as the proportion of Canadian colleges and universities not online, the lack of pan-Canadian marketing and standards, and the existence of a digital divide despite a Community Access Program that increased internet access nationally). It proposes that three major areas need

		development. First, the area of quality courseware, second that of internet access and flexibility, and third the need to develop strategies that reach across Canada to create synergies and build a critical mass of online courses and learners.
26	Relevance to Aotearoa/NZ Context	☐ Low ✓ Medium ☐ High Explanation: This background paper provides considerable insight into the state of e-learning in Canada five years ago and suggests measures to enable the use of e-learning in support of the aims noted in previous sections of this template. The document is shaped by the Canadian system of education in which jurisdiction over education is held by the states and territories, not the Federal government.
27	Actions/Strategies Related to Ministry of Education Identifiers	 ✓ Policy □ Desired Outcomes ✓ Accessibility ✓ Infrastructural Support □ Actual Outcomes □ Lessons Learnt ✓ Barriers and Enablers □ Small and Remote Communities □ Bilingual and Multi-cultural Comments (if necessary):
28	Actions/Strategies Identified for other Sub-groups	☐ Gender ☐ Ethnicity ☐ Indigenous People ☐ Socio-economic Status ✓ Diverse Learners ☐ Other [include details] Comments (if necessary):
29	Evaluative Comment	A thorough document, driven by its emphasis on life-long learning. The document has a strong focus on quality and support for learners, foreshadowing the importance of demand side policies.
30	Other	
31	Cross References	Council of Ministers of Education http://www.cmec.ca/index.en.html

Global Picture, Local Lessons: (e)Learning Policy and Accessibility

1	Name	An E-learning vision: Toward a pan-Canadian strategy and action plan
2	Reference	CANARIE (2002). An E-learning vision: Toward a pan- Canadian strategy and action plan. Retrieved December 1, 2005 from http://www.canarie.ca/funding/elearning/elearningvision.pdf
3	Date	2002
4	Country	Canada
5	Ministry of Education Identifiers	 □ Policy □ Desired Outcomes ✓ Accessibility ✓ Infrastructural Support □ Actual Outcomes □ Lessons Learnt □ Barriers and Enablers □ Small and Remote Communities □ Bilingual and Multi-cultural Comments (if necessary):
6	Major Themes	Anytime, anyplace lifelong learning; High quality e-learning content; Ubiquitous broadband networks; International recognition of Canadian excellence in e-learning
7	Category of Document	□ Policy✓ Background
8	Type of Document	 □ Policy □ Strategy □ Action Plan □ Draft Strategy/Policy/Action Plan ✓ Discussion Paper □ Evaluation Report □ Background Paper □ Book □ Journal Article □ Conference Paper □ Website
9	Scale of Project	 □ Local □ Regional ✓ National □ Supranational
10	Budget/Funding	Nil Nil

11	Timeframe	CANARIE proposes four actions in support of the development of a pan-Canadian e-learning strategy to be undertaken between the time of the report publication (2002) and the
		between the time of the report publication (2002) and the beginning of 2004.
12	Target Audience	 □ Early Childhood ✓ Compulsory Schooling ✓ Post Compulsory Schooling ✓ Higher Education ✓ Vocational Education ✓ Community-based Education □ Small and Remote
13	Sponsoring Agency	CANARIE
14	Author	CANARIE
15	Contact Details	Jamie Rossiter Director
		E-learning Programme, CANARIE Inc.
		Jamie.rossiter@canarie.ca
16	Co-Authors	
17	Aims/Objectives	To further the development of a pan-Canadian strategy for elearning.
18	Definition or Conception of	✓ Unstated
	(e)Learning	□ Broad
		□ Precise
		Comments (if necessary):
19	Areas of Priority	CANARIE's mission is to "accelerate Canada's advanced Internet development and use by facilitating the widespread adoption of faster, more efficient networks and by enabling the next generation of advanced products, applications and services to run on them." The document prioritises that broad mission.
20	Key Action Points	1. Facilitate the use of CA*net 4 for advanced pan-Canadian elearning trials and demonstrations;
		2. Continue its support of pan-Canadian e-learning research, pilot projects, standards development and early implementation trials of a pan-Canadian learning portal and content repository;
		3. Develop further its initial proposals on the application of emerging technologies, such as computing grids and web

	services, to address e-learning challenges;
	4. Facilitate the development of a series of reports on key elearning issues, such as digital rights management, best practices, standards and accessibility.
21 Procedures and Responsibility for Implementation	Not stated
Procedures and Responsibility for Monitoring and Evaluation	A report on progress was to be given at the Third Pan-Canadian E-learning Workshop in January 2004.
Partnerships with Others Regarding Implementation	Not stated. It is noted that "CANARIE's efforts will only be successful, if the primary stakeholders engage in a broad, national consultation process." (p.20)
24 Relationship to Other Policies	
25 Summary of Document	The issues of quality, accessibility, collaboration, along with the need for the development of online material must be addressed to attain the vision of a Canadian e-learning society. An additional challenge is noted. The importance of planning to explain and communicate any pan-Canadian strategy appears as a factor in the strategy development. Overall the document rehearses the argument for a pan-Canadian strategy for e-learning and then provides a small set of specific actions that CANARIE will take in support of the development of such a strategy.
Relevance to Aotearoa/NZ Context	✓ Low ☐ Medium ☐ High Explanation:
Actions/Strategies Related to Ministry of Education Identifiers	 □ Policy ✓ Desired Outcomes ✓ Accessibility ✓ Infrastructural Support □ Actual Outcomes □ Lessons Learnt □ Barriers and Enablers □ Small and Remote Communities □ Bilingual and Multi-cultural Comments (if necessary):
28 Actions/Strategies	

	Identified for other Sub-groups	☐ Gender ☐ Ethnicity ☐ Indigenous People ☐ Socio-economic Status ☐ Diverse Learners ☐ Other [include details] Comments (if necessary):
29	Evaluative Comment	The document follows in the footsteps of the CMEC document "The e-learning e-volution in colleges and universities". It follows a similar structure and notes many of the same concerns and overall areas for action. It outlines actions CANARIE plans to take in support of a pan-Canadian approach to e-learning. It adds little that is new to the Canadian "project" of developing a pan-Canadian e-learning strategy.
30	Other	The document indicates that progress on the various activities set out will be presented at the Third Pan-Canadian E-learning Workshop in January 2004. At that Workshop, the panel set up to discuss the topic "Does Canada need a pan-Canadian e-learning strategy" had the brief to respond to the following: Lifelong learning is a critical component of a successful knowledge-based economy. In Canada, all levels of government, as well as many other institutions, organizations, and associations have important roles in learning. This diversity contributes to the fabric of Canadian learning activities and provides many examples of creative collaboration. However, there is debate as to whether or not a Canadian strategy for elearning is appropriate or useful. And if so, how might such a strategy be developed? Clearly there had been relatively little progress toward a pan-Canadian strategy for elearning.
31	Cross References	The e-learning e-volution in colleges and universities http://www.cmec.ca/postsec/evolution.en.pdf CANARIE E-learning Program http://www.canarie.ca/funding/elearning/

Global Picture, Local Lessons: (e)Learning Policy and Accessibility

Template No: C #3

1	Name	Quality post-secondary opportunities. The quality learning agenda policy statement for post-secondary education and training.
2	Reference	New Brunswick Departments of Education and Training and Employment Development (2005). <i>Quality post-secondary opportunities. The quality learning agenda policy statement for post-secondary education and training.</i> Retrieved August 2, 2005 from www.gnb.ca/0000/publications/comm/3143english.pdf
3	Date	2005
4	Country	Canada
5	Ministry of Education Identifiers	 ✓ Policy ✓ Desired Outcomes ✓ Accessibility ✓ Infrastructural Support ☐ Actual Outcomes ☐ Lessons Learnt ☐ Barriers and Enablers ☐ Small and Remote Communities ☐ Bilingual and Multi-cultural Comments (if necessary):
6	Major Themes	The "Quality Learning Agenda" is composed of four interdependent policy statements from Early Childhood to Adult and Lifelong Learning, and includes this document. This policy statement is not specific to (e)learning, but makes reference to it. There is no specific e-learning strategy for New Brunswick. The policy sets out seven objectives for the post-secondary education and training sector in New Brunswick to attain over the next ten years. A particular challenge arises from the fact that participation in the post-secondary sector is below average for Canada as is the proportion of citizens with a post-secondary qualification. Improving participation rates (including by international students) and ensuring success at all levels of the post-secondary sector, it is argued, will enhance the economic and social prosperity of the province.
7	Category of Document	✓ Policy□ Background

8	Type of Document	 ✓ Policy □ Strategy □ Action Plan □ Draft Strategy/Policy/Action Plan □ Discussion Paper □ Evaluation Report □ Background Paper □ Book □ Journal Article □ Conference Paper □ Website
9	Scale of Project	 □ Local ✓ Regional □ National □ Supranational
10	Budget/Funding	Not stated. In setting out the seven objectives the document states "We will support these objectives through the allocation of financial and other resources, strategic planning and enhanced partnerships with our stakeholders" (p.18)
11	Timeframe	The "Quality Learning Agenda" of which this policy statement forms part has a ten year timeframe.
12	Target Audience	 □ Early Childhood □ Compulsory Schooling □ Post Compulsory Schooling ✓ Higher Education ✓ Vocational Education □ Community-based Education □ Small and Remote
13	Sponsoring Agency	New Brunswick Department of Education New Brunswick Department of Training and Employment Development
14	Author	New Brunswick Departments of Education and Training and Employment Development
15	Contact Details	Due to government restructuring on Feb. 14, 2006, the name of this department is now changed to: Post-Secondary Education and Training. Province of New Brunswick P.O. Box 6000 Fredericton NB E3B 5H1 Canada General Information: (506) 453-2597 Fax: (506) 453-3806 Email: http://www.gnb.ca/0105/sendmail-e.asp Web: http://www.gnb.ca/0105/index-e.asp
16	Co-Authors	

1=	Aims/Objectives	
17	Alliis/Objectives	The policy statement sets out seven objectives:
		1. Ensure higher standards of excellence and quality
		2. Increase accessibility and completion
		3. Improve affordability
		4. Enhance accountability
		5. Increase research and innovation capacity
		6. Meet the targeted human resource needs of New Brunswick
		7. Embrace the globalization of our post-secondary education and training sector (p. 18)
		The e-learning aspects of this policy are specifically mentioned under the first two objectives.
18	Definition or	✓ Unstated
	Conception of	☐ Broad ☐ Precise
	(e)Learning	Comments (if necessary):
10	4.00.00	
19	Areas of Priority	Areas of priority related to e-learning are set out in the first and second objectives (see panel 17 above). The most extensive of these occurs within the second objective where the document specifically states the need to "Expand e-learning opportunities and distance education".
20	Key Action Points	Specific action points for e-learning are:
		From Objective 1: Working with the Council of Ministers of Education, Canada, to develop a pan-Canadian framework of minimum standards for university degrees including online degrees.
		Seven points, summarized below, arise from Objective 2 (pp. 26-6)
		Identify means and models to expand online services to enhance availability of online learning
		Encourage online degree granting through public and private institutions
		New Brunswick Community Colleges (NBCC) will implement a network-wide e-learning environment
		Increase availability of online learning products to community access centres to support learner preparation for post-secondary education and training
		Explore means of strengthening opportunities for students studying in rural areas
		Strengthen access to online information in public libraries by distance or e-learning students
		Continue the role public libraries have providing access to interlibrary loan services to support distance e-learners.
		All but the last are (e)learning related.
21	Procedures and	Not stated
		I

	Responsibility for Implementation	
22	Procedures and Responsibility for Monitoring and Evaluation	Not stated
23	Partnerships with Others Regarding Implementation	The policy concludes with "An invitation to partnership" citing, as one of the assets of New Brunswick, "the ability to build strong relationships among key post-secondary partners and work collaboratively to achieve common goals." (p. 44)
24	Relationship to Other Policies	This document is one of four in the New Brunswick Quality Learning Agenda. No links to specific e-learning policy or strategy documents were found.
25	Summary of Document	E-learning aspects of this document are quite constrained. The major emphasis is on increasing e-learning accessibility throughout the province as a way of building participation in the post-secondary sector.
26	Relevance to Aotearoa/NZ Context	☐ Low ✓ Medium ☐ High Explanation:
27	Actions/Strategies Related to Ministry of Education Identifiers	 □ Policy □ Desired Outcomes ✓ Accessibility □ Infrastructural Support □ Actual Outcomes □ Lessons Learnt □ Barriers and Enablers ✓ Small and Remote Communities □ Bilingual and Multi-cultural Comments (if necessary):
28	Actions/Strategies Identified for other Sub-groups	☐ Gender ☐ Ethnicity ☐ Indigenous People ☐ Socio-economic Status ☐ Diverse Learners ☐ Other [include details] Comments (if necessary):
29	Evaluative Comment	The document relates to the entire post-secondary sector and places the role of e-learning within that sector. As such it

		portrays e-learning as one aspect of the overall approach to post-secondary education that has use in attaining particular goals within that sector.
30	Other	
31	Cross References	Post-Secondary Education and Training http://www.gnb.ca/0105/index-e.asp

Global Picture, Local Lessons: (e)Learning Policy and Accessibility

Template No: C #4

1	Name	Technology enhanced learning (TEL). An action plan for post-secondary education and training in Saskatchewan. Phase 2.
2	Reference	Saskatchewan Department of Learning (2000). <i>Technology Enhanced Learning: An Action Plan for Post-Secondary Education and Training in Saskatchewan</i> . Retrieved November 5, 2005 from http://www.aee.gov.sk.ca/tel/pdf/telplan.pdf
3	Date	2000
4	Country	Canada
5	Ministry of Education Identifiers	 ✓ Policy ✓ Desired Outcomes ☐ Accessibility ✓ Infrastructural Support ☐ Actual Outcomes ☐ Lessons Learnt ✓ Barriers and Enablers ✓ Small and Remote Communities ✓ Bilingual and Multi-cultural Comments (if necessary):
6	Major Themes	The vision statement suggests that the major themes are collaboration between stakeholders, learning for all, programme quality, and access. A set of six principles guiding the TEL Action Plan: Equity; Quality; Choice; Coherence; Sustainability; Partnerships.
7	Category of Document	✓ Policy □ Background
8	Type of Document	 □ Policy □ Strategy ✓ Action Plan □ Draft Strategy/Policy/Action Plan □ Discussion Paper □ Evaluation Report □ Background Paper □ Book □ Journal Article □ Conference Paper □ Website

9	Scale of Project	□ Local
	Scare of 1 Toject	✓ Regional
		□ National□ Supranational
10	Budget/Funding	Provincial funding of \$CAN1.656m in the 2000-2001 budget. This amount is supplemented by institutional contributions, other sources of capital funding for IT infrastructure; funding from industry partners; and, cost recovery strategies (p. 41). [The evaluation of this TEL Action Plan notes that around \$CAN17m was committed by Saskatchewan Learning over the life of the plan.]
11	Timeframe	Five years
12	Target Audience	 □ Early Childhood □ Compulsory Schooling ✓ Post Compulsory Schooling □ Higher Education □ Vocational Education □ Community-based Education □ Small and Remote
13	Sponsoring Agency	Saskatchewan Department of Learning (Saskatchewan Learning) was the major agency involved in the development of the plan. A number of other organizations collaborated in the task (p.2).
14	Author	Saskatchewan Department of Learning
15	Contact Details	Saskatchewan Department of Learning Communications Branch 1st Floor, 2220 College Avenue Telephone: 306-787-9478 Fax: 306-798-2045
16	Co-Authors	
17	Aims/Objectives	 The TEL action plan sets out four goals: Enhance Metis and First Nations peoples' education and training Advance education and training in rural and northern communities Develop and retain students, graduates and faculty for a knowledge-based society Develop Saskatchewan's intellectual capital
18	Definition or Conception of (e)Learning	✓ Unstated □ Broad □ Precise Comments (if necessary):

		Although no definition is stated, it is clear that TEL is the use of technology to support post-secondary education. The plan notes and quotes a definition of distributed learning (p.6) as involving technology enhanced learning.
19	Areas of Priority	Five 'enablers' are listed as identifying "spheres of action that need focused attention, coordinated effort and sustained investment" (p. 29). They are: • Develop TEL content and instructional strategies • Faculty development and support • Learner support and connectivity
		 Management and coordination Linkages with industry, communities, and other organisations
20	Key Action Points	Two broad areas for action are proposed: strategic collaborative priorities, requiring organizations to work together, and institutional priorities, in which institutions work to attain a series of institutional goals consistent with the TEL action plan. Key action points for the first are development of: • A Saskatchewan Virtual Campus • A network of technology enhanced learning services • First Nations and Metis partnerships • Inter-provincial, national and international initiatives • Inter-institutional faculty development • A TEL consortium • Institutional priorities are noted through commitment to a small number of strategies in relation to each of the enablers.
21	Procedures and Responsibility for Implementation	No information
22	Procedures and Responsibility for Monitoring and Evaluation	No information
23	Partnerships with Others Regarding Implementation	Collaborative action is central to implementation of the TEL Action Plan. Specific actions are noted for the three public credit-granting institutions, in conjunction with a range of other post-secondary system and related agencies.
24	Relationship to Other Policies	The province's <i>Strategic Plan for Saskatchewan Post-Secondary Education and Skills Training: 2001-01 to 2004-05</i> was accompanied by the Saskatchewan Training Strategy and the University Revitalization process, both of which highlight the need to use and integrate technology within post-secondary education and training.

25	Summary of Document	This document provides a rationale for and statement of major actions to be undertaken in Saskatchewan in support of the vision for technology enhanced learning. A set of four desired goals, and the enablers to support them, are set out, and a series of priority actions to be undertaken are clearly described. Actions are of two forms – strategic collaborative priorities and individual institutional priorities. The TEL Action Plan has a five year timeframe. This document itself represents Phase 2. Phase 3 represents the detailed development and implementation of the priority actions.
26	Relevance to Aotearoa/NZ Context	☐ Low ☐ Medium ✓ High Explanation: Saskatchewan's similarities to New Zealand include its commitment to the enhancement of education for indigenous peoples and those in rural and remote communities.
27	Actions/Strategies Related to Ministry of Education Identifiers	 □ Policy ✓ Desired Outcomes ✓ Accessibility □ Infrastructural Support □ Actual Outcomes □ Lessons Learnt ✓ Barriers and Enablers ✓ Small and Remote Communities ✓ Bilingual and Multi-cultural Comments (if necessary):
28	Actions/Strategies Identified for other Sub-groups	 □ Gender □ Ethnicity ✓ Indigenous People □ Socio-economic Status □ Diverse Learners □ Other [include details] Comments (if necessary): The TEL Action Plan notes and has specific emphasis on the needs of indigenous people and those in rural and remote areas. The introduction to the plan notes that Internet use is highly correlated with education, income and employment. Its Network of TEL Services appears to be the initiative designed to cater for those whose income or education level might inhibit use of technology enhanced learning.

29	Evaluative Comment	Clear but broad in scope with little detail about the mechanics of implementation or issues of accountability for the various projects that would emanate from this Action Plan. This document suggests that level of detail would reside in Phase 3 documents, but no such documents can be found.
30	Other	
31	Cross References	Alternative link to Action Plan http://www.sasked.gov.sk.ca/branches/elearning/tel/ An evaluation of this Action Plan was undertaken and is templated C#5. See Review of the Technology Enhanced Learning (TEL) Action Plan Final Report. http://www.sasked.gov.ca/branches/elearning/tel/pdf/final_report_review_tel_action_plan_mar_05.pdf Saskatchewan Department of Learning http://www.sasked.gov.sk.ca/branches/elearning/index.shtml

Global Picture, Local Lessons: (e)Learning Policy and Accessibility

Template No: C #5

1	Name	Review of the Technology Enhanced Learning (TEL) Action Plan. Final Report.
2	Reference	Ekos Research Associates (2005). Review of the Technology Enhanced Learning (TEL) Action Plan. Final report. Retrieved December 6, 2005, from http://www.aee.gov.sk.ca/tel/pdf/final_report_review_tel_action_nplan_mar_05.pdf
3	Date	2005
4	Country	Canada
5	Ministry of Education Identifiers	 □ Policy □ Desired Outcomes □ Accessibility □ Infrastructural Support ✓ Actual Outcomes ✓ Lessons Learnt □ Barriers and Enablers □ Small and Remote Communities □ Bilingual and Multi-cultural Comments (if necessary):
6	Major Themes	 The report addresses the following four areas: Relevance, flexibility and usefulness of the Plan as a provincial strategy Actions implemented to achieve the vision, goals and priorities within the Plan Impacts and effects of the Plan, including intended and unintended impacts for learners, faculty, and institutions Alternatives, including strengths and challenges of the Plan, and future directions
7	Category of Document	□ Policy□ Background
8	Type of Document	 □ Policy □ Strategy □ Action Plan □ Draft Strategy/Policy/Action Plan □ Discussion Paper ✓ Evaluation Report

		 □ Background Paper □ Book
		☐ Journal Article
		☐ Conference Paper
		□ Website
9	Scale of Project	□ Local✓ Regional
		□ National
		☐ Supranational
10	Budget/Funding	
11	Timeframe	
12	Target Audience	☐ Early Childhood
		☐ Compulsory Schooling✓ Post Compulsory Schooling
		✓ Higher Education
		☐ Vocational Education
		☐ Community-based Education
12	G • •	☐ Small and Remote
13	Sponsoring Agency	Saskatchewan Learning
14	Author	Ekos Research Associates Inc
15	Contact Details	Ottawa 99 Metcalfe Street, Suite 1100
		Ottawa, Ontario
		K1P 6L7
		Tel: (613) 235 7215
		Fax: (613) 235 8498
		E-mail: pobox@ekos.com
		http://www.ekos.com/main.asp
16	Co-Authors	
17	Aims/Objectives	The review authors had the brief of examining the relevance,
		implementation and impacts of the Plan and to provide input
		into a renewed strategy.
18	Definition or Conception of	☐ Unstated☐ Broad
	(e)Learning	✓ Precise
	.,	Comments (if necessary):
		A definition of technology enhanced learning was developed
		during implementation of the Technology Action Plan by
		post-secondary institutions, the provincial government and other agencies. The definition was developed to support the
		creation of Campus Saskatchewan, a partnership model for
		promoting inter-institutional collaboration. The definition
		reads:
		Technology enhanced learning means using a variety of information and communications technologies to provide
		information and communications technologies to provide flexible, high quality learning opportunities for both on and
		off-campus students. Technologies include, for example, the

		Internet and Web-based applications, video and audio conferencing, CD-ROMs, videotapes and interactive television. The use of technologies supports distributed learning where faculty and students can be located at different places and can interact at different times, enabling people to participate in education and training "anytime, anywhere". Technology enhanced learning can be used to offer wholly "virtual" online opportunities, can be multi-mode, employing a combination of technologies, or can be integrated with traditional classroom instruction or independent study courses
19	Areas of Priority	We report here a summary of the implications for the Saskatchewan approach to technology enhanced learning identified in the report.
		The TEL Action plan was well accepted and drove TEL development effectively. All partners indicate that a future shared strategy should be developed.
		There should be closer links between the goals of a new strategy, institutions' academic plans and priorities, and funding decisions.
		A programmatic approach (i.e., an approach intended to provide learners with a coherent array of course offerings to complete a credential using alternative modes) is an important thrust.
		Non-traditional part-time learners value the enhanced flexibility offered by TEL; other learners do not report significant issues with respect to learning outcomes.
		Broadening engagement by faculty, who are more conservative and less enthusiastic in their views on TEL than students, is a key issue.
		The needs of rural and northern Saskatchewan, and of Aboriginal institutions must be addressed to ensure adequate capacity building and full participation.
		Full assessment of impacts is not supported by the current reporting regime. Evaluative research is needed to support well informed decision making about TEL.
		Dissemination of TEL related products must be enhanced.
20	Key Action Points	NA
21	Procedures and Responsibility for Implementation	NA
22	Procedures and Responsibility for Monitoring and Evaluation	NA
23	Partnerships with Others Regarding Implementation	NA

24	Relationship to Other Policies	
25	Summary of Document	From the four themes Relevance: The TEL plan was considered appropriate and was an important catalyst for activity in TEL. There is support for another shared provincial strategy with fine-tuning of the goals and principles rather than a full re-drafting. The current plan is well aligned with provincial priorities but ongoing work is needed to ensure that it continues to dovetail with emerging plans and priorities. Planning and Implementation: The Plan was implemented as intended but with slow buy-in by some institutions and with some challenges to the collaborative model. There has been significant professional development and support for learners, but faculty involved in TEL are a small proportion of overall faculty. TEL content development has been a major activity. Sustainability of courses is an issue because of the cost of maintaining and upgrading courses. Remote and Aboriginal institutions face challenges relating to accessibility. The initial lack of a strategic approach to the incorporation of TEL into institutional policies limited effectiveness early on. Project tracking has been implemented but it has provided data of limited value. Impacts and Effects: There have been significant impacts on capacity within institutions. In the last year of the plan a requirement of funding for the three largest post-secondary institutions has been the preparation of institutional plans showing priorities and actions for TEL and how they relate to broader corporate strategic plans. Inter-institutional collaboration has been enhanced and Campus Saskatchewan (the purpose of Campus Saskatchewan is to enhance collaboration among the province's postsecondary institutions in the use of information and communication technologies to increase accessibility for students and to enhance the quality of programs and services see: http://www.campussaskatchewan.ca/pdf.asp?pdf=CS_MOU.pd f) has been developed. The report notes that "While TEL certainly provides another option for rural and northern residents and for First Nat
26	Relevance to Aotearoa/NZ Context	□ Low□ Medium✓ HighExplanation:
27	Actions/Strategies Related to Ministry of Education Identifiers	 □ Policy □ Desired Outcomes □ Accessibility □ Infrastructural Support

		 ✓ Actual Outcomes ✓ Lessons Learnt ✓ Barriers and Enablers ✓ Small and Remote Communities ✓ Bilingual and Multi-cultural Comments (if necessary):
28	Actions/Strategies Identified for other Sub-groups	☐ Gender ☐ Ethnicity ☐ Indigenous People ☐ Socio-economic Status ☐ Diverse Learners ☐ Other [include details] Comments (if necessary):
29	Evaluative Comment	A full document based on sound evaluation methodology. It provides clear insight into the implementation of the TEL Action Plan and its effects. The recommendations for future work in the area are based on sound analysis.
30	Other	
31	Cross References	Alternative link to Review http://www.sasked.gov.sk.ca/branches/elearning/tel/ Technology enhanced learning (TEL). An action plan for post-secondary education and training in Saskatchewan. Phase 2. http://www.sasked.gov.sk.ca/branches/elearning/tel/

Global Picture, Local Lessons: (e)Learning Policy and Accessibility

Template No: D#1

1	Name	e-Japan priority policy program – 2003 (Summary)
2	Reference	IT Strategic Headquarters. (2003). <i>e-Japan priority policy</i> program – 2003 (Summary). Retrieved 15 November, 2005, from http://www.kantei.go.jp/foreign/policy/it/0808summary/030808gaiyo_e.pdf
3	Date	August 2003
4	Country	Japan
5	Ministry of Education Identifiers	 ✓ Policy ✓ Desired Outcomes ☐ Accessibility ☐ Infrastructural Support ☐ Actual Outcomes ☐ Lessons Learnt ☐ Barriers and Enablers ☐ Small and Remote Communities ☐ Bilingual and Multi-cultural Comments (if necessary):
6	Major Themes	Effective utilization of information technology through the development of systems to support that utilization Development of a social infrastructure to support utilization of the information technology infrastructure Phase One of the IT strategy related to infrastructure development. Phase Two relates to developing systems to utilize the infrastructure and development of the social infrastructure to support them. The policy contains "proposed measures that will be implemented to meet the aim of the IT Strategic Headquarters, Japanese government and private sector in Japan, to become the world's most advanced IT nation, 2003 – 2006 and beyond." Education is one aspect of the overall policy.
7	Category of Document	✓ Policy □ Background
8	Type of Document	 □ Policy ✓ Strategy □ Action Plan □ Draft Strategy/Policy/Action Plan □ Discussion Paper □ Evaluation Report □ Background Paper

		 □ Book □ Journal Article □ Conference Paper □ Website
9	Scale of Project	 □ Local □ Regional ✓ National ✓ Supranational
10	Budget/Funding	Not stated
11	Timeframe	Measures timetable: 2003 – 2006 Desired outcomes: Up to 2006 and beyond
12	Target Audience	 ✓ Early Childhood ✓ Compulsory Schooling ✓ Post Compulsory Schooling ✓ Higher Education ✓ Vocational Education ✓ Community-based Education ✓ Small and Remote
13	Sponsoring Agency	IT Strategic Headquarters
14	Author	Not stated
15	Contact Details	Not supplied
16	Co-Authors	Not stated
17	Aims/Objectives	The main objective is to become the world's most advanced IT nation by 2005. In addition to becoming the world's most advanced IT nation by 2005, it also aims to "continue being the world's most advanced IT nation from 2006 and beyond. P 13
		Three aims emerge within this overall objective
		(1) The implementation of "Structural Reforms and the Creation of New Values" P2
		(2) "to make life more stimulating, convenient, and worry free, and to maximize the abilities of individuals by fully utilizing the merit of IT."
		(3) To develop a "new international relations based on the creation of comprehensive and harmonious relationships centering around IT." P3
18	Definition or Conception of (e)Learning	✓ Unstated □ Broad □ Precise Comments (if necessary):
19	Areas of Priority	Six areas are identified as priority areas for policy action: 1. Roles of private and Public sectors 2. Leading Areas in the Promotion of Effective IT Utilization

3. Five Priority Policy Areas 4. Cross-cutting issues 5. Benchmarks IT Strategic Headquarters' Roles and Systems **Implementations** 20 **Key Action Points** 1. Roles of private and Public sectors The government ... is to promote the realization of the IT revolution together with the private sector by steadily implementing the policies incorporated in e-Japan Priority Policy Program-2003 through actions in the following areas: a) the furnishing of overall direction; b) the implementation of regulatory reforms and competition policies (focusing on market competition); c) motivating activity for the private sector; d) the implementation of minimum investments and gap remedies, as well as guarantee security; and e) the promotion of more efficient and advanced government and the efficient distribution of resources. P5 2. Leading Areas in the Promotion of Effective IT Utilization **Medical Services** Food Lifestyle Small and Medium Enterprises Financing Knowledge **Employment and Labour Public Service** Policies for the effective utilization of IT will be implemented in the above seven areas, which will serve as leading models for the future. **Pp 5 - 8** 3. Five Priority Policy Areas These areas support the development of social infrastructure Development of the World's Most Advanced Information and Telecommunications Network Advancement of Human Resource Development, and the Promotion of Education and learning Promotion of e-commerce. etc. Promotion of Digitization of the Administration and the Utilization of Communication Technologies in Public Areas Ensuring the Security and Reliability of Advanced Information and Communication Networks. P8 4. Cross-cutting issues order to realize an advanced information telecommunications network society through the promotion of the above mentioned seven areas and five priority policy areas, cross cutting issues which are held in common to the various

22	Procedures and Responsibility for Monitoring and Evaluation	The IT Strategic Headquarters will review the programme annually. This includes progress management, and post-project evaluations. It will oversee the specific ministries and the cabinet office involved. It will also publicize evaluation results. A body of specialists in the field of IT will assess policy implementation as well as making policy proposals as a part of the evaluation procedure. Comparisons will also be made with other countries (IT Strategic Headquarters, 2003).
21	Procedures and Responsibility for Implementation	The Measures tables noted above provide the names of the ministry/s involved in the implementation of each measure.
		1. Research and development 2. International cooperation 3. Access (digital divide) 4. Employment 5. Societal awareness of IT Pp 11 -12 5. Benchmarks Benchmarks Benchmarks, which indicate the current status of IT utilization in Japan and which quantitatively evaluate the performance status of the objectives in each area, will be clearly set in order to more accurately evaluate the progress we are making on our main objective: "to become the world's most advanced IT nation." P12 6. IT Strategic Headquarters' Roles and Systems Implementations The IT Strategic Headquarters is required to take the initiative indicating directions according to the strategies, as well as formulate policies and review the program annually. P12 A Measures Timetable serves as an Appendix to the policy statement. Measures to be undertaken are listed for the seven leading areas, the five priority policy areas and for four of the cross-cutting issues. The Appendix includes a description of each Measure and the number of Measures to be implemented from 2003 – 2006. Measures that relate specifically to tertiary education are noted in the section "Advancement of Human Resource Development, and the Promotion of Education and Learning." Tertiary education related measures refer primarily to: development of IT related courses, standards for e-learning systems, and e-learning content development and access.
		respective areas need to be addressed. The government will, therefore, aggressively deal with these issues:

23	Partnerships with Others Regarding Implementation	The Council on Economic and Fiscal Policy: "the philosophical underpinnings of the new reforms proposed in the e-Japan Strategy II, are shared by the Council on Economic and Fiscal Policy where they are considered to be one of the keys to restoring the overall health of the Japanese economy" (IT Strategic Headquarters, 2003, p.13). "The Council for Science and Technology Policy and other related councils and agencies for policy proposals and implementation. The information will be openly shared between agencies, and respective council and agency roles will be strengthened to increase overall administrative effectiveness" (ibid). A list of government agencies and Ministries is provided on page 24 of the Appendix.
24	Relationship to Other Policies	 e-Japan Priority Policy Program (March 2001) e-Japan 2002 Program (June 2001) Acceleration and Advancement of e-Japan Priority Policy Program and e-Japan 2002 Program (November 2001) e-Japan Priority Policy Program-2002 (June 2002) Introduction Para 1
25	Summary of Document	The document is a broad based national "digital" policy. Its intent is to provide the basis for the activity that will move Japan from infrastructure creation to infrastructure utilization. Higher education initiatives play a small role in the overall picture. There is considerably more emphasis on, and a greater number of Measures that relate to IT in classrooms.
26	Relevance to Aotearoa/NZ Context	☐ Low ✓ Medium ☐ High Explanation: Some of the strategies listed will be of relevance to the New Zealand government and private sector in regard to lessons learnt about effective IT utilization, economic, social (cultural) and political implications of the proposed measures and potential business and/or political opportunities between Japan and NZ as a result of this policy.
27	Actions/Strategies Related to Ministry of Education Identifiers	✓Policy □ Desired Outcomes □ Accessibility □ Infrastructural Support □ Actual Outcomes □ Lessons Learnt □ Barriers and Enablers □ Small and Remote Communities □ Bilingual and Multi-cultural Comments (if necessary):

Actions/Strategies Identified for other Sub-groups	☐ Gender ☐ Ethnicity ☐ Indigenous People ☐ Socio-economic Status ☐ Diverse Learners ☐ Other [include details] Comments (if necessary):
29 Evaluative Comment	The aim of the document is to reflect a commitment to build on current infrastructure development which was the main phase one of an IT Strategy in Japan, 2001 - 2002. The IT Strategic Headquarters presents policy in this document that outlines measures as a part of phase two, with the objective of realizing future IT objectives. This is to be achieved in collaboration with the government and private sector. It maintains a stance on the impact and importance of an advanced information telecommunications network on its society. The influence of past e-Japan policy on Japanese society is presented positively, e.g. "the Internet penetration rate grew to more than 50%" (p.1). Hence its argument for the importance of continuing efforts in the direction of new policy in the area of developing IT and its positive impact on social and economic standards nationally and globally. The underpinning assumptions are that policy which enforces particular measures in the identified key areas will bring about the desired enhancement and maintenance of social and economic standards on a national and global basis. A more general assumption is that the effective utilization of IT will help create "quality, worry-free lifestyles" (IT Strategic Headquarters, 2003, p.2).
30 Other	Since this document was prepared, two major changes have occurred. First, Government policy in the IT area has moved from a focus on e-Japan to a focus on u-Japan, where the 'u-' stands for 'ubiquitous'. This is a further move to develop those aspects of policy that relate to utilization of IT, with the major object of the u-Japan policy being to involve all citizens in IT use at any place at any time. The second major change relates to the restructuring of Japanese universities. From April 2004 the number of national Japanese Universities was to be cut from 99 (in 2002) to 89, funding was to drop at a rate of 1% per annum, and all universities were to become independent of government ministries and be governed by independent Boards of Directors. The impact of these recent changes is as yet undetermined.
31 Cross References	

Global Picture, Local Lessons: (e)Learning Policy and Accessibility

Template No: D #2

1	Name	Adapting Education to the Information Age 2004.
2	Reference	Ministry of Education & Human Resources Development (MOE & HRD), ed., & Korea Education & Research Information Service (KERIS), ed. (2004). Adapting Education to the Information Age 2004. <i>A White Paper</i> . Seoul: Information Technology Division (MOE & HRD) and International Cooperation & Public Relations Team (KERIS). Retrieved from http://english.keris.or.kr/ICSFiles/afieldfile/2005/12/15/2004WhitePap.pdf
3	Date	2004
4	Country	Korea
5	Ministry of Education Identifiers	 ✓ Policy □ Desired Outcomes ✓ Accessibility ✓ Infrastructural Support ✓ Actual Outcomes ✓ Lessons Learnt □ Barriers and Enablers □ Small and Remote Communities □ Bilingual and Multi-cultural Comments (if necessary): Unclear
6	Major Themes	e-Learning promotion, content, infrastructure, support Describes e-learning policy and its implementation in primary and secondary education, university and lifelong education.
7	Category of Document	□ Policy ✓ Background A background paper that describes policies, programs and projects developed by the Korean government and carried out in 2004 that incorporate e-learning in education with a focus on promoting e-Learning. The paper is the fourth in a series.
8	Type of Document	 □ Policy □ Strategy □ Draft Strategy/Policy

Discussion Paper Evaluation Report			
✓ Background Paper Book Journal Article Conference Paper Scale of Project Local Regional Not specifically stated Timeframe Focused on 2004 achievements but draws on work undertaken prior to that year. Target Audience ✓ Early Childhood ✓ Compulsory Schooling ✓ Post Compulsory Schooling ✓ Higher Education ✓ Vocational Education ✓ Small and Remote Agency Author Ministry of Education & Human Resources Development (MOE & HRD) Korea Education & Research Information Service (KERIS) Ministry of Education & Research Information Service (KERIS) Storea Education & Research Inform			☐ Discussion Paper
□ Book □ Journal Article □ Conference Paper			☐ Evaluation Report
Journal Article Conference Paper			✓ Background Paper
Gonference Paper Conference Paper			□ Book
Scale of Project			☐ Journal Article
Local Regional Visional Visional Visional Visional Visional Visional Regional Visional Regional Visional V			☐ Conference Paper
□ Regional ✓ National ✓ Supranational 10 Budget/Funding Not specifically stated 11 Timeframe Focused on 2004 achievements but draws on work undertaken prior to that year. 12 Target Audience ✓ Early Childhood ✓ Compulsory Schooling ✓ Post Compulsory Schooling ✓ Higher Education ✓ Vocational Education ✓ Community-based Education ✓ Small and Remote 13 Sponsoring Agency Ministry of Education & Human Resources Development (MOE & HRD) Korea Education & Research Information Service (KERIS) 14 Author Ministry of Education & Research Information Service (KERIS) Korea Education & Research Information Service (KERIS) Korea Education & Research Information Service (KERIS) 22-1 KERIS B/D Sangnim-dong, Jung-gu, Seoul 100-400 Republic of Korea Tel: +82-2-2118-1478 Fax: +82-2-2265-6672 http://www.keris.or.kr 16 Co-Authors Not stated	9	Scale of Project	
✓ National			
Supranational			
10 Budget/Funding Not specifically stated 11 Timeframe Focused on 2004 achievements but draws on work undertaken prior to that year. 12 Target Audience ✓ Early Childhood ✓ Compulsory Schooling ✓ Post Compulsory Schooling ✓ Higher Education ✓ Vocational Education ✓ Community-based Education ✓ Small and Remote 13 Sponsoring Ministry of Education & Human Resources Development (MOE & HRD) Korea Education & Research Information Service (KERIS) 14 Author Ministry of Education & Research Information Service (KERIS) 15 Contact Details Korea Education & Research Information Service (KERIS) 15 Contact Details Korea Education & Research Information Service (KERIS) 16 Co-Authors Research Information Service (KERIS) 16 Co-Authors Not stated 17 Aims/Objectives Aims/Objectives			✓ National
Timeframe Focused on 2004 achievements but draws on work undertaken prior to that year. 12 Target Audience ✓ Early Childhood ✓ Compulsory Schooling ✓ Post Compulsory Schooling ✓ Higher Education ✓ Vocational Education ✓ Community-based Education ✓ Small and Remote 13 Sponsoring Agency Ministry of Education & Human Resources Development (MOE & HRD) Korea Education & Research Information Service (KERIS) 14 Author Ministry of Education & Research Information Service (KERIS) 15 Contact Details Korea Education & Research Information Service (KERIS) 22-1 KERIS B/D Ssangnim-dong, Jung-gu, Seoul 100-400 Republic of Korea Tel: +82-2-2118-1478 Fax: +82-2-2265-6672 http://www.keris.or.kr 16 Co-Authors Not stated			✓ Supranational
Focused on 2004 achievements but draws on work undertaken prior to that year. 12 Target Audience	10	Budget/Funding	Not specifically stated
 ✓ Early Childhood ✓ Compulsory Schooling ✓ Post Compulsory Schooling ✓ Higher Education ✓ Vocational Education ✓ Community-based Education ✓ Small and Remote 13 Sponsoring Agency Ministry of Education & Human Resources Development (MOE & HRD) Korea Education & Research Information Service (KERIS) 14 Author Ministry of Education & Human Resources Development (MOE & HRD) Korea Education & Research Information Service (KERIS) 15 Contact Details Korea Education & Research Information Service (KERIS) 22-1 KERIS B/D Ssangnim-dong, Jung-gu, Seoul 100-400 Republic of Korea Tel: +82-2-2118-1478 Fax: +82-2-2265-6672 http://www.keris.or.kr 16 Co-Authors Not stated 17 Aims/Objectives 	11	Timeframe	_
 ✓ Post Compulsory Schooling ✓ Higher Education ✓ Vocational Education ✓ Community-based Education ✓ Small and Remote 13 Sponsoring Agency Ministry of Education & Human Resources Development (MOE & HRD) Korea Education & Research Information Service (KERIS) 14 Author Ministry of Education & Human Resources Development (MOE & HRD) Korea Education & Research Information Service (KERIS) 15 Contact Details Korea Education & Research Information Service (KERIS) 22-1 KERIS B/D Ssangnim-dong, Jung-gu, Seoul 100-400 Republic of Korea Tel: +82-2-2118-1478 Fax: +82-2-2265-6672 http://www.keris.or.kr 16 Co-Authors Not stated 17 Aims/Objectives 	12	Target Audience	✓ Early Childhood
 ✓ Higher Education ✓ Vocational Education ✓ Community-based Education ✓ Small and Remote 13 Sponsoring Agency Ministry of Education & Human Resources Development (MOE & HRD) Korea Education & Research Information Service (KERIS) 14 Author Ministry of Education & Human Resources Development (MOE & HRD) Korea Education & Research Information Service (KERIS) 15 Contact Details Korea Education & Research Information Service (KERIS) 22-1 KERIS B/D Ssangnim-dong, Jung-gu, Seoul 100-400 Republic of Korea Tel: +82-2-2118-1478 Fax: +82-2-2265-6672 http://www.keris.or.kr 16 Co-Authors Not stated 17 Aims/Objectives 			✓ Compulsory Schooling
✓ Vocational Education ✓ Community-based Education ✓ Small and Remote 13 Sponsoring Agency Ministry of Education & Human Resources Development (MOE & HRD) Korea Education & Research Information Service (KERIS) 14 Author Ministry of Education & Human Resources Development (MOE & HRD) Korea Education & Research Information Service (KERIS) 15 Contact Details Korea Education & Research Information Service (KERIS) 22-1 KERIS B/D Ssangnim-dong, Jung-gu, Seoul 100-400 Republic of Korea Tel: +82-2-2118-1478 Fax: +82-2-2265-6672 http://www.keris.or.kr 16 Co-Authors Not stated			✓ Post Compulsory Schooling
 ✓ Community-based Education ✓ Small and Remote 13 Sponsoring Agency Ministry of Education & Human Resources Development (MOE & HRD) Korea Education & Research Information Service (KERIS) 14 Author Ministry of Education & Human Resources Development (MOE & HRD) Korea Education & Research Information Service (KERIS) 15 Contact Details Korea Education & Research Information Service (KERIS) 22-1 KERIS B/D Ssangnim-dong, Jung-gu, Seoul 100-400 Republic of Korea Tel: +82-2-2118-1478 Fax: +82-2-2265-6672 http://www.keris.or.kr 16 Co-Authors Not stated 17 Aims/Objectives 			✓ Higher Education
 ✓ Small and Remote 13 Sponsoring Agency Ministry of Education & Human Resources Development (MOE & HRD) Korea Education & Research Information Service (KERIS) 14 Author Ministry of Education & Human Resources Development (MOE & HRD) Korea Education & Research Information Service (KERIS) 15 Contact Details Korea Education & Research Information Service (KERIS) 22-1 KERIS B/D Ssangnim-dong, Jung-gu, Seoul 100-400 Republic of Korea Tel: +82-2-2118-1478 Fax: +82-2-2265-6672 http://www.keris.or.kr 16 Co-Authors Not stated 17 Aims/Objectives 			✓ Vocational Education
13 Sponsoring Agency Ministry of Education & Human Resources Development (MOE & HRD) Korea Education & Research Information Service (KERIS) 14 Author Ministry of Education & Human Resources Development (MOE & HRD) Korea Education & Research Information Service (KERIS) 15 Contact Details Korea Education & Research Information Service (KERIS) 22-1 KERIS B/D Ssangnim-dong, Jung-gu, Seoul 100-400 Republic of Korea Tel: +82-2-2118-1478 Fax: +82-2-2265-6672 http://www.keris.or.kr 16 Co-Authors Not stated 17 Aims/Objectives			✓ Community-based Education
Agency Korea Education & Research Information Service (KERIS) Ministry of Education & Human Resources Development (MOE & HRD) Korea Education & Research Information Service (KERIS) Contact Details Korea Education & Research Information Service (KERIS) 22-1 KERIS B/D Ssangnim-dong, Jung-gu, Seoul 100-400 Republic of Korea Tel: +82-2-2118-1478 Fax: +82-2-2265-6672 http://www.keris.or.kr Co-Authors Not stated			✓ Small and Remote
 Author Ministry of Education & Human Resources Development (MOE & HRD) Korea Education & Research Information Service (KERIS) Contact Details Korea Education & Research Information Service (KERIS) 22-1 KERIS B/D Ssangnim-dong, Jung-gu, Seoul 100-400 Republic of Korea Tel: +82-2-2118-1478 Fax: +82-2-2265-6672 http://www.keris.or.kr Co-Authors Not stated 	13		
Korea Education & Research Information Service (KERIS) Korea Education & Research Information Service (KERIS) 22-1 KERIS B/D Ssangnim-dong, Jung-gu, Seoul 100-400 Republic of Korea Tel: +82-2-2118-1478 Fax: +82-2-2265-6672 http://www.keris.or.kr 16 Co-Authors Not stated	14		,
22-1 KERIS B/D Ssangnim-dong, Jung-gu, Seoul 100-400 Republic of Korea Tel: +82-2-2118-1478 Fax: +82-2-2265-6672 http://www.keris.or.kr 16 Co-Authors Not stated 17 Aims/Objectives	15	Contact Details	Korea Education & Research Information Service (KERIS)
Tel: +82-2-2118-1478 Fax: +82-2-2265-6672 http://www.keris.or.kr 16 Co-Authors Not stated 17 Aims/Objectives	15	Contact Details	·
Fax: +82-2-2265-6672			
16 Co-Authors Not stated 17 Aims/Objectives			
Not stated 17 Aims/Objectives			http://www.keris.or.kr
	16	Co-Authors	Not stated
The White Paper is a record of past government policies and also a historical record from the standpoint of education. Foreword 1	17	Aims/Objectives	The White Paper is a record of past government policies and also a historical record from the standpoint of education. Foreword 1
The White Paper includes educational content, project outcomes, process			The White Paper includes educational content, project outcomes, process

		standardization, ICT training for teachers, digital libraries, and other information related to developing the elementary and secondary school e-Learning support center. It also contains a detailed description of ICT programs in universities, higher education, lifelong education, and research. This publication provides an overview of policies for adapting ICT into education in 2004. Foreword 2
18	Definition or Conception of (e)Learning	☐ Unstated ✓ Broad (p.16) ☐ Precise Comments (if necessary):
19	Areas of Priority	The document sets out progress in Elementary and Secondary Education, University Education, Lifelong Education, Education Administration, and the area of e-Learning Globalization and International Cooperation. In the tertiary sector the following areas are accorded priority Outsourcing of the operation of the national education network Increased penetration of ICT into the university sector Ongoing development of cyber universities Increased penetration of ICT into the two-year college (vocational) sector Increased adoption of ICT by libraries to make them the centre of resource management in universities and to contribute to a core infrastructure for a national digital library. Continued development of the Research Information Service System (RISS) a national infrastructure for academic research information.
20	Key Action Points	Within the tertiary sector the following key action points: Initiate a tendering process for outsourcing of the operation of the national education network (p. 71) Continue the development of a national university administration system (pp. 74-5) Increase the number of university e-learning support centres and enhance their ability to share content and collaborate with each other (p.74) Review the status of cyber universities, strengthen their administration and improve the quality of the education they offer (p.76) Move the e-learning strategic focus of two-year colleges from establishing IT infrastructure to administration and research involving e-learning (p.78) Continue the national knowledge creation and distribution system construction project for libraries (p.82)
21	Procedures and Responsibility	Specific implementation procedures and responsibilities are not specified

	for Implementation	in the report
		However, in general the report outlines e-Learning policies directed by the Ministry of Education & Human Resources Development (MOE & HRD) that aim to create a "ubiquitous learning system" (p.3). It also describes previous educational policy relating to ICT and how these support e-Learning initiatives created in 2004.
		In addition, it briefly presents the role that the Korea Education & Research Information Service (KERIS) has in managing current e-Learning educational content and it makes a recommendation in this regard.
22	Procedures and Responsibility for Monitoring and Evaluation	Tables and diagrams that outline evaluation procedures are provided throughout the paper, such as "(Figure 2) Cyber Home Learning System" which provides information on research and monitoring in the area of ICT in education and lists the government agencies involved (p.14).
		The paper also provides detail about evaluation systems, policy, processes, and results in relationship to the key action points listed in section 20 above.
23	Partnerships with Others Regarding	A number of agencies are involved in part with particular aspects of the elearning activities set out in the report. They include:
	Implementation	Korea Institute of Curriculum & Evaluation (KICE)
		Korea Education Development Institute (KEDI)
		Korea Institute for Special Education (KISE)
		Korea Research Institute for Vocational Education and Training (KRIVET)
		EBS
		National Teaching and Learning Center – EDUNET
		Metropolitan and Provincial Offices of Education
		Teaching-Learning Support Centre
		Schools
		Teaching-Learning Help Center
24	Relationship to Other Policies	The following are a list of plans that are a result of policy outlined in this paper:
		Library Informatization Comprehension Plan -2001
		3-Year Plan for Constructing Infrastructure for Adapting ICT into Education (1997-1999)

		5-Year Plan for Education Development (1999 – 2003)
		Adapting ICT into Education Master Plan for Education Reform and Developing Human Resources (2001 – 2005)
		Adapting ICT into Education Master Plan I
		Adapting ICT into Education Master Plan II
		Development Plan for Adapting ICT into Education Evaluation System – 2003
		ICT Adapted Educational Promotion Plan – 2001
		Teachers ICT Utilization Promotion Plan – 1999
		Comprehensive Promotion Plan for College Informatization - 2002
		Plan for Adapting ICT into Collection of Historical Records owned by Universities – 2004
		e-Learning Promotion Master Plan for National Human Resources Development
25	Summary of Document	A comprehensive background paper and historical record for e-Learning policy in Korea's education system.
26	Relevance to Aotearoa/NZ Context	□ Low
		✓ Medium
		□ High
		Explanation:
		Offers a set of goals to guide e-Learning policy.
27	Actions/Strategi es Related to	
	Ministry of Education	
	Identifiers	☐ Desired Outcomes
		☐ Accessibility
		☐ Infrastructural Support
		☐ Actual Outcomes
		☐ Lessons Learnt
		☐ Barriers and Enablers
		☐ Small and Remote Communities

		☐ Bilingual and Multi-cultural
		Comments (if necessary):
		Unclear
28	Actions/Strategi es Identified for other Sub-	
	groups	□ Gender
		□ Ethnicity
		☐ Indigenous People
		✓ Socio-economic Status
		✓Diverse Learners
		Other [include details]
		Comments (if necessary):
29	Evaluative Comment	The intention of this document is reflect a commitment by the Korean government to develop and implement effective e-Learning policy to keep up with the world's rapid changing social environment. It describes how the government aims to create a developed knowledge-based society in Korea through the spread of lifelong learning information. Its ultimate goal is an education welfare state which cultivates human resources for the 21st century, ultimately strengthening national competitiveness. Its key drivers therefore are economic/vocational, political, social and pedagogical.
		It argues that e-Learning is the right direction in education to provide a range of citizens in learning, and promotes an effective learning culture community. It backs up a robust argument to support its ideas and actions with research. This evidence suggests that previous initiatives such as strong infrastructures and ICT support in the educational sector have already had a positive impact in this area. It also makes recommendations for prospective development in e-Learning policy to ensure that results in the future will be positive and on-going.
30	Other	None
31	Cross References	None listed

Global Picture, Local Lessons: (e)Learning Policy and Accessibility

Endnote No: E_Fin_#1

1	Name	National strategy for education, training and research in the information society
2	Reference	Finnish Ministry of Education. (2000). National Strategy for Education, Training and Research in the Information Society 2000-2004, from http://www.minedu.fi/julkaisut/information/englishU/2/index.html
3	Date	2000
4	Country	Finland
5	Ministry of Education Identifiers	 □ Policy □ ✓ Desired Outcomes □ Accessibility □ Infrastructural Support □ Actual Outcomes □ Lessons Learnt □ Barriers and Enablers □ Small and Remote Communities □ Bilingual and Multi-cultural Comments (if necessary):
6	Major Themes	The overall theme of the strategy, was the systematic development of learning environments based on research. The strategy was divided into six sub-themes: Information society skills for all The information society skills of educational staff The knowledge of professionals in the information and content industries The consolidation of virtual learning environments Electronic publication, classification, and distribution of research information and teaching material Strengthening the structures of the information society
7	Category of Document	☐ Policy ☐ ✓Background

Type of Document	 □ Policy □ ✓ Strategy □ Draft Strategy/Policy □ Discussion Paper □ Evaluation Report □ Background Paper □ Book □ Journal Article □ Conference Paper
Scale of Project	 □ Local □ Regional □ ✓ National □ Supranational
Budget/Funding	A total average annual funding of 50 million Euro for each year of the strategy.
Timeframe	2000-2004
Target Audience	 □ Early Childhood □ Compulsory Schooling □ Post Compulsory Schooling □ Higher Education □ Vocational Education □ Community-based Education □ Small and Remote □ ✓ All of the above as this is a national strategy
Sponsoring Agency	Ministry of Education
Author	Ministry of Education
Contact Details	P.O. Box 29 FI 00023 Government FINLAND
Co-Authors	N/A
Aims/Objectives	The national vision in the strategy was stated as: "Finnish society will develop and utilise the opportunities inherent in the information society to improve quality of life, knowledge, international competitiveness and interaction in an exemplary, versatile and sustainable way." The desired state by the end of 2004 was identified as: Educational establishments and universities as innovation centres
	Scale of Project Budget/Funding Timeframe Target Audience Sponsoring Agency Author Contact Details Co-Authors

The desired state would be evidenced by: Increasingly open education establishments serving the needs of all ages. The establishments would be innovative and have a responsibility for preventing social exclusion. There would be high quality research that was international and increasingly networked. There would be increased collaboration and coordination between educational sectors and enterprises. Networked projects would have evolved into virtual universities and schools. The use of information and communication technology strategies in education will have been integrated into curricula. The increasing amount of open and distance learning will have brought about new kinds of electronic teaching material and a market for domestic and foreign educational network services. Tutoring and counselling services including technical and pedagogical support and covering the whole of Finland will have been created to address the needs of even more extensive open and distance learning – thus ever more flexible ways of studying would be possible. Teacher education will be focused in particular on the development of virtual studies All citizens will have access to information networks, their own email address and an opportunity to contribute towards the contents of networks. 18 **Definition or** □ ✓ Unstated **Conception of** □ Broad (e)Learning □ Precise *Comments (if necessary):* Mention is made of virtual schools and virtual universities which includes high-quality open and distance learning, and high-quality information which would be available through networks and organized in a way which ensured easy access. 19 **Areas of Priority** The following points were seen as requirements for implementation of the national vision: The technical and content base within society needs to be able to support teaching and research as far as possible. People need to be able to use technology efficiently.

		Application of the principle of lifelong learning to the entire educational system needed in order to motivate and teach the population to manage, analyse, evaluate and refine the increasing flow of information and thus utilise the opportunities offered by technology. A networking society and economy that would introduce new ways of organising education and transmitting cultural values. The production of new teaching material and the opening of new distribution channels would require considerable structural and legislative reforms, the training of actors, and cooperation between the public and private sectors. A sustainable information society based on solid research. Active cooperation between various administrative fields and sectors. Success of the strategy was to be "based on citizen's equal opportunities to study and develop their own knowledge and extensively utilize information resources and educational services" To do this the establishment of a high-quality, ethically and economically sustainable mode of operation in network-based teaching and research was seen as necessary.
20	Key Action Points	Research and development that is connected with the progress of information and communication technology and the information society with universities that are at the leading edge of information technology applications Enhancement of public libraries so that all citizens have access and libraries support independent study and degree-oriented distance learning. Libraries would be networked and offer opportunities for publication of material. Networked services that support teaching and studying with basic services provided free of charge. Universities developing their own content production units and marketing products jointly in networks. Inclusion of the preparation of digital material in teacher education and training in the preparation of teaching material for practicing teachers and other interested parties.
21	Procedures and Responsibility for Implementation	The development of an action programme was the means of implementation. The uniting theme of the action programme was the development of Finnish competence and learning environments. Parts of the programme were identified as still requiring additional resources and targeted allocation. They were: 1. Information society skills for all 2. The network as a learning environment 3. Accumulating digital information capital 4. Strengthening information society structures in education, training and research

		The main focus was said to remain coherently on the spearhead projects outlined in the report <i>Quality of Life, Knowledge and Competitiveness</i> of the Finnish National Fund for Research and Development (Sitra), namely <i>Cultural and information products and services, Electronic learning environments</i> and, to some extent <i>Knowledge-intensive work</i> and <i>The local information society</i> .
22	Procedures and Responsibility for Monitoring and Evaluation	The Department of Education and Science Policy of the Ministry of Education was in charge of the coordination of the national strategy. Evaluation was both external and internal. External referees included the Finnish Higher Education Evaluation Council, the National Board of Education, the Finnish National Fund for Research and Development (Sitra) and the Council for the Promotion of the Information Society through Education, Research and Culture. Monitoring and evaluation was to be integrated into a national strategy. It was seen as important to emphasise the continuous self-evaluation of the universities, polytechnics and other educational establishments. In addition the Ministry of Education's negotiations for target outcomes were also seen as a means of steering, monitoring and evaluating the implementation of the strategy.
23	Partnerships with Others Regarding Implementation	None other than those already noted with other national bodies or groups.
24	Relationship to Other Policies	Not stated.
25	Summary of Document	A background paper that provided a broad overview and some detail about strategies that had been employed to implement the national strategy
26	Relevance to Aotearoa/NZ Context	 □ Low □ ✓ Medium □ High Explanation: At a national level there is relevance but points specific to tertiary educational are general.
27	Actions/Strategies Related to Ministry of Education Identifiers	 □ Policy □ ✓ Desired Outcomes □ Accessibility □ Infrastructural Support □ Actual Outcomes □ Lessons Learnt

		 □ Barriers and Enablers □ Small and Remote Communities □ Bilingual and Multi-cultural Comments (if necessary): Mention is made that because of the long distances and the small population, educational establishments in Finland are relatively small and scattered far from each other. This increases the cost of education. Information networks offer new opportunities to support small educational establishments.
28	Actions/Strategies Identified for other Sub-groups	 □ Gender □ Ethnicity □ Indigenous People □ Socio-economic Status □ Diverse Learners □ Other [include details] Comments (if necessary):
29	Evaluative Comment	Useful for the overview provided and for identification of similar national approaches.
30	Other	
31	Cross References	

Global Picture, Local Lessons: (e)Learning Policy and Accessibility

Endnote No: E_ICE_#1

1	Name	Advantage for the future
2	Reference	Ministry of Education, Science and Culture. (2001). Advantage for the Future: Project Plan of the Ministry of Education, Science and Culture for e-Learning 2001-2003, from http://bella.mrn.stjr.is/utgafur/english2.pdf
3	Date	2001
4	Country	Iceland
5	Ministry of Education Identifiers	 □ Policy □ ✓ Desired Outcomes □ Accessibility □ Infrastructural Support □ Actual Outcomes □ Lessons Learnt □ Barriers and Enablers □ Small and Remote Communities □ Bilingual and Multi-cultural Comments (if necessary):
6	Major Themes	Learning and teaching Educational Content Equipment Educational gateways
7	Category of Document	□ Policy□ ✓ Background
8	Type of Document	 □ Policy □ Strategy □ ✓ Draft Strategy/Policy □ Discussion Paper □ Evaluation Report □ Background Paper □ Book □ Journal Article □ Conference Paper
9	Scale of Project	 □ Local □ Regional □ ✓ National □ Supranational

10	Budget/Funding	No information given
11	Timeframe	2001-2003
12	Target Audience	 □ Early Childhood □ ✓ Compulsory Schooling □ Post Compulsory Schooling □ Higher Education □ Vocational Education □ Community-based Education □ Small and Remote □ Main focus is stated as compulsory schooling but there is some reference to post compulsory/higher education.
13	Sponsoring Agency	Ministry of Education, Science and Culture
14	Author	Ministry of Education, Science and Culture
15	Contact Details	Ministry of Education, Science and Culture Solvholsgata 4, 150 Reykjavik, Iceland Tel: +354 560 9500 Fax: +354 562 3068 Email: postur@mm.syjr.is Webpage: www.ministryofeducation.is
16	Co-Authors	None
17	Aims/Objectives	To utilize the features of the internet as an information utility for schooling.
18	Definition or Conception of (e)Learning	 ☐ ✓Unstated ☐ Broad ☐ Precise Comments (if necessary): Does mention distributed learning
19	Areas of Priority	The utilization of new technology in schooling and providing an advantage for students in the knowledge society of the future.
20	Key Action Points	Initiatives in: Learning and teaching. Teacher education: The focus will be on changed teaching practices in individual subjects with continuing education courses that take into account the needs of various professional areas. Distributed learning and teleprocessing: Distributed learning will be bolstered so that students can engage in diverse studies regardless of where they live. Research and development in the field of teleprocessing will be augmented.

The supply of fully developed distance studies leading to university degrees will be increased.

Specialised education in ICT: The ties between studies in ICT and the business community will be increased and emphasis placed on diversity in the supply of new studies in secondary schools and universities.

Foreign collaboration: More purposeful co-operation will be promoted with other countries in the field of distributed education. Individuals and schools will be supported for further participation in foreign collaboration on the utilisation of ICT.

Content

Digital educational material: The production and adaptation of teaching software for the Internet will be encouraged. Digital material at libraries and other

cultural organisations will be adapted to the needs of the educational system.

The preparation of instructions on the use of digital educational material for

teaching will be supported.

Quality supervision: In co-operation with teachers, the quality of educational material will be evaluated. Information will be provided on how suitable educational material is vis-à-vis the objectives of curriculum guides. Means will be devised to inform users about quality criteria.

Equipment

Connections: Secondary schools, universities and continuing education organisations will be linked on a high-speed network. There will be wireless networks in secondary schools and universities. All classrooms in primary schools will have access to the Internet. Experience in pilot schools from experiments with portable computers and wireless networks will be utilized to find realistic and efficient means in these matters for other secondary schools.

Equipment: Support will be provided for the use of diverse equipment in schooling, such as portable computers, electronic books and mobile telephones.

Experiments will be done with alterations to school buildings to support distributed education and reduce the need for new construction.

Educational gateways

Educational gateway: menntagatt.is A database with information on educational material. Dissemination and exchange of educational material

Connection between educational material and curriculum goals. Curriculum guide gateway: An interactive platform providing access to curriculum guides for all school levels (namskra.is). The possibilities include working with objectives and obtaining material related to them as well as instruction on the Internet.

Library system: All libraries in Iceland will be connected in a

		single library system. Accessibility to books and diverse digital material. Metadata recording: The producers of educational material will be able to record it according to standards. Suitable recording forms with accessible instructions will be published. Information utilities: Detailed information on schooling, studies and teaching at all school levels will be accessible on the Internet.
21	Procedures and Responsibility for Implementation	Responsibility seems to rest with the Ministry of Education
22	Procedures and Responsibility for Monitoring and Evaluation	Not stated
23	Partnerships with Others Regarding Implementation	None noted
24	Relationship to Other Policies	An extension of the Ministry's policy on ICT enabled by the opening of the educational gateway menntagatt.is.
25	Summary of Document	A very brief overview. The precise area of educational focus for the initiatives is unclear.
26	Relevance to Aotearoa/NZ Context	☐ ✓Low ☐ Medium ☐ High Explanation:
27	Actions/Strategies Related to Ministry of Education Identifiers	 □ Policy □ ✓ Desired Outcomes □ Accessibility □ Infrastructural Support □ Actual Outcomes □ Lessons Learnt □ Barriers and Enablers □ Small and Remote Communities □ Bilingual and Multi-cultural Comments (if necessary):

28	Actions/Strategies Identified for other Sub-groups	☐ Gender ☐ Ethnicity ☐ Indigenous People ☐ Socio-economic Status ☐ Diverse Learners ☐ Other [include details] Comments (if necessary):
29	Evaluative Comment	Strategies common to other locations may add to the comprehensive picture that will be built up through the examination of a range of documents but on its own this document is of limited value and the focus is school level.
30	Other	
31	Cross References	

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Endnote No: E_ICE_#2

1	Name	Risk with responsibility
2	Reference	Ministry of Education, Science and Culture, (2005). Risk with Responsibility: Policy for ICT in education, science and culture 2005 - 2008. Retrieved 11 November, 2005, from http://bella.stjr.is/utgafur/risk.pdf
3	Date	2005
4	Country	Iceland
5	Ministry of Education Identifiers	
6	Major Themes	Access to the information society ICT infrastructure Digital content New opportunities and innovative practices Ethics and net safety
7	Category of Document	□ ✓ Policy□ Background
8	Type of Document	
9	Scale of Project	 □ Local □ Regional □ ✓ National □ Supranational

10	Budget/Funding	Government funding for the policy objectives
11	Timeframe	2005-2008
12	Target Audience	 □ Early Childhood □ ✓ Compulsory Schooling □ ✓ Post Compulsory Schooling □ ✓ Higher Education □ ✓ Vocational Education □ ✓ Community-based Education □ ✓ Small and Remote
13	Sponsoring Agency	The Icelandic Ministry of Education, Science and Culture
14	Author	The Icelandic Ministry of Education, Science and Culture
15	Contact Details	Icelandic Ministry of Education, Science and Culture Solvholsgata 4 150 Reykjavik Iceland Telephone: +354 545 9500 Fax: +354 562 3068 E-mail: postur@mrn.stjr.is Webpage: http://ministryofeducation.is/
16	Co-Authors	None
17	Aims/Objectives	Each section of the policy document has specific objectives . The section on access has objectives that relate to: Equal opportunity ICT for youth and sports Icelandic language as a priority The section on ICT infrastructure has objectives that relate to: Hardware and software New media and digital television The section on Digital content has objectives that relate to: Digital libraries and databases Digitisation of cultural content Digital preservation
		The section on ethics and asafety has objectives that relate to: Copyright The wellbeing of children

18	Definition or	□ ✓Unstated
	Conception of	☐ Broad ☐ Precise
	(e)Learning	
		Comments (if necessary):
		Information literacy is mentioned and defined as the ability to utilize computers and information technology to acquire
		utilize computers and information technology to acquire information and knowledge as well as the ability to work with
		information in a critical and creative way.
19	Areas of Priority	The areas of priority relate to the themes already stated. They
	Areas of Friority	are:
		Access to the information society
		ICT infrastructure
		Digital content
		New opportunities and innovative practices
		Ethics and safety
20	Key Action Points	Each of the areas of priority has stated objectives and a set of
		action points.
		Action points that relate to tertiary and lifelong education are:
		For access to the information society: Teachers encouraged to
		develop their IT skills with awards and IT qualifications, teacher education in ICT strengthened, continuing education in
		ICT for librarians, closer cooperation of libraries, schools and
		lifelong learning centers to develop ICT education, improve
		services for learners and public by cooperation of libraries and
		lifelong learning centers in rural areas, develop analytical skills
		in ICT for schools to evaluate ICT competency among teachers
		and students, seek cooperation of government agencies, trade unions and the business sector to enhance the public's and
		labour market's awareness of the importance of ICT, establish
		active cooperation with local authorities for increasing the
		opportunities of primary and compulsory school teachers for
		continuing education in ICT, account taken of needs of those
		with visual and hearing impairment and those with disabilities,
		the elderly and invalids, closer cooperation of educational establishments in the use of ICT for people of foreign descent
		and bilingual children, public libraries to take more account of
		people with foreign descent and their information service
		needs, increase the rural population's access to ICT education,
		support for cooperation between universities, research centers
		and companies in (Icelandic) language technology, research in
		Icelandic language technology and ICT.
		Action points that relate to ICT infrastructure and tertiary/lifelong education are:
		Support cooperation between Icelandic universities and research centres to join projects through international computer grids.
		Cooperate with foreign schools and computer grid projects to
		connect Icelandic educational, cultural and scientific institutions.
		Cooperation among Lifelong educational centres and libraries in

rural areas to run and service high-speed networks for the public. Establish cooperation between governmental agencies and highspeed university networks to integrate and share high-speed network resources and overseas connections. Support the installation of wireless networks in all the major public libraries. Cooperation between institutions and businesses, creation of a permanent basis of cooperation between schools, teacher training institutions and private companies to develop standards and interoperability between information systems. Governmental agencies, both national and local, examine closely how they can use digital television for e-government and e-democracy. Support the cooperation of universities, companies and creative artists and designers for research and development in new media and innovative uses of ICT. Support research and development in learning materials. Support cooperation between universities in online e-learning resources.

Action points that relate to digital content and tertiary/lifelong education are:

Support cooperation among research centres for online publication of research data. Develop metadata guidelines for describing research data. The Icelandic Library Consortium used to increase the public's access to scientific and scholarly research databases. Develop guidelines for publication of research data from public research centres. Establish a working group to make recommendations regarding standardisation, publication and preservation of digital collections, and review the role of public libraries, archives, the Icelandic Library Consortium, specialised scholarly libraries and other public institutions. Develop a single web based search interface for foreign databases. Raise awareness among the public about the possibilities of digital collections. Support cooperation between all education sectors for production of digital content.

Action points that relate to opportunities and innovative practices and tertiary/lifelong education are:

Participation in international research and development projects.

Action points that relate to digital ethics and safety and tertiary/lifelong education are:

Clear guidelines on copyright. Research on the effects of computer use and internet on children.

21 Procedures and Responsibility for Implementation

Presumably would follow the established pattern – policies put forward are enacted by the Iceland's governmental IT task force. Legal framework established and an action plan developed. The Ministry will also promote cooperation between groups.

22	Procedures and Responsibility for Monitoring and Evaluation	The Ministry
23	Partnerships with Others Regarding Implementation	Partnerships (cooperation) across sectors is clearly sought.
24	Relationship to Other Policies	Not elaborated.
25	Summary of Document	This is Iceland's Ministry of education's policy on ICT in education, culture and science for 2005-2008. the policy is outlined in five categories: access to the information society; infrastructure; digital content; innovative practices and net safety. In each of the five categories vision, status, objective and actions are outlined.
26	Relevance to Aotearoa/NZ Context	☐ Low ☐ ✓ Medium ☐ High Explanation: There are similarities in the countries. Both are small. Both have remote communities although isolation in parts of Iceland more challenging. Both are emphasizing the maintenance of an indigenous culture and their language. In both countries the populations are quite advanced users of technology.
27	Actions/Strategies Related to Ministry of Education Identifiers	
28	Actions/Strategies Identified for other Sub-groups	☐ ✓Gender (a focus on girls) ☐ Ethnicity ☐ Indigenous People ☐ Socio-economic Status ☐ Diverse Learners ☐ Other [include details] Comments (if necessary):

29	Evaluative Comment	Iceland appears to be taking a systematic and planned approach to the use of ICT in education. This policy builds on two earlier policy papers (1996 and 2001). There seems to have been a focus on building infrastructure and information systems. There also seems to be an acknowledgement that these actions by themselves do not lead to progress – and to change in educational practice. The document places a marked emphasis on cooperation – and it is to be presumed from the desire to see this and the central funding model that funding will be tied to this emphasis.
30	Other	
31	Cross References	

Global Picture, Local Lessons: (e)Learning Policy and Accessibility

Endnote No: E_SWE_#1

1	Name	An information society for all - a publication about the Swedish IT policy.
2	Reference	Ministry of Industry Employment and Communications. (2004). An information society for all - a publication about Swedish IT policy. Retrieved 02/08/05, from www.sweden.gov.se/content/1/c6/01/84/48/99740a84.pdf
3	Date	2004
4	Country	Sweden
5	Ministry of Education Identifiers	
6	Major Themes	The development of infrastructure for the development of IT capability in Sweden as a whole. It focuses on the development of skills, accessibility and confidence. It is applicable to all areas of education.
7	Category of Document	□ Policy□ ✓ Background
8	Type of Document	 □ Policy □ Strategy □ ✓ Draft Strategy/Policy □ Discussion Paper □ Evaluation Report □ ✓ Background Paper □ Book □ Journal Article □ Conference Paper
9	Scale of Project	 □ Local □ Regional □ ✓ National □ Supranational

10	Budget/Funding	Government funded only in areas deemed to be in the public interest where the market is unable to foster appropriate development.
11	Timeframe	Not specified but the document outlines work in progress and current initiatives.
12	Target Audience	 □ Early Childhood □ Compulsory Schooling □ Post Compulsory Schooling □ Higher Education □ Vocational Education □ Community-based Education □ Small and Remote □ ✓ All areas listed above as this document has a national focus
13	Sponsoring Agency	The Ministry of Industry, Employment and Communications
14	Author	The Ministry of Industry, Employment and Communications
15	Contact Details	www.industry.ministry.se
16	Co-Authors	None
17	Aims/Objectives	For Sweden to become the first country to be an information society for all. To promote growth, employment, regional development, democracy and justice, quality of life, equal opportunity, gender equality and cultural diversity, efficient public administration and a sustainable society.
18	Definition or Conception of (e)Learning	 ☐ ✓Unstated ☐ Broad ☐ Precise Comments (if necessary):
19	Areas of Priority	Includes a special focus on priority fields – greater accessibility to the technology and services of the information society, greater public confidence in IT and greater skills.
20	Key Action Points	Building of national infrastructure, skills, access and confidence.
21	Procedures and Responsibility for Implementation	Proceeds through a combination of Government policies and market forces.

22	Procedures and Responsibility for Monitoring and Evaluation	Government responsible for ensuring that infrastructure is available in all parts of the country – eg broadband. This may be achieved through encouraging competition.
23	Partnerships with Others Regarding Implementation	Primarily seen as a partnership with the market but supported by a range of initiatives. National Action Plan for ICT in Schools (ITiS) which ran from 1998-2003 had provided skills enhancement training for half of all teachers, facilitators and school heads. Swedish Centre for Flexible Learning (CFL) began in 2002 with the task of fostering accessibility to municipal adult education and other adult education. Swedish Net University Agency established 2002 to promote accessibility to IT-supported distance learning in higher education. Also special maths commission set up. Special programmes run by the Swedish Business development Agency, NUTEK. Ministry of Justice special working group to monitor and promote the development of democratic processes via the use of IT.
24	Relationship to Other Policies	IT Bill (2000) provided funding for broadband. Also identified IT skills as a Government priority. Electronic Communications Act (2003). Aims to create conditions for effective competition and forces companies with a dominant market position to allow competitors to access their networks. Government bills and acts generally are linked to or based on EU objectives and guidelines. There are also Nordic links and some International links detailed.
25	Summary of Document	A background paper that gives a useful overview of a centrally driven policy approach to developing an IT society.
26	Relevance to Aotearoa/NZ Context	 □ Low □ Medium □ ✓ High Explanation: Relevance is high when considering a national approach. Small country with central government. Relevance to this project medium as focus is broad and across all sectors of education.
27	Actions/Strategies Related to Ministry of Education Identifiers	 ✓ Policy ✓ Desired Outcomes Accessibility ✓ Infrastructural Support Actual Outcomes

		 □ Lessons Learnt □ Barriers and Enablers □ Small and Remote Communities □ Bilingual and Multi-cultural Comments (if necessary):
28	Actions/Strategies Identified for other Sub-groups	 □ Gender □ Ethnicity □ Indigenous People □ Socio-economic Status □ Diverse Learners □ ✓ Other [include details] Comments (if necessary): IT Bill provides training support for individuals with special needs, the elderly and people with disabilities.
29	Evaluative Comment	Interesting background/policy paper but not much specific detail on tertiary education.
30	Other	
31	Cross References	

Global Picture, Local Lessons: (e)Learning Policy and Accessibility

Endnote No: E_SWE_#2

1	Name	National Centre for Flexible Learning
2	Reference	Nationellt Centrum for Flexibelt Larande. The Swedish Agency for Flexible Learning, from http://www.cfl.se/?sid=60
3	Date	Website last updated 21-7-2005 (Swedish Agency for Flexible Learning)
4	Country	Sweden
5	Ministry of Education Identifiers	 □ Policy □ ✓ Desired Outcomes □ ✓ Accessibility □ Infrastructural Support □ Actual Outcomes □ Lessons Learnt □ Barriers and Enablers □ Small and Remote Communities □ Bilingual and Multi-cultural Comments (if necessary): Within the aims of CFL projects (and funding) are used to target particular groups and address their specific needs.
6	Major Themes	Promotion of life-long learning through flexible learning where students have the opportunity to choose time, place, pace and structure of their studies.
7	Category of Document	□ Policy□ ✓ Background
8	Type of Document	 □ Policy □ ✓Strategy □ Draft Strategy/Policy □ Discussion Paper □ Evaluation Report □ Background Paper □ Book □ Journal Article □ Conference Paper
9	Scale of Project	 □ Local □ Regional □ ✓ National □ Supranational
10	Budget/Funding	Funding is received from the government.
11	Timeframe	Ongoing – but projects are time bound.

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Definition or Conception of (e)Learning	☐ Unstated☐ Broad☐ ✓ Precise Comments (if necessary): Focus is on flexible learning which is defined as: a form of study that concentrates on the individual and therefore takes great account of the student's wishes and capabilities. Flexible learning gives the students the opportunity to choose the time, place, pace and structure of their studies.
Areas of Priority	To support and promote the development of flexible learning within adult education by means of
	distributing project funds for the purpose of increasing the pedagogic and methodical level of flexible learning with regard to personnel, materials and technology
	 working with and through target groups in projects and networks
	 acting as a resource in local development work through mentoring, providing direct advice and consultancy activities.
	To increase knowledge of distance education and flexible learning To offer flexible distance education courses.
Key Action Points	Development of learning centers
	Development of teaching aids
	Act as lobbyist, initiator and partner, mainly in collaboration with associated authorities and organizations.
Procedures and	Funds distributed to municipalities
Responsibility for Implementation	CFL's task to develop teaching aids (specific 2003/4 focus on teaching aids using sign language)
Procedures and Responsibility for Monitoring and Evaluation	CFL gathers research results, experiences in the fields of distance education and flexible learning and disseminates them to customers. Experiences from projects are followed up and passed on to educational providers.
	Dissemination is mainly through website but seminars, conferences are also arranged and there are links to national and international networks.
Partnerships with Others Regarding Implementation	Development of teaching aids for adults with hearing disabilities using sign language is in collaboration with the Swedish Institute for Special Needs Education
Relationship to Other Policies	The CFL is a government agency and as such implements government policy.
	Conception of (e)Learning Areas of Priority Key Action Points Procedures and Responsibility for Implementation Procedures and Responsibility for Monitoring and Evaluation Partnerships with Others Regarding Implementation Relationship to

25	Summary of Document	The document provides a useful insight into how a government funded agency can work in partnership with institutions and agencies in the field of adult education. It appears that care is taken to complement courses already offered by municipalities. There is also a focus on supporting providers with material and resources so they can reach disadvantaged groups.
26	Relevance to Aotearoa/NZ Context	□ Low□ ✓ Medium□ HighExplanation:
27	Actions/Strategies Related to Ministry of Education Identifiers	 □ Policy □ ✓ Desired Outcomes □ ✓ Accessibility □ Infrastructural Support □ Actual Outcomes □ Lessons Learnt □ Barriers and Enablers □ Small and Remote Communities □ Bilingual and Multi-cultural Comments (if necessary):
28	Actions/Strategies Identified for other Sub-groups	 □ Gender □ Ethnicity □ Indigenous People □ Socio-economic Status □ ✓ Diverse Learners □ ✓ Other [include details] Adults Comments (if necessary):
29	Evaluative Comment	A reasonably classic model for dissemination of government funding in a targeted manner.
30	Other	
31	Cross References	

Global Picture, Local Lessons: (e)Learning Policy and Accessibility

Template No: F#1

1	Name	Australian Flexible Learning Framework for the National Vocational Education and Training (VET) system 2000-2004
2	Reference	ANTA (2000). Australian Flexible Learning Framework for the National Vocational Education and Training (VET) system 2000-2004. Retrieved November 7, 2005 from http://www.flexiblelearning.net.au/aboutus/aflframework2000.pdf
3	Date	2000
4	Country	Australia
5	Ministry of Education Identifiers	 □ Policy ✓ Desired Outcomes (5 broad goals set out with 6 accompanying measures of success. Each goal is supported with a number of strategies and performance measures.) □ Accessibility ✓ Infrastructural Support □ Actual Outcomes □ Lessons Learnt □ Barriers and Enablers □ Small and Remote Communities □ Bilingual and Multi-cultural Comments (if necessary): This framework is relevant to only one part of the tertiary education sector – the VET sector
6	Major Themes	Five goals represent the major themes of this framework: Creative, capable people Supportive technological infrastructure World-class online content development, applications and services Enabling policies Problem solving regulation
7	Category of Document	✓ Policy□ Background

8	Type of Document	 □ Policy ✓ Strategy □ Action Plan □ Draft Strategy/Policy/Action Plan □ Discussion Paper □ Evaluation Report □ Background Paper □ Book □ Journal Article □ Conference Paper □ Website
9	Scale of Project	 □ Local □ Regional ✓ National □ Supranational
10	Budget/Funding	Not specified
11	Timeframe	2000-2004
12	Target Audience	 □ Early Childhood □ Compulsory Schooling □ Post Compulsory Schooling □ Higher Education ✓ Vocational Education □ Community-based Education □ Small and Remote
13	Sponsoring Agency	Australian National Training Authority (ANTA)
14	Author	ANTA
15	Contact Details	ANTA GPO Box 3120 Brisbane QLD 4001 Ph +61 7 3246 2300 Fax +61 7 3246 2490
16	Co-Authors	N/A
17	Aims/Objectives	See section 6 above
18	Definition or Conception of (e)Learning	 ✓ Unstated □ Broad □ Precise Comments (if necessary): uses the term flexible learning. One (of 7) principles is "Strategic use of new learning technologies"

19	Areas of Priority	Noted within the Goals of the Framework, see section 6.
20	Key Action Points	14 strategies are noted in this document
21	Procedures and Responsibility for Implementation	No indication of overall accountability procedures in this document. The Framework was outworked into a series of related projects
22	Procedures and Responsibility for Monitoring and Evaluation	Not indicated except for statements of performance measures for each goal.
23	Partnerships with Others Regarding Implementation	Not indicated at this level of document. Collaboration through strategic partnerships is noted as a guiding principle.
24	Relationship to Other Policies	This document arose from a series of initiatives which commenced in 1995 and were based in the desire to make vocational education and training more flexible. As well as setting out the Framework, this document sets out that background (p.5). This document also notes that it is supported by a series of annual implementation plans.
25	Summary of Document	The document sets out a rationale for its development and direction. It provides a justification for national collaboration across state boundaries and argues (p.9) that Governments have a catalytic role to play in the development of a coordinated VET system. The Framework itself is brief (7 pages plus endnotes). It comprises a set of 7 guiding principles; a set of 5 goals; a set of 6 measures of overall success; and, more detailed statements of strategies necessary to attain the goals and particular performance measures to assess the outcomes of the projects related to each strategy.
26	Relevance to Aotearoa/NZ Context	☐ Low ☐ Medium ✓ High Explanation: The nature of this national e-learning framework for Vocational training in the tertiary education sector and similarities between the NZ and Aus. economies suggest that this document has considerable relevance to NZ.
27	Actions/Strategies Related to Ministry of Education Identifiers	 □ Policy ✓ Desired Outcomes ✓ Accessibility ✓ Infrastructural Support □ Actual Outcomes □ Lessons Learnt ✓ Barriers and Enablers □ Small and Remote Communities □ Bilingual and Multi-cultural Comments (if necessary):

28	Actions/Strategies Identified for other Sub-groups	☐ Gender ☐ Ethnicity ☐ Indigenous People ☐ Socio-economic Status ☐ Diverse Learners ☐ Other [include details] Comments (if necessary):
29	Evaluative Comment	Clearly constructed and argued. As a major Framework document set in the context of the earlier work it provides an excellent overview of the directions and strategies to be pursued in working toward the over-arching goals.
30	Other	
31	Cross References	Evaluation of the Australian Flexible Learning Framework 2000 – 2004.

Global Picture, Local Lessons: (e)Learning Policy and Accessibility

Template No: F #2

1	Name	2005 Australian Flexible Learning Framework for the national vocational education and training system 2005 Framework Business Plan
2	Reference	ANTA (2004). 2005 Australian Flexible Learning Framework for the national vocational education and training system. 2005 Framework Business Plan. Retrieved November 11, 2005 from http://www.flexiblelearning.net.au/aboutus/resources/Business_Plan_2005_final_website_050210.pdf
3	Date	2004
4	Country	Australia
5	Ministry of Education Identifiers	 □ Policy ✓ Desired Outcomes □ Accessibility □ Infrastructural Support □ Actual Outcomes □ Lessons Learnt □ Barriers and Enablers □ Small and Remote Communities ✓ Bilingual and Multi-cultural Comments (if necessary):
6	Major Themes	Sustainability of practices Development of synergies between activities Strong accountability focus (sub theme of tighter management) Note also that the document now is quite explicit in its reference to the broader national strategy for VET.
7	Category of Document	✓ Policy □ Background
8	Type of Document	 □ Policy ✓ Strategy □ Action Plan □ Draft Strategy/Policy/Action Plan □ Discussion Paper □ Evaluation Report □ Background Paper □ Book □ Journal Article

		☐ Conference Paper ☐ Website
9	Scale of Project	☐ Local ☐ Regional ✓ National ☐ Supranational
10	Budget/Funding	Funding for 2005 is \$AU15m
11	Timeframe	The Business plan is for the 2005 Framework covering the period 2005 – 2007. A note to the document indicates that "commitment beyond 2005 for national collaboration for a continued national strategy such as the Framework rests with the (Federal) Ministers and has yet to be considered.
12	Target Audience	 □ Early Childhood □ Compulsory Schooling □ Post Compulsory Schooling □ Higher Education ✓ Vocational Education □ Community-based Education □ Small and Remote
13	Sponsoring Agency	Australian National Training Authority
14	Author	Further information can be obtained from Jenny Ahern Executive Officer, Flexible Learning Advisory Group
15	Contact Details	Ph +61 3 9637 2672 Email: ahern.julie.l@edumail.vic.gov.au
16	Co-Authors	ANTA GPO Box 3120 Brisbane QLD 4001 Ph +61 7 3246 2300 Fax +61 7 3246 2490
17	Aims/Objectives	The Framework "is organized around one goal, one purpose and three components" (p.1). The goal is: A flexible VET system which meets diverse client needs and helps them succeed in a global environment The purpose is: To increase the sustainable uptake of quality e-learning in VET The components are: Component 1 Client Engagement

		To strengthen the role of industry, individuals and communities in shaping VET provision to meet their needs
		Component 2
		Provide Flexibility and
		Innovation
		To build the capacity of the VET workforce and VET organisations to use information and communications technologies (ICT) to improve service delivery
		Component 3
		VET System Support
		To improve the policy, regulatory and system environment and VET business models which affect the uptake of e-learning
18	Definition or Conception of (e)Learning	✓ Unstated □ Broad □ Precise Comments (if necessary): Note the explicit reference to elearning in the Purpose statement and in Component 3. This term was not used once in the 2000-2004 Framework.
10	A	
19	Areas of Priority	Four programmes of action are noted.
		Programme 1: Client engagement comprises 3 projects
		Programme 2: Resources and innovation comprises 4 projects
		Programme 3: Capability building comprises 4 projects
		Programme 4: VET system support comprises 4 projects
20	Key Action Points	The projects are:
		Programme 1: Industry engagement; Indigenous engagement; E-learning creative community partnerships
		Programme 2: New practices in flexible learning; Quality e- learning resources; E-learning for target learner groups; Learning object repository (LOR) network
		Programme 3: LearnScope; Networks of the Australian flexible learning community; VET e-learning international; knowledge sharing services
		Programme 4: E-learning benchmarking; Research and policy advice; Access to broadband; National communication
21	Procedures and Responsibility for Implementation	Each project has a contact person – presumably responsible for progressing implementation.
22	Procedures and Responsibility for Monitoring and Evaluation	Each project has a set of project outputs and a set of project performance indicators.

23	Partnerships with Others Regarding Implementation	None
24	Relationship to Other Policies	This 2005 Framework Business Plan indicates its explicit support for the current national VET policy: Shaping our Future: Australia's National Strategy for Vocational Education and Training (VET) 2004-2010 (see http://antapubs.dest.gov.au/publications/publication.asp?qsID=488) and acknowledges that it draws from the experiences of implementing the 2000 – 2004 Framework.
25	Summary of Document	This document sets out what it describes as a "streamlined design" for implementation of a set of projects designed to achieve its declared purpose. The document is more strongly demand-side strategy than previously as a result of the experience from and evaluation of the 2000-2004 Framework. It is stressing targeting of supply-side initiatives and is focused on accountability and sustainability. The threads of the previous framework can still be seen but with a stronger focus on building the demand for e-learning.
26	Relevance to Aotearoa/NZ Context	☐ Low ☐ Medium ✓ High Explanation:
27	Actions/Strategies Related to Ministry of Education Identifiers	 □ Policy □ Desired Outcomes ✓ Accessibility ✓ Infrastructural Support □ Actual Outcomes □ Lessons Learnt □ Barriers and Enablers □ Small and Remote Communities ✓ Bilingual and Multi-cultural Comments (if necessary):
28	Actions/Strategies Identified for other Sub-groups	☐ Gender ☐ Ethnicity ✓ Indigenous People ☐ Socio-economic Status ☐ Diverse Learners ☐ Other [include details] Comments (if necessary):

		Contains a project for indigenous engagement that seeks to strengthen the role of indigenous people and communities in shaping vocational education and training provision in very remote, remote, provincial and urban contexts.
29	Evaluative Comment	Clearly developed business plan. Good follow-on from 2000-2004 Framework. Well articulated. Conceptually clear except for the use of three 'components' with four project areas. The match is hard to determine. Acknowledges the supply/demand side issues that are starting to arise in other documents e.g. the eEurope action plan (see http://europa.eu.int/information_society/eeurope/2002/action_pulan/mid-term_review/what_is_eeurope/index_en.htm)
30	Other	
31	Cross References	2000 – 2004 Framework
		Evaluation of the Australian Flexible Learning Framework 2000 - 2004

Global Picture, Local Lessons: (e)Learning Policy and Accessibility

Template No: F #3

1	Name	Australian Flexible Learning Framework Implementation plan 2004
2	Reference	ANTA (2003). Australian Flexible Learning Framework Implementation plan 2004. Retrieved November 14, 2005 from http://www.flexiblelearning.net.au/aboutus/implementationplan 2004.pdf
3	Date	2004
4	Country	Australia
5	Ministry of Education Identifiers	 □ Policy ✓ Desired Outcomes ✓ Accessibility ✓ Infrastructural Support ✓ Actual Outcomes ✓ Lessons Learnt □ Barriers and Enablers □ Small and Remote Communities ✓ Bilingual and Multi-cultural Comments (if necessary):
6	Major Themes	The goals of the 2000-2004 Framework stand as major themes Creative, capable people Supportive technological infrastructure World-class online content development, applications and services Enabling policies Problem solving regulation
7	Category of Document	✓ Policy □ Background
8	Type of Document	 □ Policy ✓ Strategy □ Action Plan □ Draft Strategy/Policy/Action Plan □ Discussion Paper □ Evaluation Report □ Background Paper □ Book □ Journal Article □ Conference Paper □ Website

9	Scale of Project	□ Local□ Regional
		✓ National
		☐ Supranational
10	Budget/Funding	\$AU15m
11	Timeframe	For 2004
12	Target Audience	 □ Early Childhood □ Compulsory Schooling □ Post Compulsory Schooling □ Higher Education ✓ Vocational Education □ Community-based Education □ Small and Remote
13	Sponsoring Agency	Australian National Training Authority (ANTA)
14	Author	ANTA
15	Contact Details	ANTA GPO Box 3120 Brisbane QLD 4001 Ph +61 7 3246 2300 Fax +61 7 3246 2490
16	Co-Authors	
17	Aims/Objectives	See section 6 above
18	Definition or Conception of (e)Learning	✓ Unstated □ Broad □ Precise Comments (if necessary):
19	Areas of Priority	6 priority areas are noted: Engagement of industries and enterprises in designing, developing and applying flexible learning solutions to significant business problems A range of flexible learning solutions to meet the needs of Indigenous Australians A range of flexible learning solutions to meet the needs of people in rural and remote communities Cross-sectoral collaboration for lifelong flexible learning with a focus on the 15-19 age group

25	Summary of Document	Ultimately, this document is a statement of programmes of action and priority areas for projects to continue implementation of the 2000-2004 Framework. It is of interest to note that the seven principles that underpinned the Framework are now eight. The additional principle is stated as: Assure quality, access and equity.
24	Implementation Relationship to Other Policies	Derived from the Australian Flexible Learning Framework 2000-2004, with input from the Phase One evaluation of the Framework. Also developed in light of the 2004-2010 National Vet Strategy
23	Evaluation Partnerships with Others Regarding	None
22	Procedures and Responsibility for Monitoring and	Not specified
21	Procedures and Responsibility for Implementation	Not specified. Each programme has a contact person – presumably responsible for progressing implementation.
		Resources for teaching learning and assessment Policy and research Communication and leadership Project priorities in each programme are specified.
20	Key Action Points	Funded projects are based in one of five programmes: New practices in flexible learning Professional development
		Increased exchange of Australian-made e-learning resources across State/Territory borders (pp14-15) The priorities set are also consistent with the VET national Strategy 2004 – 2010.
		Practical partnerships between the VET system and other portfolio areas

27	Actions/Strategies Related to Ministry of Education Identifiers	 □ Policy ✓ Desired Outcomes ✓ Accessibility ✓ Infrastructural Support □ Actual Outcomes ✓ Lessons Learnt □ Barriers and Enablers ✓ Small and Remote Communities ✓ Bilingual and Multi-cultural Comments (if necessary):
28	Actions/Strategies Identified for other Sub-groups	 □ Gender □ Ethnicity ✓ Indigenous People □ Socio-economic Status □ Diverse Learners □ Other [include details] Comments (if necessary):
29	Evaluative Comment	Clear document grounded in the 2000-2004 Framework. A move to consideration of demand-side issues surfaces in this plan. Lessons learnt from the Phase One evaluation appear to be built into this plan, such as tighter management, closer liaison with industry,
30	Other	
31	Cross References	

Global Picture, Local Lessons: (e)Learning Policy and Accessibility

Template No: F #4

1	Name	Phase 2 Evaluation of the Australian Flexible Learning Framework 2000-2004
		Final Evaluation Report
2	Reference	ANTA (2004). Phase 2 Evaluation of the Australian Flexible Learning Framework 2000-2004. Final Evaluation Report. Retrieved November 29, 2005 from http://www.flexiblelearning.net.au/aboutus/resources/evaluationreportfinal0604.pdf
3	Date	June 2004
4	Country	Australia
5	Ministry of Education Identifiers	 □ Policy □ Desired Outcomes □ Accessibility □ Infrastructural Support ✓ Actual Outcomes ✓ Lessons Learnt □ Barriers and Enablers □ Small and Remote Communities □ Bilingual and Multi-cultural Comments (if necessary):
6	Major Themes	The Report is divided into three main themes. One set of recommendations involves the Framework, its value as a strategy and its efficiency and effectiveness as a system shaping the delivery of its goals. A further section discusses uptake of flexible learning in VET since 1999 but no recommendations are made. A final set of recommendations relates to collaboration between states/territories and institutions.
7	Category of Document	☐ Policy ✓ Background
8	Type of Document	 □ Policy □ Strategy □ Action Plan □ Draft Strategy/Policy/Action Plan □ Discussion Paper ✓ Evaluation Report □ Background Paper □ Book □ Journal Article □ Conference Paper □ Website

9	Scale of Project	 □ Local □ Regional ✓ National □ Supranational
10	Budget/Funding	
11	Timeframe	Evaluation of the 2000-2004 Framework
12	Target Audience	 □ Early Childhood □ Compulsory Schooling □ Post Compulsory Schooling □ Higher Education ✓ Vocational Education □ Community-based Education □ Small and Remote
13	Sponsoring Agency	Australian National Training Authority (ANTA)
14	Author	The evaluation was conducted by Ian Phillips, Margaret Aspin, Deb Hull and Carol Oxley of I & J Management Services Pty Ltd.
15	Contact Details	I & J Management Services Pty Ltd PO Box 845 Sunbury VIC 3429 Australia
16	Co-Authors	N/A
17	Aims/Objectives	To evaluate the Framework activities of the period 2002-2003 and build on the findings of the Phase One evaluation.
18	Definition or Conception of (e)Learning	☐ Unstated ☐ Broad ☐ Precise Comments (if necessary): As an evaluation this paper draws on the explicit and implicit definitions of the Framework and its various implementation plans
19	Areas of Priority	N/A
20	Key Action Points	N/A
21	Procedures and Responsibility for Implementation	N/A

22	Procedures and Responsibility for Monitoring and Evaluation	N/A
23	Partnerships with Others Regarding Implementation	N/A
24	Relationship to Other Policies	Evaluation of the Australian Flexible Learning Framework 2000 - 2004
25	Summary of Document	A total investment of \$A80m over the five years of the Framework is noted. 41% of this is committed to direct professional development objectives; 42% to development of online content, applications and services; the remainder to policy, research and standards-based activities. The approaches adopted are primarily part of a blended approach rather than 100% online, with substantial increases in student use of technology, the number of technology enabled learning resources, the number of training providers offering enrolment/admin/support online and the number of practitioners accessing information about e-learning. However, level of uptake overall is rather small in overall terms. Less than 10% of VET activity is effectively supported by technology. There is considerable untapped potential, but the VET sector is not yet equipped in either a personnel, technological or policy sense to meet the challenges of the new national VET strategy with its strong emphasis on flexible learning. A central thread is the need for a commitment to work that will help the VET sector realize and sustain the investment made in the 2000-2004 period.
26	Relevance to Aotearoa/NZ Context	☐ Low ☐ Medium ✓ High Explanation: This evaluation highlights the successes of the previous four years of policy and strategy implementation but also reveals areas where additional work is required. This latter aspect points to concerns that will also be relevant in the NZ context.
27	Actions/Strategies Related to Ministry of Education Identifiers	 □ Policy □ Desired Outcomes □ Accessibility □ Infrastructural Support

		 ✓ Actual Outcomes □ Lessons Learnt □ Barriers and Enablers □ Small and Remote Communities □ Bilingual and Multi-cultural Comments (if necessary):
28	Actions/Strategies Identified for other Sub-groups	☐ Gender ☐ Ethnicity ☐ Indigenous People ☐ Socio-economic Status ☐ Diverse Learners ☐ Other [include details] Comments (if necessary):
29	Evaluative Comment	This document is a final evaluative report of the Australian Flexible Learning Framework. It draws on a set of five separately conducted evaluations. The report addresses the impact of the Framework and its projects, the uptake of flexible learning in VET and the impact of the framework on uptake, and discusses the case for further collaboration. The evaluation is a full and thorough evaluation of the implementation and projects of the Framework over its five year period.
30	Other	
31	Cross References	

Global Picture, Local Lessons: (e)Learning Policy and Accessibility

1	Name	eEurope: An information society for all
2	Reference	Commission of the European Communities (2000a). <i>eEurope: An information society for all</i> . Retrieved 28 November, 2005, from http://www.e-europestandards.org/policy_statements.htm
3	Date	2000
4	Country	International - European Union
5	Ministry of Education Identifiers	 √ Policy √ Desired Outcomes √ Accessibility √ Infrastructural Support □ Actual Outcomes □ Lessons Learnt √ Barriers and Enablers □ Small and Remote Communities □ Bilingual and Multi-cultural Comments (if necessary):
6	Major Themes	European Youth, Information Society, e-Commerce, Government Online, Healthcare Online, Inclusion, Social Cohesion
7	Category of Document	√ Policy □ Background
8	Type of Document	 V Policy □ Strategy □ Action Plan □ Draft Strategy/Policy □ Discussion Paper □ Evaluation Report □ Background Paper □ Book □ Journal Article □ Conference Paper □ Website
9	Scale of Project	☐ Local ☐ Regional ☐ National ✓ Supranational
10	Budget/Funding	Not stated
11	Timeframe	2000 - 2003

13 14 15	Sponsoring Agency Author Contact Details	 □ Early Childhood √ Compulsory Schooling √ Post Compulsory Schooling √ Higher Education √ Vocational Education √ Community-based Education □ Small and Remote Commission of the European Communities Commission of the European Communities Commission of the European Communities Rue de la Loi / Wetstraat, 175 B-1048 Brussels Tel (32-2) 285 61 11 Fax (32-2) 285 73 97 / 8
4.6		public.info@consilium.eu.int
16	Co-Authors Aims/Objectives	<i>e</i> Europe aims at bringing the perceived benefits of the Information Society to the reach of all Europeans. The key objectives of <i>e</i> Europe are:
		 Bringing every citizen, home and school, every business and administration into the digital age and online; Creating a digitally literate Europe, supported by an entrepreneurial culture ready to finance and develop new ideas;
		• Ensuring the whole process is socially inclusive, builds consumer trust and strengthens social cohesion (p.2).
18	Definition or Conception of (e)Learning	 √ Unstated □ Broad □ Precise Comments (if necessary): The term elearning is not used in this policy document. Rather this concept is implicit in the stated objective of creating a digitally literate European citizenry.
19	Areas of Priority	There are 10 priority areas: 1. European youth into the digital age 2. Cheaper Internet access 3. Accelerating E-Commerce 4. Fast Internet for researchers and students 5. Smart cards for secure electronic access 6. Risk capital for high-tech SMEs 7. eParticipation for the disabled 8. Healthcare online 9. Intelligent transport 10. Government online (p.5)

20 Key Action Points

The main action points are stated as targets and those relevant to elearning include:

1. European youth into the digital age

By the end of 2001:

- · All schools should have access to the Internet and multimedia resources.
- · Support services, including web-based information and educational resources, should be made available to all teachers and pupils.
- · Access to Internet and multimedia resources in public centres should be made available to all youngsters, including in less-favoured areas.

By the end of 2002:

- · All teachers should be individually equipped and skilled in the use of Internet and multimedia resources.
- · All pupils should have access to high-speed Internet and multimedia resources in their classroom.

By the end of 2003:

· All pupils should be "digitally literate" by the time they leave school (p.7).

2. Cheaper Internet access

By the end of 2000:

- · Incumbents should offer unbundled local loops under nondiscriminatory terms and conditions in order to allow all operators to provide innovative services.
- · Leased lines tariffs should be significantly reduced, including cross border leased lines.
 - · Licence requirements for communications services should be significantly lightened and as far as possible individual licences should be replaced by general authorisations.

By the end of 2001:

· The allocation of frequencies for multimedia wireless systems should be established (p.8).

4. Fast Internet for researchers and students

By the end of 2000:

· The available Internet infrastructure for European researchers and students should be upgraded. In addition enhanced services and applications for teaching and researching must be developed, to support innovative practices.

By the end of 2001:

· At least one university and one scientific research faculty per country should have a campus network capable of supporting multimedia communications. This should be extended rapidly to

		institution or training facility in every Member State (p.10).5. <u>eParticipation for the disabled</u>
		By the end of 2000: The European Commission and Member States should review the relevant legislation and standards programmes dealing with the Information Society, with a view to ensuring their conformity with accessibility principles and accelerating standardisation processes.
		The European Commission will propose a recommendation to Member States to take account of the requirements of people with disabilities in the procurement of information and communications products and services.
		By the end of 2001: • The European Commission and Member States should commit themselves to making the design and content of all public Web sites accessible to people with disabilities.
		By the end of 2002: • The European Commission will support the creation of a Network of Centres of Excellence, at least one in each Member State, that will develop a European curriculum module in Designfor-All to train designers and engineers (p.13).
21	Procedures and Responsibility for Implementation	The European Commission acknowledges that it cannot achieve the stated targets alone. A joint effort of the Member States, the European Commission, industry and citizens is required. There is little or no indication of how the policy will be implemented in the document itself.
22	Procedures and Responsibility for Monitoring and Evaluation	No indication is given of how the stated targets will be measured and/or evaluated. In 2002, however, a progress report was published on the <i>e</i> Europe related Action Plan with an overall assessment of its success based on a benchmarking exercise.
23	Partnerships with Others Regarding Implementation	EU member states will have a major responsibility for the implementation.
24	Relationship to Other Policies	<i>e</i> Europe is the first policy document in a series of related initiatives leading to two different action plans. The latest iteration of this policy direction is <i>e</i> Europe 2005.

25	Summary of Document	The <i>e</i> Europe initiative was launched by the European Commission to bring the perceived benefits of the Information Society to all Europeans. The initiative was adopted by the European Council of Ministers at its meeting in Portugal in June 2000. eEurope aimed to accelerate positive change in the European Union (EU), and was a key element in the strategy for modernising the European economy. The key objectives of <i>e</i> Europe were to bring every citizen, home and school, every business and administration, into the Digital Age. It aimed to create a digitally literate Europe, supported by an entrepreneurial culture ready to finance and develop new ideas. Notably, eEurope also aimed to ensure the whole process was socially inclusive, builds consumer trust and contributes to social cohesion. Overall, the ultimate objective was to bring everyone in Europe on-line as quickly as possible.
26	Relevance to Aotearoa/NZ Context	 □ Low √ Medium □ High Explanation: The supranational European context is unique. However, the emphasis on creating an inclusive and socially cohesive Information Society through new electronic technologies may have relevance to the wider New Zealand context.
27	Actions/Strategies Related to Ministry of Education Identifiers	 √ Policy √ Desired Outcomes √ Accessibility √ Infrastructural Support □ Actual Outcomes □ Lessons Learnt □ Barriers and Enablers □ Small and Remote Communities □ Bilingual and Multi-cultural Comments (if necessary):
28	Actions/Strategies Identified for other Sub-groups	☐ Gender ☐ Ethnicity ☐ Indigenous People ☐ Socio-economic Status ✓ Diverse Learners ✓ Other [include details] One aspect of <i>e</i> Europe has a specific focus on <i>e</i> participation for the so-called 'disabled'. There is also a strong emphasis on supporting the learning and education of European youth in the so-called Digital Age.
29	Evaluative Comment	The standout feature of this policy initiative is the tension between the goals of accelerating e-commerce and an entrepreneurial culture on the one hand, and promoting the ideals of inclusion and social cohesion on the other. This

		tension is evident in the launching of the initiative, where Commissioner Romano Prodi, stated: "The story of the e-Economy is complex, but it is one we need to understand. The prosperity of the EU's 377 million citizens (or about half a billion if we include the candidate countries) depends on it." In sum, eEurope is a response to social and economic changes that were perceived to be the most significant since the Industrial Revolution. The policy reflects an effort on the part of the EU to manage these changes over the next three years and for decades afterwards.
30	Other	
31	Cross References	eEurope: An information society for all – Action plan. http://europa.eu.int/information_society/eeurope/2002/action_pl an/pdf/actionplan_en.pdf eEurope: Final report. http://europa.eu.int/information_society/eeurope/2002/news_libr ary/documents/acte_eEurope_2002_en.doc eEurope_2003+ A co-operative effort to implement the Information Society in Europe: Action plan. http://europa.eu.int/information_society/eeurope/plus/index_en. httm eEurope_2003 + Progress report http://europa.eu.int/information_society/eeurope/plus/index_en. httm eEurope_2005: An information_society/eeurope/2002/news_libr ary/eeurope.2005/index_en.htm e-Learning - Designing tomorrow's education. http://europa.eu.int/comm/education/programmes/elearning/doc_en.html The eLearning action plan: Designing tomorrow's education. http://europa.eu.int/comm/education/programmes/elearning/doc_en.html

Global Picture, Local Lessons: (e)Learning Policy and Accessibility

1	Name	eEurope 2002: An information society for all – Action Plan
2	Reference	Commission of the European Communities (2000b). <i>eEurope</i> 2002: An information society for all – Action Plan. Retrieved 28 November, 2005, from http://europa.eu.int/information_society/eeurope/2002/action_plan/pdf/actionplan_en.pdf
3	Date	2000
4	Country	International - European Union
5	Ministry of Education Identifiers	 √ Policy √ Desired Outcomes √ Accessibility √ Infrastructural Support □ Actual Outcomes □ Lessons Learnt √ Barriers and Enablers □ Small and Remote Communities □ Bilingual and Multi-cultural Comments (if necessary):
6	Major Themes	Internet, The Challenge, Digital Literacy, European Youth, Knowledge-based Economy, e-Commerce, Health Online, Government Online
7	Category of Document	√ Policy□ Background
8	Type of Document	 □ Policy □ Strategy √ Action Plan □ Draft Strategy/Policy/Action Plan □ Discussion Paper □ Evaluation Report □ Background Paper □ Book □ Journal Article □ Conference Paper □ Website
9	Scale of Project	 □ Local □ Regional □ National √ Supranational
10	Budget/Funding	80m Euro is available for upgrading trans-European network capacity to 2.5 Gbit/s. Other initiatives involve local

		investment by member states and actions are to be undertaken on the basis of political commitments. Hence no specific costs or funding details are given.
11	Timeframe	A common key date of 2002 was set by which they aimed to meet the eEurope targets. By that time, the impact of the Action Plan and its results would be reviewed with the aim to determine the need to develop further recommendations and propose policy measures in areas of special importance to the Candidate Countries (p. 3)
12	Target Audience	□ Early Childhood √ Compulsory Schooling √ Post Compulsory Schooling √ Higher Education √ Vocational Education √ Community-based Education □ Small and Remote
13	Sponsoring Agency	Commission of the European Communities
14	Author	Commission of the European Communities
15	Contact Details	Commission of the European Communities Rue de la Loi / Wetstraat, 175 B-1048 Brussels Tel (32-2) 285 61 11 Fax (32-2) 285 73 97 / 8 public.info@consilium.eu.int
16	Co-Authors	
17	Aims/Objectives	The central aim of this Action Plan was to ensure that the targets set in <i>e</i> Europe are reached by defining the necessary measures. <i>e</i> Europe initially identified 10 areas where action at European level would help to bring the perceived benefits of the Information Society to all Europeans. As a result, the actions are clustered around three main objectives: 1. A cheaper, faster, secure Internet; 2. Investing in people and skills; 3. Stimulate the use of the Internet (p.2).
18	Definition or Conception of (e)Learning	 √ Unstated □ Broad □ Precise Comments (if necessary):

		The term elearning is only used on three occasions in this action plan. While the concept is not defined the implicit definition is to promote the stated objective of creating a digitally literate European citizenry.
19	Areas of Priority	There are three areas of priority:
		1. A cheaper, faster, secure Internet
		2. Investing in people and skills
		3. Stimulating the use of the Internet
20	Key Action Points	The action points include:
		1. A cheaper, faster, secure Internet
		a) Cheaper and faster Internet access
		b) Faster Internet for researchers and studentsc) Secure networks and smart cards
		2. Investing in people and skills
		a) European youth into the digital ageb) Working in the knowledge-based economy
		c) Participation for all in the knowledge-based economy
		3. Stimulating the use of the Internet
		a) Accelerating e-commerce b) Government online: electronic access to public services
		b) Government online: electronic access to public services c) Health online
		d) European digital content for global networks e) Intelligent transport systems (p.2)
21	Procedures and Responsibility for Implementation	The Action Plan is focused on solutions and concentrates on what should be done , by whom and when . There are three main methods by which the <i>e</i> Europe targets will be achieved:
		1. Accelerating the setting up of an appropriate legal environment
		On a European level, a range of legislative proposals is being prepared and discussed. <i>e</i> Europe aims to speed up their adoption through setting tight deadlines for all the actors.
		2. Supporting new infrastructure and services across Europe
		Developments here depend mainly on private sector funding. Such activity may be supported with European funding, but much depends on action by Member States. This action should, of course, not compromise budgetary discipline.

		3. Applying the open method of co-ordination and benchmarking
		This aims to ensure that actions are carried out efficiently, have the intended impact and achieve the required high profile in all Member States. This process will be fully co-ordinated with the general benchmarking linked to the special European Council each spring (p.2-3).
22	Procedures and Responsibility for Monitoring and Evaluation	A limited number of targeted <i>e</i> Europe benchmarks will be defined by the European Commission before the end of 2000. There are several ongoing statistical data gathering initiatives at national and international level and data from Eurostat and Member States' statistical offices will be used where available. Industry associations and private consultants may also produce statistics relevant to the initiative. In some instances, specific surveys and case studies will be used to supplement these data. It was foreseen that a first progress report would be presented in February/March 2002, with an interim report being submitted at the end of 2002. The final progress report was expected to be presented at the end of 2003. See <i>e</i> Europe 2002 Final
		http://europa.eu.int/information_society/eeurope/2002/news_li_brary/documents/acte_eEurope_2002_en.doc
23	Partnerships with Others Regarding Implementation	EU member states will have a major responsibility for the implementation. There is also a recognition of the need to involve Candidate Countries in the process.
24	Relationship to Other Policies	<i>e</i> Europe 2002 is the Action Plan that attempts to implement the objectives of the <i>e</i> Europe initiative. The latest iteration of this policy direction is <i>e</i> Europe 2005. The Action Plan also refers to a complementary eLearning initiative, which had yet to be released.
25	Summary of Document	This is a comprehensive action plan for European Communities with far reaching implications for member countries. The central aim of the Action Plan was to ensure that the targets set in <i>e</i> Europe are reached for each of the 10 identified areas. The actions are clustered around three main objectives:
		1. A cheaper, faster, secure Internet
		2. Investing in people and skills
		3. Stimulating the use of the Internet The second objective is linked to a complementary eLearning
		initiative that addresses the needs of the education and training systems to the challenges of the Knowledge Society. Overall, the Action Plan focuses on precisely identifiable actions that operationalise the wider <i>e</i> Europe policy initiative.

26	Relevance to Aotearoa/NZ Context	 ↓ Low □ Medium □ High Explanation: Very specific to the European context.
27	Actions/Strategies Related to Ministry of Education Identifiers	 √ Policy √ Desired Outcomes √ Accessibility √ Infrastructural Support □ Actual Outcomes □ Lessons Learnt □ Barriers and Enablers □ Small and Remote Communities □ Bilingual and Multi-cultural Comments (if necessary):
28	Actions/Strategies Identified for other Sub-groups	☐ Gender ☐ Ethnicity ☐ Indigenous People ☐ Socio-economic Status √ Diverse Learners √ Other [include details] Comments (if necessary): There is a specific focus on eparticipation for the 'disabled' and for people with special needs.
29	Evaluative Comment	At the European Council held in Lisbon on 23-24 March 2000, the Heads of Government and State of the EU-15 set the ambitious goal for Europe for the next decade to become: "the most competitive and dynamic knowledge-based economy in the world". This quote provides a clear indication of the economic imperative underpinning the whole eEurope initiative. The Action Plan was a response to a perceived need for Europe to quickly exploit the opportunities of the knowledge-based economy and in particular the Internet. Hence the goals of creating cheaper, faster, secure Internet access and stimulating the use of the Internet amongst European citizens. Throughout the Action Plan there is an implicit assumption that digital literacy and life-long learning are at the heart of a competitive economy. The other goal of investing in people and skills is linked to a complementary eLearning initiative that together targets the creation of an educationally oriented framework that will address the request of the Lisbon Council to adapt Europe's education and training systems to the needs of the Information Society. Notably, the concept of the Information Society is poorly defined and often replaced with the term 'Knowledge-based Economy', which illustrates how the Action Plan appears to place greater emphasis on economic and employment issues as opposed to

		inclusion and social cohesion, as originally intended in the first iteration of e Europe.
		In sum, a lot of the emphasis on elearning is limited to new skills for employment and the concept of digital literacy is viewed as an essential element of the adaptability of the workforce and the employability of all citizens.
30	Other	
31	Cross References	eEurope: An information society for all. http://www.e-europestandards.org/policy_statements.htm eEurope 2002: Final report. http://europa.eu.int/information_society/eeurope/2002/news_libr ary/documents/acte_eEurope_2002_en.doc eEurope 2003+ A co-operative effort to implement the Information Society in Europe: Action plan. http://europa.eu.int/information_society/eeurope/plus/index_en. htm eEurope 2005: An information society/eeurope/2002/news_libr ary/eeurope2005/index_en.htm e-Learning - Designing tomorrow's education. http://europa.eu.int/comm/education/programmes/elearning/doc_en.html The eLearning action plan: Designing tomorrow's education. http://europa.eu.int/comm/education/programmes/elearning/doc_en.html

Global Picture, Local Lessons: (e)Learning Policy and Accessibility

1	Name	<i>e</i> Europe 2003+ A co-operative effort to implement the Information Society in Europe: Action plan
2	Reference	Candidate Countries with the assistance of the European Commission (2001). <i>eEurope 2003+ A co-operative effort to implement the Information Society in Europe: Action Plan.</i> Retrieved 28 November, 2005, from http://europa.eu.int/information_society/eeurope/plus/index_en.htm
3	Date	2001
4	Country	International - European Community
5	Ministry of Education Identifiers	 V Policy √ Desired Outcomes √ Accessibility √ Infrastructural Support □ Actual Outcomes □ Lessons Learnt √ Barriers and Enablers □ Small and Remote Communities √ Bilingual and Multi-cultural Comments (if necessary):
6	Major Themes	Internet, The Challenge, Digital Literacy, European Youth, Knowledge-based Economy, e-Commerce, Health Online, Government Online, Info-exclusion
7	Category of Document	√ Policy□ Background
8	Type of Document	 □ Policy □ Strategy √ Action Plan □ Draft Strategy/Policy/Action Plan □ Discussion Paper □ Evaluation Report □ Background Paper □ Book □ Journal Article □ Conference Paper □ Website
9	Scale of Project	 □ Local □ Regional □ National √ Supranational

10	Budget/Funding	Funding for actions in the <i>e</i> Europe+ Action Plan will predominantly come from national budgets, private sector investments, relevant programmes and funds made available by the European Union through its existing programmes, and available instruments of international financial institutions such as EIB, EBRD and the World Bank (p.4).
11	Timeframe	2001 – 2003 A common key date of 2003 was set by which they aim to meet the eEurope+ targets. At that time, the impact of the Action Plan would be reviewed with the aim to determine the need to develop further recommendations (p. 3).
12	Target Audience	 □ Early Childhood √ Compulsory Schooling √ Post Compulsory Schooling √ Higher Education √ Vocational Education √ Community-based Education □ Small and Remote
13	Sponsoring Agency	Commission of the European Communities
14	Author	Candidate Countries
15	Contact Details	Commission of the European Communities Rue de la Loi / Wetstraat, 175 B-1048 Brussels Tel (32-2) 285 61 11 Fax (32-2) 285 73 97 / 8 public.info@consilium.eu.int
16	Co-Authors	With the assistance of the European Commission
17	Aims/Objectives	Aims to accelerate reform and modernisation of the economies in the candidate countries, encourage capacity and institution building, improve overall competitiveness and provide for actions which address the specific situation of the Candidate Countries. The specific objectives include: 0. Accelerate the putting in place of the basic building blocks for the Information Society; 1. A cheaper, faster, secure Internet; 2. Investing in people and skills; 3. Stimulate the use of the Internet (p.2).
18	Definition or Conception of (e)Learning	 √ Unstated □ Broad □ Precise Comments (if necessary):

		Refers to the elearning initiative adopted by the EU but gives not explicit definition.
19	Areas of Priority	There are four areas of priority:
		0. Accelerate the putting in place of the basic building blocks for the Information Society;
		1. A cheaper, faster, secure Internet;
		2. Investing in people and skills;
		3. Stimulate the use of the Internet (p.2).
20	Key Action Points	The action points include:
		0. Accelerate the putting in place of the basic building blocks for the Information Society;
		a) Accelerate the provision of affordable communication services for allb) Transpose and implement the <i>acquis</i> relevant to the Information Society
		1. A cheaper, faster, secure Internet
		a) Cheaper and faster Internet accessb) Faster Internet for researchers and studentsc) Secure networks and smart cards
		2. Investing in people and skills
		a) European youth into the digital ageb) Working in the knowledge-based economyc) Participation for all in the knowledge-based economy
		3. Stimulate the use of the Internet
		 a) Accelerating e-commerce b) Government online: electronic access to public services c) Health online d) European digital content for global networks e) Intelligent transport systems f) Environment on-line
21	Procedures and Responsibility for Implementation	The Action Plan is undertaken on the basis of political commitments by the Candidate Countries, with the assistance of the services of the European Commission. The Candidate Countries regard this assistance as a positive step towards obtaining the support of the European Community for the <i>e</i> Europe2003+ Action Plan. To this end, the Candidate Countries encourage the Community to provide the necessary

		support under existing, and forthcoming programmes, in accordance with the procedures to obtain such support, so as to enable the Candidate Countries to pursue the actions identified (p.3).
22	Procedures and Responsibility for Monitoring and Evaluation	To enable comparison of data for monitoring and benchmarking between <i>e</i> Europe and <i>e</i> Europe2003+, the Candidate Countries agreed to use the same indicators which have been selected and agreed by the EU-15, for <i>e</i> Europe. As far as possible, the relevant institutions of the Candidate Countries (notably the statistical offices) will work closely with those of the EU Member States with the aim to develop a common methodology and approach in the collection and presentation of relevant benchmarks.
		Further benchmarks and indicators may also be defined which are of relevance to measuring the progress made in the Candidate Countries for all <i>e</i> Europe 2003+ targets. It is foreseen that a first progress report will be presented in February/March 2002, with an interim report being submitted at the end of 2002. The final progress report would be presented at the end of 2003.
		See <i>e</i> Europe 2003 + Progress report http://europa.eu.int/information_society/eeurope/plus/index_en.htm
23	Partnerships with Others Regarding Implementation	Candidate countries have the major responsibility for implementation but positive support is requested from the European Commission and existing member countries.
24	Relationship to Other Policies	<i>e</i> Europe 2003+ mirrors the priority objectives and targets of <i>e</i> Europe but provides for actions which tackle the specific situation of the Candidate Countries.
25	Summary of Document	The Action Plan was launched by the Prime Ministers of the Candidate Countries at the Göteborg European Summit on 15-16 June 2001. This parallel action to the <i>e</i> Europe 2002 Action Plan was intended to allow players in the EU and the Candidate Countries to co-operate, exchange experiences and best practice, and thereby help the effective integration of Europe. Importantly, it was not perceived as a substitute for or interfering with accession negotiations. The action was to allow the Candidate Countries to work alongside the EU Member States in ensuring that the whole of Europe becomes "the most competitive and dynamic knowledge-based economy in the world" (p.1) and not only a part of it. Despite the addition of a new objective, overall the actions mirror those of European Commission and are clustered around
		four main objectives: 0. Accelerate the putting in place of the basic building blocks for the Information Society;

		1. A cheaper, faster, secure Internet;
		2. Investing in people and skills;
		3. Stimulate the use of the Internet (p.2).
		The core assumption is that the accelerated use of the Internet has put very powerful tools within the reach of citizens and governments as well as large and small businesses everywhere. This is resulting in profound changes that have a considerable impact on the whole of the economy. ICT is now central to the modernisation of Europe and contribute to the take-up of new opportunities for employment and inclusion in the new global economy.
26	Relevance to Aotearoa/NZ Context	 √ Low ☐ Medium ☐ High Explanation: Very specific to the European context.
27	Actions/Strategies Related to Ministry of Education Identifiers	 √ Policy √ Desired Outcomes √ Accessibility √ Infrastructural Support □ Actual Outcomes □ Lessons Learnt □ Barriers and Enablers □ Small and Remote Communities √ Bilingual and Multi-cultural Comments (if necessary): Interestingly, the Action Plan includes provision of access to digitized cultural heritage and multilingual multimedia, which was not a stated outcome of the original eEurope initiative.
28	Actions/Strategies Identified for other Sub-groups	☐ Gender ☐ Ethnicity √ Indigenous People ☐ Socio-economic Status √ Diverse Learners √ Other [include details] Comments (if necessary): Specific mention is given of the need to avoid policies that may lead to 'info-exclusion' in Candidate Countries.
29	Evaluative Comment	The Action Plan largely mirrors the European Union's and therefore contains a strong economic undercurrent, but it has some notable additions to the action points. For example, the new objective of putting in place the basic building blocks for the Information Society is intended to ensure that 'all citizens are offered the possibility of affordable communications services so that info-exclusion can be avoided' (p.5).

		In a similar vein, the provision of access to digitized cultural heritage and multilingual multimedia, which was not a stated outcome of the original <i>e</i> Europe initiative, suggests that there is a stronger sense of the need of Candidate Countries to retain their own national and cultural identity. This is probably understandable given local concerns. Overall, subtle but important differences between the two action plans illustrate how these policy initiatives and the new technologies themselves are part of, and a contributing force to, greater globalisation—albeit within Europe. A tension exists that was not evident within the EU Action Plan between embracing the benefits of the new knowledge-based economy whilst retaining a sense of national and cultural identity.
30	Other	
31	Cross References	eEurope: An information society for all. http://www.e-europestandards.org/policy_statements.htm eEurope: An information society for all – Action plan. http://europa.eu.int/information_society/eeurope/2002/action_pl an/pdf/actionplan_en.pdf eEurope 2002: Final report. http://europa.eu.int/information_society/eeurope/2002/news_libr ary/documents/acte_eEurope_2002_en.doc eEurope 2003 + Progress report http://europa.eu.int/information_society/eeurope/plus/index_en. httm eEurope 2005: An information_society for all. http://europa.eu.int/information_society/eeurope/2002/news_libr ary/eeurope2005/index_en.htm e-Learning - Designing tomorrow's education. http://europa.eu.int/comm/education/programmes/elearning/doc_en.html The eLearning action plan: Designing tomorrow's education. http://europa.eu.int/comm/education/programmes/elearning/doc_en.html

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1	Name	e-Learning - Designing tomorrow's education
2	Reference	Commission of the European Communities (2000c). <i>e-Learning - Designing tomorrow's education</i> . Retrieved 28 November, 2005, from http://europa.eu.int/comm/education/programmes/elearning/doc_en.html
3	Date	2000
4	Country	International - European Union
5	Ministry of Education Identifiers	 ✓ Policy ✓ Desired Outcomes ✓ Accessibility ✓ Infrastructural Support ☐ Actual Outcomes ☐ Lessons Learnt ✓ Barriers and Enablers ☐ Small and Remote Communities ✓ Bilingual and Multi-cultural Comments (if necessary):
6	Major Themes	Infrastructure, e-Learning, Multimedia, Knowledge-based Society, Digital Literacy, Community
7	Category of Document	√ Policy□ Background
8	Type of Document	 V Policy □ Strategy □ Action Plan □ Draft Strategy/Policy/Action Plan □ Discussion Paper □ Evaluation Report □ Background Paper □ Book □ Journal Article □ Conference Paper □ Website
9	Scale of Project	 □ Local □ Regional □ National √ Supranational
10	Budget/Funding	No specific details.
		The Commission's role is to support the Member States as they

		implement the <i>e</i> Learning initiative and to co-ordinate and strengthen their efforts by co-financing certain activities. Member States will be encouraged to use their allocation as per the Structural Funds (p.6), in order to support <i>e</i> Learning, particularly with regard to equipment and the training of teachers and trainers, and to set up multi-use local centres accessible to everyone (p10).
11	Timeframe	No clear timeframe but some of the specific objectives extend until 2004.
12	Target Audience	 □ Early Childhood √ Compulsory Schooling √ Post Compulsory Schooling √ Higher Education √ Vocational Education √ Community-based Education □ Small and Remote
13	Sponsoring Agency	Commission of the European Communities
14	Author	Commission of the European Communities
15	Contact Details	Commission of the European Communities Rue de la Loi / Wetstraat, 175 B-1048 Brussels Tel (32-2) 285 61 11 Fax (32-2) 285 73 97 / 8 public.info@consilium.eu.int
16	Co-Authors	NA
17	Aims/Objectives	The <i>e</i> Learning initiative seeks, specifically with regard to education and training, to implement the objectives of <i>e</i> Europe, and to give tangible expression to and complement the comprehensive <i>e</i> Europe action plan. The main objectives are: 1. Develop infrastructure; 2. Increase people's level of knowledge; 3. Adapt education and training systems to the knowledge-based society (p.6).
18	Definition or Conception of (e)Learning	 √ Unstated ☐ Broad ☐ Precise Comments (if necessary): There is no explicit definition but note the use of the hyphen. e-Learning is claimed to mobilise the educational and cultural communities, as well as the economic and social players in Europe, in order to speed up changes in the education and training systems for Europe's move to a knowledge-based society (p.3).
19	Areas of Priority	There are three areas of priority:

- Develop infrastructure; - Increase people's level of knowledge; - Adapt education and training systems to the knowledgebased society. The eLearning initiative also aims to bridge the gap between those who have access to the new technologies and those who are excluded from these technologies, by endeavouring to provide all citizens with a solid basic education (p.7). The action points include: 20 **Key Action Points** 1. Objectives for infrastructures: provide all schools in the Union with an Internet connection by the end of 2001; - encourage the creation by the end of 2001 of a trans-European high speed network for specific communications linking research institutes, universities, scientific libraries and, in due course, schools; ensure that by the end of 2002 all pupils have a fast Internet connection and multimedia resources in the classroom (p.6). 2. Objectives for increasing people's level of knowledge: - substantially increase every year the investment per capita in human resources; provide each citizen with the skills necessary to live and work in the new information society; enable the population at large to become digitally literate (pp. 6 & 7). 3. Objectives for adapting education and training systems to the knowledge-based society: - by the end of 2002 train a sufficient number of teachers in the use of Internet and multimedia resources; ensure that schools and training centres become local centres for acquiring knowledge which is versatile and accessible to everyone, using the most appropriate methods tailored to the broad diversity of the target groups: adopt a European framework to define the new basic skills which lifelong learning must make it possible to acquire: information technologies, foreign languages, technical knowledge, particularly the introduction of a European diploma for basic information technology skills, issued by means of decentralised procedures; by the end of the year 2000 define ways of encouraging mobility among students, teachers, trainers researchers, through the optimal use of Community programmes, by removing obstacles and by increased transparency for the recognition of qualifications and

		 periods of study and training; prevent the gap from constantly widening between those who have access to new knowledge and those who do not, by defining priority actions for certain target groups (minorities, the elderly, the disabled, the under-qualified) and women; provide pupils with broad digital literacy by the end of the year 2003 (p.7).
21	Procedures and Responsibility for Implementation	e-Learning will be implemented in conformity with the method advocated by the European Council, an open method of coordination in line with the principle of subsidiarity, whereby best practice can be disseminated and greater convergence secured with regard to the goals set. This method will require the Member States, the Council and the Commission to take steps in line with their responsibilities and which must make it possible to attain the goals set. The initiative does not set out to create new processes, but draws upon existing Luxembourg processes in enriching it and deepening it in the fields of education and training (p.9).
22	Procedures and Responsibility for Monitoring and Evaluation	In close conjunction with the Council's Committee on Education, the Commission will prepare a framework for attaining the goals of <i>e</i> Learning. Benchmarking of education and training policy actions will thus be carried out in line with the Lisbon conclusions allowing the European Council to gauge:
		 progress made in the attainment of the objectives set; the effectiveness of the action taken and policies implemented; the dissemination of best practice and the enhancement of joint reflection.
		Benchmarking will be carried out at the European level, by using indicators which have been defined in the Luxembourg process and in the e-Europe action plan. The Commission will periodically present progress reports on e-Learning to the Education Council. (p.9).
23	Partnerships with Others Regarding Implementation	EU member states will have a major responsibility for the implementation but the European Commission will endeavour to create favourable conditions for the responsible authorities to adapt their own education systems.
24	Relationship to Other Policies	The eEurope Action Plan brings together a number of strategic action areas and defines for each of them the challenges and the proposed answers. Two of these action areas, "European Youth into the Digital Era" and "Faster Internet for researchers and students" address specifically education; three others are closely related with vocational training and lifelong learning.

		The e-Learning initiative has been developed in this context. <i>e</i> Learning is claimed to not open new or parallel processes, nor does it duplicate other initiatives. Rather <i>e</i> Learning brings together the different education components of <i>e</i> Europe actions,
25	Summary of Document	The eLearning initiative of the European Commission seeks to mobilise the educational and cultural communities, as well as the economic and social players in Europe, in order to speed up changes in the education and training systems for Europe's move to a knowledge-based society.
		The policy is based on the assumption that the Member States of the European Union have decided to work together to harmonise their policies in the field of educational technology and share their experience. In this regard, 'eLearning aims to support and coordinate their efforts and to accelerate the adaptation of education and training systems in Europe' (Viviane Reding, Commissioner for Education and Culture).
		In order to strengthen synergy at all levels, the <i>e</i> Learning initiative seeks, specifically with regard to education and training, to implement the conclusions of the Lisbon European Council and the employment policy guidelines, and to give tangible expression to and complement the comprehensive <i>e</i> Europe action plan. It aims to provide overall consistency for the action undertaken in these areas and mobilise all the players concerned around ambitious objectives. It will also help to mobilise research for better targeting of actions in the area of education and lifelong training and learning.
26	Relevance to Aotearoa/NZ Context	 □ Low √ Medium □ High Explanation: Although focused on Europe some of the initiatives such as critical media literacy and language learning have relevance to the current New Zealand context.
27	Actions/Strategies Related to Ministry of Education Identifiers	 √ Policy √ Desired Outcomes √ Accessibility √ Infrastructural Support □ Actual Outcomes □ Lessons Learnt √ Barriers and Enablers □ Small and Remote Communities √ Bilingual and Multi-cultural Comments (if necessary):

28	Actions/Strategies Identified for other Sub-groups	☐ Gender √ Ethnicity ☐ Indigenous People ☐ Socio-economic Status ☐ Diverse Learners ☐ Other [include details] Comments (if necessary): For Europe, the policy is seen as an historic opportunity for its citizens can get to know each other's cultures, languages, traditions, creations, and instigate new forms of cooperation in education and culture, thereby bringing a greater density to the cultural and educational area they share (p.4).
29	Evaluative Comment	This policy initiative is based on the premise that 'everyone in Europe will in the very near future have to come to terms with the new ICTs if they are to play an active role in an increasingly knowledge-driven society (p.13). Unlike the wider eEurope initiative, the term Knowledge Society is used throughout the document, as opposed to the Knowledge Economy, reflecting a stronger emphasis on educational concerns. That said, the need to act swiftly to successfully incorporate ICT in the education and training systems is heavily couched in the language of economics and employability. The educational benefits of the e-learning initiative remain somewhat understated beyond the broad goal of promoting greater digital literacy—a concept that is poorly defined in the policy document. It follows that the implicit goal of the e-Learning initiative appears to be to mobilise the education and training communities, along with the economic, social and cultural players concerned, in order to enable Europe to catch up and accelerate other countries in their pursuit of a modern Knowledge Economy. Thus, there is a strong economic undercurrent throughout the policy initiative. Overall, the initiative must be backed up by strong commitment from the Member States if it is to be successful; herein lies a second major tension between the aspirations of the EU and those of individual member states. The paradox here is that the goal of turning Europe into the most dynamic and most cohesive society in the world still largely rests with the actions of individual nations.
30	Other	
31	Cross References	 eEurope: An information society for all. http://www.e-europestandards.org/policy_statements.htm eEurope: An information society for all – Action plan. http://europa.eu.int/information_society/eeurope/2002/action_pl

an/pdf/actionplan_en.pdf

eEurope 2002: Final report.

http://europa.eu.int/information_society/eeurope/2002/news_library/documents/acte_eEurope_2002_en.doc

*e*Europe 2003+ A co-operative effort to implement the Information Society in Europe: Action plan.

 $\frac{http://europa.eu.int/information_society/eeurope/plus/index_en.}{htm}$

*e*Europe 2003 + Progress report

 $\frac{http://europa.eu.int/information_society/eeurope/plus/index_en.}{htm}$

eEurope 2005: An information society for all.

 $\frac{http://europa.eu.int/information_society/eeurope/2002/news_library/eeurope2005/index_en.htm$

The *e*Learning action plan: Designing tomorrow's education. http://europa.eu.int/comm/education/programmes/elearning/docen.html

Global Picture, Local Lessons: (e)Learning Policy and Accessibility

Template G #5

1	Name	The <i>e</i> Learning action plan: Designing tomorrow's education
2	Reference	Commission of the European Communities (2001). <i>The eLearning action plan: Designing tomorrow's education</i> . Retrieved 28 November, 2005, from http://europa.eu.int/comm/education/programmes/elearning/doc_e http://europa.eu.int/comm/education/programmes/elearning/doc_e http://europa.eu.int/comm/education/programmes/elearning/doc_e http://europa.eu.int/comm/education/programmes/elearning/doc_e
3	Date	2001
4	Country	International - European Union
5	Ministry of Education Identifiers	 √ Policy √ Desired Outcomes √ Accessibility √ Infrastructural Support □ Actual Outcomes □ Lessons Learnt √ Barriers and Enablers □ Small and Remote Communities √ Bilingual and Multi-cultural Comments (if necessary):
6	Major Themes	e-Learning, Life-long Learning, Infrastructure, Training, Cooperation and Dialogue, Digital Literacy, Partnerships
7	Category of Document	√ Policy □ Background
8	Type of Document	 □ Policy □ Strategy √ Action Plan □ Draft Strategy/Policy/Action Plan □ Discussion Paper □ Evaluation Report □ Background Paper □ Book □ Journal Article □ Conference Paper □ Website
9	Scale of Project	☐ Local ☐ Regional ☐ National ✓ Supranational
10	Budget/Funding	Substantial ongoing funding from a number of sources is earmarked for this initiative (See pp.6, 7 & 8).
11	Timeframe	2001 - 2004

12	Target Audience	 □ Early Childhood √ Compulsory Schooling √ Post Compulsory Schooling √ Higher Education √ Vocational Education √ Community-based Education □ Small and Remote
13	Sponsoring Agency	Commission of the European Communities
14	Author	Commission of the European Communities
15	Contact Details	Commission of the European Communities Rue de la Loi / Wetstraat, 175 B-1048 Brussels Tel (32-2) 285 61 11 Fax (32-2) 285 73 97 / 8 public.info@consilium.eu.int
16	Co-Authors	
17	Aims/Objectives	 To make life-long learning the driving force behind a cohesive and inclusive society, within a competitive economy. Specific aims include: To accelerate the deployment in the European Union of a high-quality infrastructure at a reasonable cost (p.3). To step up the training drive at all levels, especially by promoting universal digital literacy and the general availability of appropriate training for teachers and trainers, including technology training as well as courses on the educational use of technology and management of change (p.3). Developing appropriate conditions for the development of context, services and learning environments (p.3). To strengthen cooperation and dialogue and improve links between measures and initiatives at all levels — local, regional, national and European — and between all the players in the field: universities, schools, training centres, decision-makers and administrators responsible for selecting equipment, software, content or services (including the social partners) (p.4).
18	Definition or Conception of (e)Learning	 ☐ Unstated √ Broad ☐ Precise Comments (if necessary): Defined as the use of new multimedia technologies and the

		Internat to immuore the smallest of the state of the stat
		Internet to improve the quality of learning by facilitating access to resources and services as well as remote exchanges and collaboration (p.2). Note the italics for 'e' which does not appear in the superordinate policy initiative.
19	Areas of Priority	There are four main areas of priority:
		1. Infrastructure and equipment
		2. Training
		3. Services and content
		4. Cooperation and dialogue
20	Key Action Points	The action points include:
		1. Infrastructure and equipment
		 Development of a tool to assist decision-making; A European research area for new learning environments; Encouraging the development of infrastructure. 2. Training New skills and eLearning;
		- Training of teachers and trainers.
		3. Services and content
		 A conducive environment; Priority areas for innovation and development including modern languages, science, technology and society, and art, culture and citizenship.
		4. Cooperation and dialogue
		 The eLearning site: a virtual cooperation platform; Reinforcing the European education and training networks.
21	Procedures and Responsibility for Implementation	The <i>e</i> Learning Action Plan will be implemented by a combination of strategies supported by the European Commission, Member States, European Investment Bank and related agencies.
22	Procedures and Responsibility for Monitoring and Evaluation	There are clearly defined measures and benchmarks for each of the action points and progress will be evaluated against these by the European Commission, Member States, and other interested parties. Those groups responsible for each action point are clearly identified in the key measures stated over the duration of the Action Plan. See eLearning: Designing tomorrow's education — A mid-term report http://europa.eu.int/comm/education/programmes/elearning/doc_en.html
23	Partnerships with	The Action Plan explicitly promotes a range of partnerships by
	Others Regarding Implementation	bringing together the public and private sectors to encourage exchanges of experience, technology transfers and an improvement in the way in which <i>e</i> learning is implemented in keeping with the original goals of <i>e</i> Europe.
24	Relationship to Other Policies	The eLearning Action Plan is an extension of e-Learning: Designing Tomorrow's Education which in turn comes under

		the <i>e</i> Europe Action Plan.
25	Summary of Document	The <i>e</i> Learning Action Plan attempts to operationalise the aims and objectives of e-Learning policy within the wider scope of the <i>e</i> Europe initiative. The purpose of this Action Plan, which covers the period 2001-2004, is to present ways and means of implementing the <i>e</i> Learning initiative. The overall intention is 'to involve education and training players, as well as the relevant social, industrial and economic players, in order to make lifelong learning the driving force behind a cohesive and inclusive society, within a competitive economy' (p.2). It sets out to help promote the employability and adaptability objectives under the <i>European Employment Strategy</i> , rectify the shortage of skills associated with new technologies, and improve social inclusion within the European Community. To this end, the Action Plan aims to build infrastructure and equipment, increase provision for training, improve services and content, and establish greater cooperation and dialogue between Member States and related partners.
26	Relevance to Aotearoa/NZ Context	 □ Low √ Medium □ High Explanation: Although focused on Europe some of the initiatives such as teacher training and the need to respect diverse learners have relevance to the current New Zealand context.
27	Actions/Strategies Related to Ministry of Education Identifiers	 √ Policy √ Desired Outcomes √ Accessibility √ Infrastructural Support □ Actual Outcomes □ Lessons Learnt √ Barriers and Enablers □ Small and Remote Communities √ Bilingual and Multi-cultural Comments (if necessary):
28	Actions/Strategies Identified for other Sub-groups	☐ Gender √ Ethnicity ☐ Indigenous People ☐ Socio-economic Status √ Diverse Learners ☐ Other [include details] Comments (if necessary): Aims to ensure that Europe's cultural and linguistic diversity

		is preserved and encouraged.
29	Evaluative Comment	This is a comprehensive action plan for European Communities with far reaching implications for member countries. While it is noteworthy that Art, Culture and Citizenship are key components of the plan, as well as preserving cultural diversity, the investment in <i>e</i> learning is also viewed an important source of jobs in the new economy. Indeed, these 'e' related positions are estimated to represent over a million potential new jobs by 2005. In this regard, the new goals for life-long learning and digital literacy are to some extent overshadowed by a social, vocational and economic rationale, which seeks to maintain a competitive European economy.
		Thus, the claim that 'Education must always be the driving force behind these innovations' and that the 'Action Plan intends to ensure adherence to this principle throughout its implementation' (p.19) should not be accepted at face value. After all, the Action Plan must be seen in the broader context of the goals of the <i>e</i> Europe initiative.
30	Other	
31	Cross References	The European eLearning Summit http://europa.eu.int/comm/education/programmes/elearning/docen.html eEurope: An information society for all. http://www.e-europestandards.org/policy_statements.htm eEurope: An information society for all – Action plan. http://europa.eu.int/information_society/eeurope/2002/action_pl an/pdf/actionplan_en.pdf
		eEurope 2002: Final report. http://europa.eu.int/information_society/eeurope/2002/news_library/documents/acte_eEurope_2002_en.doc
		<i>e</i> Europe 2003+ A co-operative effort to implement the Information Society in Europe: Action plan. http://europa.eu.int/information_society/eeurope/plus/index_en.htm
		<i>e</i> Europe 2003 + Progress report http://europa.eu.int/information_society/eeurope/plus/index_en.htm
		e-Learning - Designing tomorrow's education. http://europa.eu.int/comm/education/programmes/elearning/doc en.html
		<i>eEurope</i> 2005: An information society for all. http://europa.eu.int/information_society/eeurope/2002/news_library/eeurope2005/index_en.htm

Global Picture, Local Lessons: (e)Learning Policy and Accessibility

1	Name	eEurope 2005: An information society for all
2	Reference	Commission of the European Communities (2002a). <i>eEurope</i> 2005: An information society for all. Retrieved 28 November, 2005, from http://europa.eu.int/information_society/eeurope/2002/news_library/eeurope2005/index_en.htm
3	Date	2002
4	Country	International - European Union
5	Ministry of Education Identifiers	 √ Policy √ Desired Outcomes √ Accessibility √ Infrastructural Support √ Actual Outcomes √ Lessons Learnt √ Barriers and Enablers □ Small and Remote Communities □ Bilingual and Multi-cultural Comments (if necessary):
6	Major Themes	Broadband, Infrastructure, Security, Good Practice, eGovernment, eLearning, eHealth, eBusiness, Benchmarking
7	Category of Document	√ Policy□ Background
8	Type of Document	 □ Policy □ Strategy √ Action Plan □ Draft Strategy/Policy/Action Plan □ Discussion Paper □ Evaluation Report □ Background Paper □ Book □ Journal Article □ Conference Paper □ Website
9	Scale of Project	 □ Local □ Regional □ National √ Supranational
10	Budget/Funding	The action plan sets ambitious objectives and proposes actions that will need significant resources. This will be met by using

11	Timeframe	and, where necessary, re-focussing existing programmes. To finance projects and actions at European level, the Commission will make full use of the <i>e</i> TEN and the IDA programmes. Both programmes are currently being re-orientated to support <i>e</i> Europe objectives. The Commission will, where possible, also use available funds of the <i>e</i> Content programme, the follow-up programme of PROMISE41, the multiannual programme for enterprise and entrepreneurship, as well as the standardisation, the Internal Market and the industrial competitiveness budget lines (p.21).
		□ Early Childhood
12	Target Audience	 Compulsory Schooling ✓ Post Compulsory Schooling ✓ Higher Education ✓ Vocational Education ✓ Community-based Education ☐ Small and Remote
13	Sponsoring Agency	Commission of the European Communities
14	Author	Commission of the European Communities
15	Contact Details	Commission of the European Communities Rue de la Loi / Wetstraat, 175 B-1048 Brussels Tel (32-2) 285 61 11 Fax (32-2) 285 73 97 / 8 public.info@consilium.eu.int
16	Co-Authors	
17	Aims/Objectives	The main objective of this Action Plan is to stimulate secure services, applications and content based on a widely available broadband infrastructure (p.8). It sets out to provide a favourable environment for private investment and for the creation of new jobs, to boost productivity, to modernise public services, and to give everyone the opportunity to participate in the global information society. Overall, <i>e</i> Europe 2005 aims to make the European Union the most competitive and dynamic knowledge-based economy with improved employment and social cohesion by 2010 (p.2).
18	Definition or Conception of (e)Learning	 ✓ Unstated ☐ Broad ☐ Precise Comments (if necessary): There is no explicit definition in the body of the policy but notably the hyphen between 'e' and 'learning' has now completely disappeared. On a website related to eEurope 2005 the following definition of elearning is once again provided: The use of new multimedia technologies and the Internet

		to improve the quality of learning by facilitating access to resources and services as well as remote exchanges and collaboration.
19	Areas of Priority	The action plan is structured around four lines which are interlinked:
		1. Policy measures to review and adapt legislation at national and European level, to strengthen competition and interoperability, to create awareness, and to demonstrate political leadership.
		2. The implementation of policy measures is supported by the development, analysis and dissemination of good practices . Projects will be launched to accelerate the roll-out of leading edge applications and infrastructure.
		3. Policy measures will be monitored and better focussed by benchmarking of the progress made in achieving the objectives and of the policies in support of the objectives.
		4. An overall co-ordination of existing policies will bring out synergies between proposed actions. A steering group will provide a better overview of policy developments and ensure a good information exchange between national and European policy makers and the private sector (pp. 3 &4).
20	Key Action Points	To meet these requirements, the <i>e</i> Europe 2005 Action Plan is based on two groups of actions which reinforce each other and build a virtuous circle (p.3).
		The first one concerns services , applications and content , covering both online public services and e-business, and the second one concerns the underlying broadband infrastructure and security matters .
		The targets of e Europe 2005 are summarised as follows; by 2005, Europe should have:
		 modern online public services e-government e-learning services e-health services a dynamic e-business environment
		and, as an enabler for these
		 widespread availability of broadband access at competitive prices a secure information infrastructure
		Each of the target areas have a series of proposed actions. These include:

Broadband connections. By end 2005, Member States should aim that all schools and universities have Internet access for educational and research purposes over a broadband connection. Museums, libraries, archives and similar institutions that play a key role in elearning should also be connected to broadband networks.

eLearning Programme. By end 2002, the Commission intends to adopt a proposal for a specific eLearning Programme. It will focus on the implementation of the objectives of the eLearning Action Plan from an educational perspective and run from 2004-2006. The Commission will also publish an analysis of the European market for e-learning, including the private sector. It will review the market situation and analyse legal, economic and social issues with a view to identifying obstacles to the development of the e-learning market in Europe and where necessary make proposals to remedy them.

Virtual campuses for all students. By end 2005, Member States, supported by the *e*Learning and *e*TEN18 programmes, should ensure that all universities offer on-line access for students and researchers to maximise the quality and efficiency of learning processes and activities.

University and research computer-supported co-operative system. By end 2003, the Commission will launch research and piloting actions to enable the deployment of Europewide computer-supported networks and platforms, based on high performance computing infrastructures and GRID19 technologies. They will allow collaborative work addressed at solving complex problems and virtual access to, and sharing of learning resources, and computational power across Europe.

Re-skilling for the knowledge society: By end 2003, Member States, where appropriate using structural funds and supported by the Commission, should launch actions to provide adults (e.g. the unemployed, women returning to the labour market, etc) with the key skills20 needed for the knowledge society, to improve their employability and overall quality of life. These actions will take advantage of the possibilities offered by elearning (p.12).

21 Procedures and Responsibility for Implementation

An *e*Europe steering group, chaired by the Commission (composed of Member States and candidate countries representatives, the European Parliament, and, where necessary, representatives of the private sector and of consumer groups, will be established. This steering group will monitor progress of the *e*Europe action plan with the aim of improving the implementation of *e*Europe 2005. It will also provide a forum to exchange experiences, and bring in the private sector and make an early participation of candidate countries possible. More information on the responsibility for the implementation of specific *e*learning objectives will also be contained in the *e*Learning Action Plan.

22	Procedures and Responsibility for Monitoring and Evaluation	Policy measures will be monitored by benchmarking of the progress made in achieving the objectives. Benchmarking of eEurope 2005 is a 3-stage process. 1. Definition of indicators For eEurope 2002, 23 indicators were used. A revised set of indictors will be adopted in this iteration of the policy. 2. Measurement and analysis To improve the quality, measurement of eEurope 2005 indicators will make greater use of official statistics from the National Statistical Institutes and Eurostat. To enable Member States to undertake their own analysis the results will be regularly updated on the eEurope web sites. The Commission and the Member States will encourage the development of regional benchmarking, especially with less developed regions in relation to the development of national and regional information society strategies. 3. Policy development Benchmarking will be further exploited by exchanging policy good practices. To facilitate this, the Commission will analyse the benchmarking results to identify policy good practices, including regional policies of those Member States, or other countries, with best results in terms of the indicators. eEurope 2005 will by end 2002 adopt a list of indicators and a methodology for the benchmarking exercise. By beginning 2003, the Commission will publish an evaluation of the eEurope 2002 action plan which will build on the first benchmarking exercise.
		methodology for the benchmarking exercise. By beginning 2003, the Commission will publish an evaluation of the <i>e</i> Europe
23	Partnerships with	Requires a joint effort including the European Commission,
	Others Regarding Implementation	Member Countries, public-private partnerships and the co- operation of all related stakeholders.
24	Relationship to Other Policies	eEurope 2005 is the next iteration of the eEurope 2002 Action Plan that attempts to implement the objectives of the wider eEurope initiative. Also, the 2005 Action Plan is related to the complementary eLearning Action Plan.

25	Summary of Document	This policy document recounts progress made under <i>e</i> Europe 2002, and introduces its successor, <i>e</i> Europe 2005 and beyond. The <i>e</i> Europe 2005 Action Plan was launched at the European Council in June 2002 and endorsed by the Council of Ministers in the <i>e</i> Europe Resolution of January 2003. Notably, in July 2002, a revised Rolling Action Plan was also produced and this updated version of the original Action Plan provides a 3-year work plan in support of the new priorities outlined in the <i>e</i> Europe 2005. The <i>e</i> Europe 2005 actions are intended to act as a lever for change that go beyond current policies and to make a real difference. They aim to develop modern public services and a dynamic environment for e-business through widespread availability of broadband access at competitive prices and a secure information infrastructure.
26	Relevance to Aotearoa/NZ Context	 √ Low ☐ Medium ☐ High Explanation: Very specific to the European context.
27	Actions/Strategies Related to Ministry of Education Identifiers	 √ Policy √ Desired Outcomes √ Accessibility √ Infrastructural Support √ Actual Outcomes √ Lessons Learnt √ Barriers and Enablers □ Small and Remote Communities □ Bilingual and Multi-cultural Comments (if necessary):
28	Actions/Strategies Identified for other Sub-groups	 ✓ Gender □ Ethnicity □ Indigenous People ✓ Socio-economic Status □ Diverse Learners □ Other [include details] Comments (if necessary): States that it should launch actions to provide adults (e.g. the unemployed, women returning to the labour market, etc) with the key skills needed for the knowledge society, to improve their employability and overall quality of life (p.12). Notably there is no longer any reference to people with special needs and disabilities, and the promotion of language and retention of cultural diversity is missing in this iteration of the policy.
29	Evaluative Comment	The standout feature of this iteration of the wider <i>e</i> Europe policy initiative is the emphasis placed on the introduction and use of broadband technology throughout Member States. In this regard, the policy document has a far stronger technical and networking

		focus than earlier policy as illustrated by the apparent shift away from the need to invest in people and skills including those with disabilities. Instead, there is limited reference to the concept of the Knowledge Society and the main emphasis appears to be on stimulating secure services, applications and content based on a widely available broadband infrastructure. In the context of elearning, the interface with the eLearning Action Plan is somewhat vague and notably there is now reference to 'elearning' as a market. The need to re-skill people for the Knowledge Society has a strong employability rationale and there is no explicit statement or explanation of how elearning will lead to a better overall quality of life.
30	Other	
31	Cross References	eEurope 2005 Mid-term review http://europa.eu.int/information_society/eeurope/2005/useful_inf ormation/mid_term_review/index_en.htm eEurope: An information society for all. http://www.e-europestandards.org/policy_statements.htm eEurope: An information society for all – Action plan. http://europa.eu.int/information_society/eeurope/2002/action_pl an/pdf/actionplan_en.pdf eEurope 2002: Final report. http://europa.eu.int/information_society/eeurope/2002/news_libr ary/documents/acte_eEurope_2002_en.doc eEurope 2003+ A co-operative effort to implement the Information Society in Europe: Action plan. http://europa.eu.int/information_society/eeurope/plus/index_en. httm eEurope 2003 + Progress report http://europa.eu.int/information_society/eeurope/plus/index_en. httm e-Learning - Designing_tomorrow's_education. http://europa.eu.int/comm/education/programmes/elearning/doc_en.html The eLearning action_plan: Designing_tomorrow's_education. http://europa.eu.int/comm/education/programmes/elearning/doc_en.html

Global Picture, Local Lessons: (e)Learning Policy and Accessibility

2	Name Reference	Adopting a multi-annual programme (2004-2006) for the effective integration of Information and Communication Technologies (ICT) in education and training systems in Europe (eLearning Programme) Commission of the European Communities (2002b). Adopting a multi-annual programme (2004-2006) for the effective integration of Information and Communication Technologies (ICT) in education and training systems in Europe (eLearning Programme). Retrieved 28 November, 2005, from http://europa.eu.int/comm/education/programmes/elearning/programme_en.html
3	Date	2002
4	Country	International - European Union
5	Ministry of Education Identifiers	 √ Policy √ Desired Outcomes √ Accessibility √ Infrastructural Support √ Actual Outcomes √ Lessons Learnt √ Barriers and Enablers √ Small and Remote Communities √ Bilingual and Multi-cultural Comments (if necessary):
6	Major Themes	ICT, eLearning, Digital Literacy, Higher Education, Virtual Campuses, Lifelong Learning, Partnerships, Digital Divide
7	Category of Document	√ Policy □ Background
8	Type of Document	 V Policy □ Strategy □ Action Plan □ Draft Strategy/Policy/Action Plan □ Discussion Paper □ Evaluation Report □ Background Paper □ Book □ Journal Article □ Conference Paper □ Website
9	Scale of Project	 □ Local □ Regional □ National √ Supranational

10	Budget/Funding	Specific funding details for each policy action. The European Parliament has proposed a new budget allocation to explore possibilities for innovative European action in this field and over the past two years, a number of strategic projects and studies have been launched with this budget (p.3).
11	Timeframe	2004-2006
12	Target Audience	 □ Early Childhood √ Compulsory Schooling √ Post Compulsory Schooling √ Higher Education √ Vocational Education √ Community-based Education □ Small and Remote
13	Sponsoring Agency	Commission of the European Communities
14	Author	Commission of the European Communities
15	Contact Details	Commission of the European Communities Rue de la Loi / Wetstraat, 175 B-1048 Brussels Tel (32-2) 285 61 11 Fax (32-2) 285 73 97 / 8 public.info@consilium.eu.int
16	Co-Authors	
17	Aims/Objectives	The overall objective of the programme is to promote and facilitate the effective use of information and communication technologies in European education and training systems, as a contribution to a quality education and an essential element of their adaptation to the needs of the knowledge society and of the European model of social cohesion. The specific objectives of the programme are: (a) To explore and to promote ways and means of using elearning for strengthening social cohesion and personal development, fostering intercultural dialogue, and fighting the digital divide; (b) To promote and develop the use of e-learning as an enabling factor for the implementation of the lifelong learning paradigm in Europe; (c) To exploit the potential of e-learning for enhancing the European dimension in education;
		(d) To facilitate a more structured co-operation in the field of e-learning between the diverse Community programmes and instruments and Member States actions;
		(e) To provide mechanisms for encouraging improvement of quality of products and services as well as for their effective dissemination and for exchange of good practice (pp. 16 & 17).

Unstated 18 **Definition or** Broad **Conception of** □ Precise (e)Learning Comments (if necessary): e-learning is defined as "the use of new multimedia technologies and the Internet to improve the quality of learning by facilitating access to resources and services as well as remote exchanges and collaboration". However, "e-learning" is claimed to be shorthand for a vision in which Information and Communication Technologies (ICT)mediated learning is an integral component of education and training systems. The ability to use ICT is presented as a new form of literacy - "digital literacy". In this context, digital literacy is regarded as important as "classic" literacy and numeracy were one hundred years ago. The document states that 'without it, citizens can neither participate fully in society nor acquire the skills and knowledge necessary for the 21st century' (p.2).This proposal to further develop the Action Plan into a 19 **Areas of Priority** Programme aims at complementing its monitoring and coordinating actions with a selected set of targeted strategic actions on high priority areas. The eLearning Programme aims to address each of these four areas in a coherent and consistent way: 1. Fighting the digital divide (p.11) Actions in this area will address the contribution of ICT for learning, in particular for those who -due to their geographical location, social situation or special needs- are not able to benefit from traditional educational and training provisions. The objective is to foster awareness and understanding of how ICT can aid these less privileged groups to acquire basic educational skills and new competences that are needed for the knowledge society. It will identify good examples and build synergies between the many national and European projects which address these target groups. 2. Universities and higher education institutions (p.11) The priority here is better integration of the virtual dimension in physical mobility, quality assurance and the mutual recognition schemes of the Bologna Process. The objective is to encourage the development of new organisational models for European universities (virtual campus) and for European exchange and sharing schemes (virtual mobility), building on existing European co-operation frameworks (Erasmus programme, Bologna process), and providing an "e-learning dimension" to their operational tools (ECTS, European

Masters; quality assurance; mobility). **3. School twinning via the Internet** (p.11) This priority shall implement a request of the Barcelona European Council, which identified school twinning is an opportunity for young people to learn and practice ICT skills, as well as promoting awareness of the multilingual and multicultural European model of society. The objective is to strengthen and develop schools networking, in particular via an European-wide school-twinning scheme which should make it possible for all European schools to build pedagogical partnerships with a school elsewhere in Europe, fostering language learning and intercultural dialogue. **4. Transversal actions** for the promotion of e-learning in Europe, building on the monitoring of the eLearning Action **Plan** (p.11). The objectives are the dissemination, promotion and take-up of good practice and products from the many projects and programmes which have been funded at the European level or by Member States and to reinforce co-operation between the various actors involved, in particular by fostering public-private partnerships. In order to achieve its objectives, the programme will finance 20 **Key Action Points** the following types of actions: A strategic set of actions related to each of the above objectives, such as, for example, analysis of results and exchange of European experience in the provision of polyvalent public learning centres; specific e-learning developments for university co-operation agreements under Erasmus; a regional network for support and pedagogical guidance of school-twinning; A strategic set of actions aimed at the systematic identification, analysis and exchange of good practice through focused workshops, seminars, studies, reports, etc supported by a European "virtual infrastructure" for cooperation and exchange (such as, for example, the eLearning European portal); Design and development of monitoring, analysis and forecasting tools for e-learning in Europe, including the funding of specific surveys, studies and intelligence gathering activities on the real use of e-learning in the different educational contexts, and the co-operation with existing international projects (such as, for example PISA-OECD); Design of a virtual structure for the provision of meaningful and timely information on e-learning in Europe, for academy, industry and policy-making needs, building on the

above, and in co-operation with Eurostat, the European Investment Bank, and OECD: Monitoring of the eLearning Action Plan; clustering of relevant e-learning projects from the education, training, research and other relevant programmes, and of the Structural Funds with a view to effective synergy and to reaching the critical mass required for take-up by education and training systems; and building on them, where appropriate, new co-operation platforms open to all interested education stakeholders; Targeted events (conferences, seminars, workshops, etc) to promote awareness of the eLearning Programme actions, cooperation between interested parties and Member States, and the effective transfer of public domain e-learning methods, contents and services (pp. 11 & 12). 21 **Procedures and** The delivery mechanisms foreseen in the proposal follow broadly the usual Community approach. The programme will Responsibility for **Implementation** be managed at central level by the Commission, with possible assistance from a future Executive Agency, the creation of which is currently under study (p.36). Overall, the Commission shall ensure the implementation of the actions covered by this programme by seeking synergies with other EU programmes and actions in the field of education, research, social policy and regional development. They will attempt to foster and facilitate co-operation with international organisations developing activities in the field of e-learning (p.18). The Member States, in turn, are expected to take the necessary steps to ensure close co-operation with the Commission; particularly as regards relevant information about e-learning use and practice; take steps to ensure that potential synergies with other Community programmes are achieved at the individual member level (p.18). 22 **Procedures and** The implementation of the programme, including monitoring, **Responsibility for** may be carried out by an Executive Agency, which should be Monitoring and operational from the start of the programme. It is expected that **Evaluation** monitoring activities will not start until approximately twelve months after the launch of the programme. This time will be used to prepare tools for data collection and processing (p.42). The ongoing monitoring of the programmes will be based on the information obtained directly from beneficiaries, which will submit interim and final activity and financial reports, including performance criteria set out in the selection process. In order to ensure the quality of the execution of the programme, visits to the projects will be carried out on a regular basis, and regular feedback will also be requested on

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		the activities of participants in the programme. All projects and actions will include built-in evaluation, or provision for assessment by external experts or internal sources, and contain performance indicators and guidelines for follow-up. For one-off projects, such as seminars and conferences, on-site monitoring will be undertaken, and external in-depth evaluation will be carried out on the basis of random samples and/or on the basis of risk factors. An interim evaluation will be carried out on the second year of the programme. For the purpose of evaluation, a number of clear indicators have been identified (see p.43).
23	Partnerships with Others Regarding Implementation	The policy places a great deal of importance on forging new public-private partnerships (p.8). These partnerships are proposed to include local and regional authorities, Non Governmental Organisations (NGOs) and social partners, as grass-roots players with a major role in implementing the programme objectives.
		Some co-financed actions (e.g. action 3) could be carried out with specific networks (EUN, EUA) having a de facto monopoly. EUN is a network of ministries of education in all the Member States and in several applicant countries. EUA is the European Association of Universities, bringing together over 500 universities (p.28).
24	Relationship to Other Policies	The multi-annual programme (2004-2006) for the effective integration of ICT in education and training systems in Europe is an extension of <i>e</i> Learning Action Plan, which in turn comes under the wider <i>e</i> Europe Action Plan.
		More specifically, this latest iteration of ICT policy needs to be read in the context of several parallel initiatives such as (a) Key Competencies for Lifelong Learning, (b) the new EU Action Programme in the field of lifelong learning 2007-2013, (d) the Action Plan on Language Learning and Linguistic Diversity, and (c) the Education & Training 2010 initiatives. See
		http://europa.eu.int/comm/education/policies/2010/doc/keyrec_e n.pdf
		http://europa.eu.int/comm/education/programmes/newprog/inde x_en.html
		http://europa.eu.int/comm/education/policies/lang/policy/index_en.html
		http://europa.eu.int/information_society/eeurope/i2010/index_enhtm
25	Summary of Document	The multi-annual programme (2004-2006) for the effective integration of ICT is a further step towards realising the goals of <i>e</i> Europe and, in particular, the vision of technology serving as a contribution to a quality education system and an essential element

		of the Knowledge Society. Throughout the policy there is strong emphasis on the importance of life-long learning and on the European model of social cohesion. Overall, the policy focuses on a set of actions in high priority areas chosen for their strategic relevance to the modernisation of Europe's education and training systems. These involve: - Fighting the digital divide - Universities and higher education institutions - School twinning via the Internet - Transversal actions for the promotion of e-learning in Europe, building on the monitoring of the eLearning Action Plan. The policy is reasonably comprehensive in these areas and is designed to complement many of the other related EU policy initiatives.
26	Relevance to Aotearoa/NZ Context	☐ Low ☐ Medium √ High Explanation: This is the latest iteration of policy on the use of ICT in education. Although highly specific to the European context, the raft of related initiatives, particularly those on the digital divide, life-long learning, education for citizenship, and cultural and language diversity, have direct relevance to the New Zealand context.
27	Actions/Strategies Related to Ministry of Education Identifiers	 √ Policy √ Desired Outcomes √ Accessibility √ Infrastructural Support √ Actual Outcomes √ Lessons Learnt √ Barriers and Enablers √ Small and Remote Communities √ Bilingual and Multi-cultural Comments (if necessary):
28	Actions/Strategies Identified for other Sub-groups	 √ Gender √ Ethnicity □ Indigenous People √ Socio-economic Status √ Diverse Learners √ Other [include details] Comments (if necessary):

The policy aims to address: (a) the needs of young learners, in particular, those who are increasingly at the margins of society such as school drop-outs or disadvantaged immigrants; (b) cognitive and didactic approach differences, and different learning styles. Under this point, attention will be paid to the different needs and attitudes of men and women in the use of new media, in view to ensuring gender equality; (c) specific needs, for example, those of hospitalised children or handicapped users (p. 24).

29 Evaluative Comment

With the exception of the current discussion around the i2010 initiative, which has a far stronger emphasis on issues of growth and employment, this is the latest policy initiative on the role of ICT and elearning in the education and training systems of Europe. In comparison to some of the earlier policy documents, there is a far stronger educational rationale implicit in this policy, as reflected by the emphasis on life-long learning and the provision of educational opportunities for disadvantaged people.

Notably the policy acknowledges the need to clarify the 'why' and the 'how' to use ICT in education, and that the focus should be on innovative educational methods and settings (p.5). In this regard, the policy contains some quite innovative proposals such as the development of virtual campuses and provision for greater virtual mobility.

It is also noteworthy the policy comments that 'e-learning is proving to be a major evolution rather than a revolution' (p.5). In a similar vein, it acknowledges that many early attempts at e-learning were unsuccessful as they 'did not consider well enough the needs of the learner and the nature of what is to be learnt' (p.8). For the first time the term 'blended learning' is introduced suggesting that elearning is not a standalone innovation but rather it needs to be part of a more flexible approach to providing contents and services. On the whole, the concept of elearning does not appear to have the same high profile as previous policy documents.

Of particular note is the comment that 'competition may, in some cases, contradict the political will for co-operation,' thereby implying that some of the past initiatives may have been unrealistic or overly ambitious in a market economy.

Finally, the argument that 'the nature of the proposed actions is such that they cross the traditional borders of school education, higher education, vocational training and adult learning' (p.10) appears to be particularly relevant to the desired pan sector New Zealand policy framework. The policy goes on to state that:

With e-learning a whole new range of partnerships becomes practicable: public-public, public-private and private-private. For example, schools are called on to work more closely with universities and other sources of knowledge – museums, cultural centres, factories, hospitals, libraries, etc; universities and vocational training centres are able to co-operate with industry to

		offer virtual apprenticeships and more context related
		learning; SMEs are called on to work together with
		local or regional administrations and industry associations on common training needs' (p.10).
		associations on common training needs (p.10).
		Of course, it remains to be seen whether the full advantages of e-learning, as claimed, can only be realised in a policy programme which transcends the boundaries of education and
		training, in a true lifelong learning perspective. From what can be ascertained there appears to be limited reference to elearning in these related policy initiatives, which is confirmed by the European Open and Distance Learning Liaison Committee (2004).
		There is value, nonetheless, in the New Zealand Ministry of Education exploring some of these wider policy initiatives, such as the eight new key competencies of lifelong learning (including digital competence), recently adopted by the European Commission as they may reflect a maturing of the policy literature beyond a pure elearning focus.
		A more detailed critique of European elearning policy by the European Open and Distance Learning Liaison Committee (2004) can be found at:
		http://www.odl-liaison.org/pages.php?PN=policy-paper_2004
		The following is a useful article on the challenge of ICT and e Learning in Europe in the context of the role of public and private sectors.
		Debande, O. (2004). ICTs and the development of <i>e</i> Learning in Europe: The role of the public and private sectors. <i>European Journal of Education</i> , 39, (2), 191-208.
30	Other	Note that the European Commission is a major sponsor of the forthcoming eLearning Africa conference
		http://www.elearning-africa.com/
31	Cross References	<i>e</i> Europe: An information society for all. http://www.e-europestandards.org/policy_statements.htm
		<i>e</i> Europe: An information society for all – Action plan. http://europa.eu.int/information_society/eeurope/2002/action_plan/pdf/actionplan_en.pdf
		<i>e</i> Europe 2003+ A co-operative effort to implement the
		Information Society in Europe: Action plan.
		http://europa.eu.int/information_society/eeurope/plus/index_en. htm
		e-Learning - Designing tomorrow's education. http://europa.eu.int/comm/education/programmes/elearning/doc
		<u>en.html</u>
		The eLearning action plan: Designing tomorrow's education. http://europa.eu.int/comm/education/programmes/elearning/doc

_en.html

eEurope 2005: An information society for all. http://europa.eu.int/information_society/eeurope/2002/news_library/eeurope2005/index_en.htm

Key competencies for lifelong learning http://europa.eu.int/comm/education/policies/2010/doc/keyrec_e n.pdf

EU action programme in the field of lifelong learning 2007-2013.

 $\frac{http://europa.eu.int/comm/education/programmes/newprog/inde}{x_en.html}$

Action plan on language learning and linguistic diversity. http://europa.eu.int/comm/education/policies/lang/policy/indexen.html

Global Picture, Local Lessons: (e)Learning Policy and Accessibility

1	Name	ICT in education
2	Reference	UNESCO Bangkok. (2005). <i>ICT in education</i> . Retrieved 22 November, 2005, from http://www.unescobkk.org/index.php?id=494
3	Date	2005
4	Country	International - UNESCO
5	Ministry of Education Identifiers	 ✓ Policy ✓ Desired Outcomes ✓ Accessibility ✓ Infrastructural Support ☐ Actual Outcomes ✓ Lessons Learnt ✓ Barriers and Enablers ✓ Small and Remote Communities ☐ Bilingual and Multi-cultural Comments (if necessary):
6	Major Themes	ICT, Education Policy, Teaching & Learning, Teacher Training, Assessing Impact, Technologies
7	Category of Document	□ Policy√ Background
8	Type of Document	 □ Policy □ Strategy □ Action Plan □ Draft Strategy/Policy/Action Plan □ Discussion Paper □ Evaluation Report □ Background Paper □ Book □ Journal Article □ Conference Paper √ Website
9	Scale of Project	 □ Local □ Regional □ National √ Supranational
10	Budget/Funding	No indication but some funding from the Japanese Funds-in-Trust
11	Timeframe	Ongoing

12	Target Audience	 □ Early Childhood √ Compulsory Schooling √ Post Compulsory Schooling √ Higher Education √ Vocational Education √ Community-based Education √ Small and Remote
13	Sponsoring Agency	UNESCO Japanese Funds-in-Trust
14	Author	UNESCO - Bangkok
15	Contact Details	ICT in Education Unit UNESCO Regional Office for Asia and the Pacific P.O. Box 967 Prakanong Post Office Bangkok 10110 Thailand Tel: +66 2 391 0577 Fax: +66 2 391 0866 email: ICTinEd@unescobkk.org
16	Co-Authors	
17	Aims/Objectives	The UNESCO vision is to empower learners, teachers, educators, managers and leaders to use information communication technology (ICT) effectively for expanding learning opportunities, ensuring educational quality and relevance, and achieving Education for All goals. The UNESCO ICT in Education Asia-Pacific programme, with generous funding support from Japanese Funds-in-Trust, aims to achieve sustainable ICT integration at all levels of the educational process.
18	Definition or Conception of (e)Learning	 ✓ Unstated ☐ Broad ☐ Precise Comments (if necessary): The term 'elearning' is not used by UNESCO Bangkok. Instead, they define Information and Communication Technologies (ICT) as technology that are used to transmit, store, create, share or exchange information. Examples of ICT include: radio, television, video, DVD, telephone, satellite systems, computer and network hardware and software, as well as the services associated with them, such as videoconferencing and electronic mail.
19	Areas of Priority	There are five main areas of priority:
		- ICT in Education Policy

		- Teaching & Learning - Teacher Training
		- Indicators for Assessing ICT Impact in Education - Technologies
20	Key Action Points	The main action points that have relevance to tertiary education include:
		 Education Policies - ICT in Education Policies Teaching and learning; Clearing house -Regional clearing house on ICT in education for Asia-Pacific; Meta-survey -Meta Survey on effective use of ICT in education; Non-formal education -ICT application for non-formal education programmes; Technical and Vocational Education -Improving Management and Delivery of Technical and Vocational Education (TVE) through the Application of Information and Communication Technologies (ICTs); Indicators for assessing ICT impact in education; Performance indicators on ICT use in Education project;
		UNESCO Asia-Pacific regional bureau
		 Non-formal education - Developing educational software for non-formal education; MANGO - Monitoring non-formal learning; Distance Learning (ODL) - The Higher Education Open and Distance Learning (ODL) Knowledge and Information Base; Developing open learning communities; Higher education - open and distance knowledge base for decision makers.
21	Procedures and Responsibility for Implementation	Too many projects with their own individual aims to describe in detail but notably developing indicators for assessing the impact of ICT on education is one of UNESCO's key themes. In 2003, for example, UNESCO published the following comprehensive report:
		UNESCO (2003). Performance indicators for ICT in education. Consultative workshop for Developing Performance Indicators for ICT. Bangkok: UNESCO.
		See http://www.unescobkk.org/index.php?id=662 .
22	Procedures and Responsibility for Monitoring and Evaluation	UNESCO appears to accept responsibility for ongoing monitoring and the need to evaluate progress in the area of elearning especially in developing nations within the Asia-Pacific region.

23	Partnerships with Others Regarding Implementation	The Japanese Funds-in-Trust appears to financially support many of the UNESCO ICT-related projects.
24	Relationship to Other Policies	The relationship between UNESCO and individual countries in the Asia-Pacific region is unclear. However, there does appear to be some relationship between UNESCO and the Southeast Asian Ministers of Education Organisation (SEAMEO) but the precise nature of this requires further investigation. See
		http://www.seameo.org/
		In a similar vein, the relationship between UNESCO, SEAMEO and APEC warrants further analysis as the latter has also published statements about the importance of ICT in education. See
		http://ott.educ.msu.edu/apec/overview.asp
		Finally, UNESCO is also involved in another large scale initiative entitled <i>Education for all</i> . See
		http://www.unesco.org/education/efa/index.shtml
25	Summary of Document	UNESCO has a genuine concern to ensure that ICT does not become a source of further inequality, with the digital divide potentially accentuating already existing disparities. The assumption is that access to computers, the Internet, and the capacity to make use of ICT depend largely on socio-economic and/or ethnic background, as well as on gender, age, educational background and geographical location. The various UNESCO activities and projects detailed on the ICT in Education website aims to promote successful policy models and strategies of technology integration, with special emphasis on removing barriers to participation, and the learning of girls and women, out-of school youth, the disadvantaged, those with special needs and the poor.
26	Relevance to Aotearoa/NZ Context	 ↓ Low □ Medium □ High Explanation: Most of UNESCO's work is in less developed Asia-Pacific nations.
27	Actions/Strategies Related to Ministry of Education Identifiers	 √ Policy √ Desired Outcomes √ Accessibility √ Infrastructural Support ☐ Actual Outcomes √ Lessons Learnt √ Barriers and Enablers

	<u></u>	V Small and Damata Communities
		√ Small and Remote Communities □ Bilingual and Multi-cultural
		Comments (if necessary):
		Notably some of the UNESCO sponsored projects aim to improve quality of life and alleviate poverty among disadvantaged rural populations through greater access to context-specific education programmes using ICTs.
28	Actions/Strategies Identified for other Sub-groups	√ Gender √ Ethnicity □ Indigenous People √ Socio-economic Status √ Diverse Learners √ Other [include details] Comments (if necessary): Notably the ICT in Education Policy project promotes successful policy models and strategies for integration of ICT into educational systems and curricula, with special emphasis on removing barriers to participation and the learning of girls and women, out-of-school youth, the disadvantaged, those with special needs and the poor.
29	Evaluative Comment	The role of UNESCO in promoting the inclusive use of ICT in education is not widely documented in the academic literature nor is it well understood throughout the developed world. However, UNESCO has published a number of reports on this topic as illustrated by the recent book entitled <i>Open and Distance Learning: Trends, Policy and Strategy Consideration.</i> Although there is a strong compulsory schooling emphasis, UNESCO's work has relevance to New Zealand policy initiatives for two reasons: (a) due to our geographical location to Asia and (b) because of the emphasis placed on removing barriers to participation. Having said that, many of the projects relate to contexts that are very different from those in New Zealand but the work UNESCO is undertaking serves to underscore the extent of the Digital Divide between developed and lesser developed nations. Perhaps the lesson for policy-makers from the activities described by the UNESCO <i>ICT in Education</i> website is that New Zealand has an important responsibility to its Pacific neighbours in the area of elearning. Our policies should not only align with internal policies but also the aims and aspirations Pacific nations, which play such an important part in New Zealand society.
30	Other	Note that the European Commission is a major sponsor of the forthcoming eLearning Africa conference
		http://www.elearning-africa.com/
31	Cross References	UNESCO – Education
		http://portal.unesco.org/education/en/ev.phpURL_ID=42332&U RL_DO=DO_TOPIC&URL_SECTION=201.html

UNESCO Education for all

http://www.unesco.org/education/efa/index.shtml

UNESCO - Open and Distance Learning: Trends, Policy and Strategy Considerations

http://unesdoc.unesco.org/images/0012/001284/128463e.pdf

SEAMEO

http://www.seameo.org/

APEC

http://ott.educ.msu.edu/apec/overview.asp

APEC Education Foundation - Consortium for APEC cyber education cooperation (ACEC)

http://www.apecef.org/grant/acec.asp

APEC 2003 eLearning Summit

http://linc.hinet.net/apec/summit2003/summit.html

Japanese Funds-in-Trust Funded Projects

http://www.unescobkk.org/index.php?id=966

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1	Name	The World Bank
2	Reference	The World Bank. (2005). Retrieved 4 December, 2005, from http://worldbank.org/
3	Date	2005
4	Country	International – World Bank
5	Ministry of Education Identifiers	 □ Policy √ Desired Outcomes √ Accessibility √ Infrastructural Support □ Actual Outcomes □ Lessons Learnt □ Barriers and Enablers √ Small and Remote Communities □ Bilingual and Multi-cultural Comments (if necessary):
6	Major Themes	Distance Education, Distance Learning, ICT, e-Learning, Infrastructure
7	Category of Document	□ Policy√ Background
8	Type of Document	 □ Policy □ Strategy □ Action Plan □ Draft Strategy/Policy/Action Plan □ Discussion Paper □ Evaluation Report □ Background Paper □ Book □ Journal Article □ Conference Paper √ Website
9	Scale of Project	 □ Local □ Regional □ National √ Supranational
10	Budget/Funding	Funding specific to each project. In 2005, for example, \$4.6m (US) was made available for a new Chinese distance learning project. In 2004, The World Bank approved a \$100 m (US) loan for the first phase of a total \$300 million Adaptable Program loan to the Russian Federation for the e-Learning Support Project.
11	Timeframe	Ongoing

12	Target Audience	 □ Early Childhood √ Compulsory Schooling √ Post Compulsory Schooling √ Higher Education √ Vocational Education □ Community-based Education √ Small and Remote
13	Sponsoring Agency	The World Bank
14	Author	The World Bank
15	Contact Details	The World Bank 1818 H Street, NW Washington, DC 20433 USA tel: (202) 473-1000 fax: (202) 477-6391 http://worldbank.org/
16	Co-Authors	
17	Aims/Objectives	The World Bank is a source of financial and technical assistance to developing countries around the world. It is not a typical bank as The World Bank is made up of two unique development institutions owned by 184 member countries—the International Bank for Reconstruction and Development (IBRD) and the International Development Association (IDA). Each institution plays a different but supportive role in their mission of global poverty reduction and the improvement of living standards. The IBRD focuses on middle income and creditworthy poor countries, while IDA focuses on the poorest countries in the world. Together they claim to provide low-interest loans, interest-free credit and grants to developing countries for education, health, infrastructure, communications and many other purposes.
18	Definition or Conception of (e)Learning	 √ Unstated □ Broad □ Precise Comments (if necessary):
19	Areas of Priority	The priority areas appear to differ from project to project but on face value these are generally consistent with the goals of widening educational opportunities, global poverty reduction and the improvement of living standards.

20 Key Action Points

The World Bank is involved in at least 13 projects in the education sector that have notable ICT and elearning components. Some of the more notable action points include:

1. Egypt - Higher Education Enhancement Project

This Project aims at laying the foundation for improving the quality of the higher education system in Egypt, through legislative reform, institutional restructuring, and establishment of independent quality assurance mechanisms, and monitoring systems. A component of this project will improve the quality, and relevance of university education, through the establishment of an information technology (IT) integrated computer, and network infrastructure, and finance in-service training to develop competencies in the application of computer technology, particularly in teaching methodologies.

http://web.worldbank.org/external/projects/main?pagePK=1042 31&Projectid=P056236

2. Russian Federation & WorldBank E-learning Initiative

The first phase of the project will support education modernization goals of the Federal Targeted Program for 2001-2005 "e-Education," and will help improve accessibility, quality, and efficiency of general and first level vocational education all over Russia.

http://researchblog.ecornell.com/2004/03/russian_federat.html

3. The Virtual Colombo Plan

The Virtual Colombo Plan (VCP) is an initiative of the World Bank and the Australian Government to bridge the 'digital divide' between rich and developing nations. In doing so, the VCP claims to promote opportunities for people in developing countries to access education, information and knowledge. It intends to achieve this by using ICTs to support and accelerate international development as technology becomes more affordable and widespread globally.

http://www.ausaid.gov.au/keyaid/vcp.cfm

4. New Chinese Distance Learning Project

The World Bank Group has invested \$4.6 million in the China Vocational Education Satellite Network. This Network is the premier distance learning platform sponsored by the National Center for Education Development & Research of Ministry of Education of People's Republic of China, owned and operated by Shanghai Aerospace Computer System Engineering Co., Ltd. Shanghai Aerospace Computer System Engineering Co., Ltd. is a private shareholding company, engaging in the development of

		a multi-media medical training system, an image processing and satellite transmission system, and distance learning platform.
		http://biz.yahoo.com/iw/051121/0101971.html
		5. Global Development Learning Network
		This is an extensive network of distance learning centers that use advanced information and communications technologies to connect people working in development around the world.
		http://www.gdln.org/WBSITE/EXTERNAL/GDLNCHILD/0,,m enuPK:1409420~pagePK:64233373~piPK:64234192~theSitePK :841731,00.html
21	Procedures and Responsibility for Implementation	No specific information is available
22	Procedures and Responsibility for Monitoring and Evaluation	No specific information is available
23	Partnerships with Others Regarding Implementation	The nature and extent of partnerships vary according to the project. However, there does seem to be a relationship with the Commonwealth of Learning and the Development Gateway – an independent not-for-profit organization conceived by former World Bank President James Wolfensohn.
24	Relationship to Other Policies	Depends on the project
25	Summary of Document	The World Bank is involved in funding a number of elearning projects and initiatives in less developed nations. A major theme of their support, which appears to be largely financial, is the provision of distance learning—especially in large geographically spread counties with rural and remote communities. The World Bank does not appear to be heavily involved in the implementation of each project and there is very little information on the success or otherwise of each initiative. The majority of The World Bank sponsored projects have a strong compulsory schooling flavour.
26	Relevance to Aotearoa/NZ Context	√ Low ☐ Medium ☐ High Explanation:
27	Actions/Strategies Related to Ministry of Education Identifiers	 □ Policy √ Desired Outcomes √ Accessibility √ Infrastructural Support □ Actual Outcomes □ Lessons Learnt

		 □ Barriers and Enablers √ Small and Remote Communities □ Bilingual and Multi-cultural Comments (if necessary):
28	Actions/Strategies Identified for other Sub-groups	 □ Gender □ Ethnicity □ Indigenous People √ Socio-economic Status □ Diverse Learners □ Other [include details] Comments (if necessary):
29	Evaluative Comment	The World Bank's involvement in promoting elearning needs to be understood in the context of its well-known pro free trade and market reform ideological position. In this regard, ICT and elearning is no doubt seen by The World Bank as the digital lubricant through which to promote economic reform and the extension of the global market. The Chinese distance learning project which involves several private corporations is a strong indication of how elearning itself has become part of the market. Put bluntly, it is big business! Although many of these initiatives have great potential, there is little or no consideration in the information on each of the projects of the potential long—term social, economic and educational effects of such investment in ICT in education—for better and worse. In other words, rightly or wrongly, elearning is treated as a benign and largely neutral educational
30	Other	innovation.
31	Cross References	World Bank http://worldbank.org/ Noteworthy Recent World Bank Education Projects with ICT Components www.infodev.org/files/1712_file_Some_noteworthy_ recent_World_Bank_education_projects_with_ICT_components .pdf
		Reaching the potential of Information and communication technologies http://web.worldbank.org/WBSITE/EXTERNAL/EXTABOUT_US/ORGANIZATION/EXTINFNETWORK/0,.contentMDK:20721189~menuPK:489896~pagePK:64159605~piPK:64157667~theSitePK:489890,00.html Global development learning network

 $\frac{http://www.gdln.org/WBSITE/EXTERNAL/GDLNCHILD/0,,m}{enuPK:1409420\sim pagePK:64233373\sim piPK:64234192\sim the SitePK}{:841731,00.html}$

Egypt - Higher Education Enhancement Project

http://web.worldbank.org/external/projects/main?pagePK=1042 31&Projectid=P056236

Russian Federation & WorldBank E-learning Initiative http://researchblog.ecornell.com/2004/03/russian_federat.html

Global Development Learning Network

http://www.gdln.org/WBSITE/EXTERNAL/GDLNCHILD/0,,menuPK:1409420~pagePK:64233373~piPK:64234192~theSitePK:841731,00.html

Development Gateway http://home.developmentgateway.org

COL http://www.col.org/

Global Picture, Local Lessons: (e)Learning Policy and Accessibility

1	Name	APEC Education Foundation (AEF)
2	Reference	APEC Education Foundation. (2005). Retrieved 2 December, 2005, from http://www.unescobkk.org/index.php?id=494
3	Date	2005
4	Country	International - APEC
5	Ministry of Education Identifiers	 √ Policy √ Desired Outcomes √ Accessibility √ Infrastructural Support □ Actual Outcomes □ Lessons Learnt □ Barriers and Enablers √ Small and Remote Communities √ Bilingual and Multi-cultural Comments (if necessary):
6	Major Themes	ICT, Cyber Education, elearning, Knowledge Bank, Strategic Plan, Education Policy, Communities, Teacher Training
7	Category of Document	□ Policy√ Background
8	Type of Document	 □ Policy □ Strategy □ Action Plan □ Draft Strategy/Policy/Action Plan □ Discussion Paper □ Evaluation Report □ Background Paper □ Book □ Journal Article □ Conference Paper √ Website
9	Scale of Project	 □ Local □ Regional □ National √ Supranational
10	Budget/Funding	\$679.000 (US). The bulk of funding for the APEC Education Foundation (AEF) appears to come from Task 1 countries including Hong Kong-China; Korea; New Zealand and the United States.
11	Timeframe	2001-2004

12	Target Audience	 □ Early Childhood √ Compulsory Schooling √ Post Compulsory Schooling □ Higher Education √ Vocational Education □ Community-based Education □ Small and Remote
13	Sponsoring Agency	APEC
14	Author	APEC Education Foundation
15	Contact Details	APEC Education Foundation 300-4 Yomgok-dong, Seocho-gu, Seoul 137-747, Korea Tel: 82-2-576-7373/4 Fax: 82-2-576-5303 E-mail: secretariat@apecef.org http://www.apecef.org
16	Co-Authors	
17	Aims/Objectives	APEC Education Foundation (AEF), a non-profit, grant-making organization, established in 1995 as an expansion of the Leaders' Education Initiative of the first APEC Economic Leaders' Meeting in Blake Island, the United States. The mission of the APEC Education Foundation is to support APEC endeavours towards shared prosperity and community building in Asia and the Pacific by advancing education and human resources development in APEC economies. To achieve the mission, the Foundation aims to promote research, scholarship and learning in Asia-Pacific region through programs of grants for projects and other special initiatives in the areas of APEC priorities. As an offshoot of AEF, the goal of the Consortium for APEC Cyber Education Cooperation (ACEC), established in 2001, is to help narrow the digital divide among APEC economies by sharing information and knowledge on education in the APEC region through effective web portals, by fostering community-building for teachers, and building human capacities of educators (P.2). ACEC's primary missions are: • Engage in projects that narrow the digital divide in the APEC region • Make available to teachers and administrators in the APEC region information and services that improve education, in particular the use of ICT; and • Coordinate the work of various APEC economies to enhance multilateral cooperation in the region and avoid duplication of projects.

18	Definition or Conception of (e)Learning	 √ Unstated □ Broad □ Precise Comments (if necessary):
19	Areas of Priority	The APEC Education Foundation supports a number of e- Learning projects through the APEC Cyber Education Cooperation (ACEC). ACEC have identified three types of activities:
		 Constructing a web portal that provides access to the contributing projects and to materials produced by the participating groups.
		2. Providing provision of mechanisms that foster educational communities, both on and off-line.
		3. Producing projects, such as training sessions and workshops, which build the human capacity of educators in the APEC region.
20	Key Action Points	The main action points to date include:
		Publication of the Asia-Pacific Cyber Education Journal [online]
		2. Development of an online Knowledge Bank of policy and practice for educators. The bank will focus on the use of technology in the classroom, teaching and learning of other subject matter, and the exchange of people and ideas.
		3. The Asia-Pacific e-Learning Alliance, a private-sector effort involving 10 major computer companies involved in working with APEC economies to identify ways to maximize education resources through greater use of web-based learning opportunities. The group, which includes AOL Time Warner, Sun Microsystems, Cisco Systems and several non-U.S. companies, will also provide technical assistance.
		4. The e-Language Learning Project, a proposal to help students and educators in the APEC region use the Internet to learn a second language, with an initial focus on English, Chinese and Spanish language skills. The web-based initiative recognizes that second language skills are essential for economic success in a global economy, as well as for creating mutual understanding among people. The project is claimed to represent a prototype for education in the 21st Century and could be extended to cover additional languages spoken in other APEC economies.
		Notably, there was an initiative to produce an APEC eLearning Strategic Plan but after some progress led by the US and Korea this project was terminated, as reported in the

24	Relationship to Other Policies	but this requires further investigation.
23	Partnerships with Others Regarding Implementation	In order to ensure a coordinated approach to common concerns, the Foundation reports that it works closely with the APEC Secretariat, the APEC Human Resources Development Working Group, the APEC Study Centers and other partners of APEC. The precise role of member nations in relation to developments in their own country is unclear. There may be some relationship between AEF and SAEMEO
22	Procedures and Responsibility for Monitoring and Evaluation	AEF appears to accept responsibility for ongoing monitoring and evaluation with regular progress reports presented at each AEF gathering. Some minutes of AEF meetings contain further information on each project and some of these are available online.
21	Procedures and Responsibility for Implementation	Initiatives have their own budget line and responsibility for implementation appears to rest with those sponsoring the individual projects.
		 Strengthen coordination across APEC for and with the private and foundation sectors throughout the region. [www.apec.edu.tw/APEC_USA_ChineseTaipeigc0613032.doc]
		4. Address the quality assurance, legal and policy issues raised in implementing eLearning efforts across APEC.5. Promote efficiency and reduce duplication of effort among APEC economies through joint research and development activities.
		3. Improve teachers' and education leaders' capacity to use technology to improve education through access to quality training. 4. Address the reality assumption leaders' capacity to use
		2. Improve access to innovative educational content using Internet in pre-K through adult education.
		 Expand access to the Internet infrastructure throughout the APEC regions and reduce the access gap among different student groups in rural and urban areas in APEC economies.
		This project sought to develop an eLearning Strategic Plan to be presented at the 2004 APEC Education Ministerial in Chile and with results reported at the 2005 Leader's Meeting in Korea. The purpose of this eLearning plan was:
		APEC Education Network minutes of 22-23 June.

25	Summary of Document	APEC, through the APEC Education Foundation (AEF), has a strong interest in the area of elearning. In 2003, APEC offered an eLearning Summit in Chinese Taipei attended by about two hundred scholars, entrepreneurs, educational administrators, and teachers in the field. Since then APEC and AEF have been active in supporting a number of projects such as the Knowledge Bank of education policy and the Cyber Education Journal but interestingly the development of an APEC eLearning Strategic Plan was recently terminated. However, APEC continues to sponsor a number of innovative projects, which promote the general economic and cooperation goals of the association in the Asia-Pacific region.
26	Relevance to Aotearoa/NZ Context	 □ Low √ Medium □ High Explanation:
27	Actions/Strategies Related to Ministry of Education Identifiers	 √ Policy √ Desired Outcomes √ Accessibility √ Infrastructural Support □ Actual Outcomes □ Lessons Learnt □ Barriers and Enablers √ Small and Remote Communities √ Bilingual and Multi-cultural Comments (if necessary): While there is a strong compulsory schooling emphasis in the work of AEF some of the APEC sponsored projects are relatively 'blue sky' and albeit within their economic frame aim to improve educational opportunities throughout Asia-Pacific.
28	Actions/Strategies Identified for other Sub-groups	 □ Gender √ Ethnicity □ Indigenous People √ Socio-economic Status □ Diverse Learners □ Other [include details] Comments (if necessary):
29	Evaluative Comment	The role of APEC in the area of elearning is somewhat interesting and, arguably, it parallels the rise of the importance of e-commerce throughout the region. It would be interesting to know why a decision was made to terminate the development of the APEC eLearning Strategic Plan and one can only speculate whether this is a response to the more realistic appreciation of the actual growth of e-commerce. Alternatively, the decision may be a reflection of the fact that

		member countries have made considerable progress in developing their own elearning plans and a supranational initiative might be somewhat problematic. Although many of the activities of APEC relate to compulsory schooling, they have implications for tertiary education and are worthy of further and ongoing data gathering.
30	Other	
31	Cross References	APEC 2005
		http://www.apec2005.org/
		APEC Education Foundation - Consortium for APEC cyber education cooperation (ACEC)
		http://www.apecef.org/grant/acec.asp
		APEC eLearning strategic plan
		www.apec.edu.tw/APEC_USA_ChineseTaipeigc0613032.do
		APEC
		http://ott.educ.msu.edu/apec/overview.asp
		APEC 2003 eLearning Summit
		http://linc.hinet.net/apec/summit2003/summit.html
		Japanese Funds-in-Trust Funded Projects
		http://www.unescobkk.org/index.php?id=966
		Consortium for APEC Cyber Education Cooperation (ACEC)
		http://www.goacec.com/
		Knowledge Bank
		http://www.apecneted.org/knowledgebank/
		Asia-Pacific cyber education journal
		http://acecjournal.org/
		SEAMEO
		http://www.seameo.org/

Global Picture, Local Lessons: (e)Learning Policy and Accessibility

1	Name	World Summit on the Information Society
2	Reference	World summit on the Information Society. (2005). <i>Tunis agenda for the Information Society</i> . Retrieved 2 December, 2005, from http://www.itu.int/wsis/documents/doc_multi.asp?lang=en&id=2267 0
3	Date	2005
4	Country	International - World Summit on the Information Society
5	Ministry of Education Identifiers	 √ Policy √ Desired Outcomes √ Accessibility √ Infrastructural Support ☐ Actual Outcomes √ Lessons Learnt √ Barriers and Enablers √ Small and Remote Communities √ Bilingual and Multi-cultural Comments (if necessary):
6	Major Themes	Information Society, ICT, Infrastructure, Digital Divide, Financial Mechanisms, Internet Governance, Implementation and Follow up
7	Category of Document	√ Policy□ Background
8	Type of Document	 □ Policy □ Strategy √ Action Plan □ Draft Strategy/Policy/Action Plan □ Discussion Paper □ Evaluation Report □ Background Paper □ Book □ Journal Article □ Conference Paper □ Website
9	Scale of Project	 □ Local □ Regional □ National √ Supranational
10	Budget/Funding	No indication – but establishment of the Digital Solidarity Fund (DSF) (item 28 of Tunis Agenda)

11	Timeframe	November 2005 - ongoing
12	Target Audience	 □ Early Childhood □ Compulsory Schooling □ Post Compulsory Schooling □ Higher Education □ Vocational Education □ Community-based Education √ Small and Remote
13	Sponsoring Agency	United Nations - International Telecommunication Union
14	Author	World Summit on the Information Society
15	Contact Details	Executive Secretariat World Summit on the Information Society International Telecommunication Union Place des Nations 1211 Geneva 20 Switzerland Email wsis@itu.int Phone: +41 22 730 55 11 Fax: +41 22 730 63 93
16	Co-Authors	
17	Aims/Objectives	The objective is to move from principles to action, considering the work already being done in implementing the Geneva Plan of Action and identifying those areas where progress has been made, is being made, or has not taken place.
18	Definition or Conception of (e)Learning	 √ Unstated □ Broad □ Precise Comments (if necessary): The policy does not make explicit reference to elearning as the term 'ICT' is adopted throughout the document.
19	Areas of Priority	There are three broad areas of priority: 1. Financial mechanisms 2. Internet governance 3. Implementation and follow up.
20	Key Action Points	The Tunis agenda has few concrete action points. Although a list of over 100 resolutions is provided, few of these provide any detail of how the desired outcomes will be achieved.

21	Procedures and Responsibility for Implementation	Responsibility for implementation rests with individual countries, industry stakeholders and international organizations such as the United Nations. Again, there are few specific details of how the various commitments will be enacted to create an Information Society based on the Geneva Declaration of Principles.
22	Procedures and Responsibility for Monitoring and Evaluation	The World Summit on the Information Society appears to accept some responsibility for ongoing monitoring and evaluating progress in meeting the stated commitments. In practice, however, it would appear that a large portion of the responsibility still rests with individual countries, industry stakeholders and international organizations such as the United Nations.
23	Partnerships with Others Regarding Implementation	The extent of the partnership between contributing nations outside of the World Summit on the Information Society movement is unclear. The nature of the relationship with the United Nations is left undefined and the role and responsibility of contributing signatories to the Tunis Agenda and original Geneva declaration is open to conjecture.
24	Relationship to Other Policies	Geneva Declaration of Principles http://www.itu.int/wsis/documents/doc_multi.asp?lang=en&id=1 Geneva Plan of Action http://www.itu.int/wsis/documents/doc_multi.asp?lang=en&id=1 Tunis Commitment http://www.itu.int/wsis/documents/doc_multi.asp?lang=en&id=2 266 0
25	Summary of Document	The Tunis agenda for the Information Society is the most recent iteration of publications to come out of the World Summit on the Information Society (WSIS). To date, the Summit has been held in two phases, with participation of 175 countries. The first phase took place in Geneva hosted by the Government of Switzerland from 10 to 12 December 2003, and the second phase took place in Tunis hosted by the Government of Tunisia, from 16 to 18 November 2005. So far, four documents have been adopted: - Geneva Declaration of Principles - Geneva Plan of Action - Tunis Commitment - Tunis Agenda for the Information Society The UN agency that took the lead in organizing the Summit is the International Telecommunication Union (ITU). In the second phase of WSIS efforts were made to put the Plan of Action into motion and working groups were set up to find solutions and reach agreements in the fields of Internet governance and financing mechanisms. As an outcome, over

		100 comments, resolutions and commitments were published as part of the Tunis Agenda for the Information Society.
26	Relevance to Aotearoa/NZ Context	 □ Low √ Medium □ High Explanation: The emphasis on creating an inclusive Information Society is directly relevant to the current New Zealand context but many of the action points have little or no substance.
27	Actions/Strategies Related to Ministry of Education Identifiers	 √ Policy √ Desired Outcomes √ Accessibility √ Infrastructural Support □ Actual Outcomes √ Lessons Learnt √ Barriers and Enablers √ Small and Remote Communities √ Bilingual and Multi-cultural Comments (if necessary): There is a strong emphasis on using ICTs to expand access to quality education, to boost literacy and universal primary education, and to facilitate the learning process itself, thus laying the groundwork for the establishment of a fully-inclusive and development-oriented Information Society and knowledge economy which respects cultural and linguistic diversity. Particular attention is given to the special situation of indigenous peoples, as well as to the preservation of their heritage and their cultural legacy.
28	Actions/Strategies Identified for other Sub-groups	√ Gender √ Ethnicity √ Indigenous People √ Socio-economic Status √ Diverse Learners □ Other [include details] Comments (if necessary): There is particular attention to the special needs of marginalised and vulnerable groups of society including migrants, internally displaced persons and refugees, unemployed and underprivileged people, minorities and nomadic people, older persons and persons with disabilities.
29	Evaluative Comment	The Tunis Agenda for the Information Society is heavily on rhetoric but light on concrete and substantive actions leading to measurable outcomes. Arguably the real value of this policy document is the way it conceptualizes the Information Society beyond a narrow economic imperative. The wider goal is to build ICT capacity for all and confidence in the use of ICTs by all including youth, older persons,

		women, indigenous peoples, people with disabilities, and remote and rural communities through the improvement and delivery of relevant education and training programmes and systems including lifelong and distance learning (Item 90 c). Just how this might be achieved is another matter but the inclusion of many of these ideals and commitments in individual nation ICT and elearning policy would be a positive step in the right direction.
30	Other	
31	Cross References	Geneva Declaration of Principles http://www.itu.int/wsis/documents/doc_multi.asp?lang=en&id=1 161 0 Geneva Plan of Action http://www.itu.int/wsis/documents/doc_multi.asp?lang=en&id=1 160%7C0 Tunis Commitment http://www.itu.int/wsis/documents/doc_multi.asp?lang=en&id=2266 0 OECD and the World Summit on the Information Society http://www.oecd.org/document/21/0,2340,en_2649_34223_352 82901_1_1_37409,00.html

Global Picture, Local Lessons: (e)Learning Policy and Accessibility

1	Name	COL's policy on elearning
2	Reference	The Commonwealth of Learning. (2005). <i>COL's policy on elearning</i> . Retrieved 24 November, 2005, from http://www.col.org/05elearning.htm
3	Date	2005
4	Country	International - Commonwealth
5	Ministry of Education Identifiers	 ✓ Policy □ Desired Outcomes □ Accessibility ✓ Infrastructural Support □ Actual Outcomes □ Lessons Learnt □ Barriers and Enablers □ Small and Remote Communities □ Bilingual and Multi-cultural Comments (if necessary):
6	Major Themes	eLearning, Infrastructure, Learning Management Systems, Learning Object Repositories, Commonwealth Countries
7	Category of Document	√ Policy□ Background
8	Type of Document	 √ Policy □ Strategy □ Action Plan □ Draft Strategy/Policy/Action Plan □ Discussion Paper □ Evaluation Report □ Background Paper □ Book □ Journal Article □ Conference Paper □ Website
9	Scale of Project	 □ Local □ Regional □ National √ Supranational
10	Budget/Funding	No indication
11	Timeframe	Released in February 2005

13 14 15	Sponsoring Agency Author Contact Details	 □ Early Childhood □ Compulsory Schooling □ Post Compulsory Schooling √ Higher Education √ Vocational Education √ Community-based Education √ Small and Remote Commonwealth of Learning Commonwealth of Learning Commonwealth of Learning 1055 West Hastings Street, Suite 1200 Vancouver, BC V6E 2E9 Canada
		Tel: +1.604.775.8200 Fax: +1.604.775.8210 E-mail: info@col.org Web: www.col.org
16	Co-Authors	
17	Aims/Objectives	The objectives are to:
		 (a) expand effective learning opportunities through its programmes, using the most appropriate technologies and approaches to fit the learners' circumstances; (b) monitor latest developments in eLearning to help promote what could be useful in reaching additional learners and improving the teaching-learning processes; (c) support and perform limited pilot programmes to test the use of technologies and approaches in reaching COL's objectives; and (d) provide a technological infrastructure that may be used to support education programmes that COL has a need to run (p.1).
18	Definition or Conception of (e)Learning	 ✓ Unstated ☐ Broad ☐ Precise Comments (if necessary): The policy does not provide an explicit definition but elsewhere on the COL website [http://www.col.org/resources/] 'online learning' and 'elearning' are defined as terms that have emerged to describe the application of information and communication technologies (ICTs) to enhance distance education, implement open learning policies, make learning activities more flexible and enable those learning activities to be

21	Procedures and Responsibility for Implementation	Where COL staff members deem a programme is suitable for offering in an online environment, the choices of technology mix, instructional design and learning facilitation will rest with the person responsible for the activity, while support and advice and infrastructure will be provided by the KM team in support of this policy (p.2).
		 Implement and maintain an infrastructure including LMS and LOR to support the development (including "conversion") of learning objects and provision of online learning environments. Online and face-to-face programmes to enhance the skills of ODL practitioners in Commonwealth countries to implement similar systems (p.2).
20	Key Action Points	To adequately provide for the integration of eLearning techniques into COL's work, the following will be implemented and maintained: 1. Monitor the available learning management systems and learning object repositories.
		7. Through COL's work in policy, systems, applications and knowledge management, learning content that is customisable, reusable and available to member countries should be stored using appropriate technologies and made easy to access and use (pp.1&2).
		6. Provide a basic infrastructure that may be used for online programmes and communities of practice supported by COL to address both development and delivery of effective eLearning practices.
		5. Developing and providing the training necessary for Commonwealth countries to gain the skills to develop learning materials in formats appropriate for storage in repositories and reuse in learning management systems.
		4. The evaluation of learning management systems (LMSs), learning content management systems (LCMSs) and learning object repositories (LORs) where these are applicable and appropriate to COL's mandate, with special attention to open source software.
19	Areas of Priority	States of the Commonwealth. Vancouver: The Commonwealth of Learning. The focus is in the following four areas:
		distributed among many learning venues. This definition is attributed to: Farrell, G. (ed.). (2003). A Virtual University for Small

22	Procedures and Responsibility for Monitoring and Evaluation	eLearning programmes should be monitored from the point of view of creating good practice case studies and examples that can be shown to Commonwealth countries (p.2).
23	Partnerships with Others Regarding Implementation	The Commonwealth of Learning is an intergovernmental organisation created by Commonwealth Heads of Government to encourage the development and sharing of open learning/distance education knowledge, resources and technologies. Commonwealth Governments financially support COL on a voluntary basis. Major contributors include Canada, India, New Zealand, Nigeria, South Africa and the United Kingdom. Some financial support is also provided by The World Bank and there appears to be a relationship with the Development Gateway—an independent not-for-profit organization. conceived by former World Bank President James Wolfensohn.
24	Relationship to Other Policies	COL's Three-year Plan http://www.col.org/programmes/reporting/3year_plan.htm
25	Summary of Document	The COL's policy on elearning has a strong emphasis on open learning and distance education. It is a leader in policy and practice in this area by enhancing the provision of educational opportunities across the Commonwealth. The core task of the COL is to expand access to quality education through its programmes in Commonwealth countries. As a result of its work, the COL claims that governments have an increasing appreciation of the potential of open and distance learning. This policy recognises that the range of possible technologies to achieve this includes all aspects of elearning. Due to the rapid technological changes, the COL must constantly seek new technological methods and approaches that will assist in finding the correct balance in reaching more potential learners. The four objectives of the elearning policy are largely consistent with this goal.
26	Relevance to Aotearoa/NZ Context	√ Low ☐ Medium ☐ High Explanation:
27	Actions/Strategies Related to Ministry of Education Identifiers	 ✓ Policy □ Desired Outcomes □ Accessibility ✓ Infrastructural Support □ Actual Outcomes □ Lessons Learnt

		 □ Barriers and Enablers □ Small and Remote Communities □ Bilingual and Multi-cultural Comments (if necessary): Although unstated in the policy document, implicit in the work of the COL is support for small and remote communities.
28	Actions/Strategies Identified for other Sub-groups	 □ Gender □ Ethnicity □ Indigenous People □ Socio-economic Status □ Diverse Learners □ Other [include details] Comments (if necessary): Although unstated in the policy document, implicit in the work of the COL is support for indigenous people and those of low socio-economic status.
29	Evaluative Comment	The COL's policy on elearning and its contribution to open and distance learning across the Commonwealth are important to note, but the policy itself has limited value outside of the organisation. The one activity that may be of interest in the future is the COL's particular interest in open source software including learning management systems and learning object repositories. Overall, the COL provides a useful dissemination service for resources and publications in the area of open learning and distance education.
30	Other	
31	Cross References	COL http://www.col.org/ COL's Three-year Plan http://www.col.org/programmes/reporting/3year_plan.htm World Bank http://worldbank.org/ Development Gateway http://home.developmentgateway.org

Global Picture, Local Lessons: (e)Learning Policy and Accessibility

1	Name	IAU policy statement: Universities and information and communication technologies.
2	Reference	International Association of Universities. (2005). <i>IAU policy statement: Universities and information and communication technologies</i> . Retrieved 16 November, 2005, from http://www.unesco.org/iau/p_statements/itc_statement.html
3	Date	2005
4	Country	International – International Association of Universities
5	Ministry of Education Identifiers	 ✓ Policy □ Desired Outcomes □ Accessibility □ Infrastructural Support □ Actual Outcomes □ Lessons Learnt □ Barriers and Enablers □ Small and Remote Communities □ Bilingual and Multi-cultural Comments (if necessary):
6	Major Themes	Universities, ICT Policy, Fundamental Questions, Intergovernmental Organizations, Governments and national authorities
7	Category of Document	√ Policy □ Background
8	Type of Document	 √ Policy □ Strategy □ Action Plan □ Draft Strategy/Policy/Action Plan □ Discussion Paper □ Evaluation Report □ Background Paper □ Book □ Journal Article □ Conference Paper □ Website
9	Scale of Project	 □ Local □ Regional □ National √ Supranational
10	Budget/Funding	No specific information

11	Timeframe	Ongoing
12	Target Audience	 □ Early Childhood □ Compulsory Schooling □ Post Compulsory Schooling √ Higher Education □ Vocational Education □ Community-based Education □ Small and Remote
13	Sponsoring Agency	International Association of Universities
14	Author	International Association of Universities
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16	Co-Authors	
17	Aims/Objectives	The IAU, founded in 1950, is the UNESCO-based worldwide association of universities. It brings together institutions and organisations from some 150 countries for reflection and action on common concerns and collaborates with various international, regional and national bodies active in higher education. Its services are available on the priority basis to members but also to organisations, institutions and authorities concerned with higher education, as well as to individual policy and decision-makers, specialists, administrators, teachers, researchers and students.
		The Association aims at giving expression to the obligation of universities as social institutions to promote, through teaching and research, the principles of freedom and justice, of human dignity and solidarity, and contributes, through international cooperation, to the development of material and moral assistance for the strengthening of higher education generally. Their mission is based on the fundamental principles for which every university should stand:
		The right to pursue knowledge for its own sake and to follow wherever the search for truth may lead;
		The tolerance of divergent opinion and freedom from political interference.

		The overall goals of IAU are both internal and external:
		• to link up its members;
		• to speak on behalf of universities, and of higher education in general
		Both of these complementary goals are pursued through future oriented collective action, including conferences and meetings, information services, policy discussion, research and publications.
18	Definition or Conception of (e)Learning	 √ Unstated □ Broad □ Precise Comments (if necessary):
		The term 'elearning' is not used by the IAU but nor is there an explicit definition of ICT provided in the policy statement.
19	Areas of Priority	There are three main areas of priority:
		1. International community and intergovernmental organizations
		2. Governments and national authorities
		3. Universities
		Within these priorities the goal is to:
		- act as a <i>platform for information sharing</i> in regard to the use of ICTs in higher education, stimulating exchange of expertise and disseminating examples of good practices such as the Open Educational Resources;
		 advocate and promote networking among higher education institutions to share experience, educational material and ICT facilities in order to ensure that institutions in all parts of the world can fully participate in exchanges of information, knowledge and expertise;
		- encourage the <i>development of a code of good practice</i> for the exchange of research results and products in the field of ICTs;
		- promote cooperation and consortia for the design and dissemination of educational materials in non-dominant' languages.
20	Key Action Points	Action points under each priority area include:
		1. International community and intergovernmental organizations
		a) promote the development of internationally compatible ICT

tools, thus ensuring a global standardization of processes and systems in order to enable effective cooperation and exchanges in research and training around the world. At the same time, efforts should be made to ensure that the potential of ICTs is more equitably shared around the world and to avoid the overwhelming domination by developed countries in terms of ICT production, development and application;

- b) initiate ICT development programs at a regional and an international level with the contribution of national authorities and all stakeholders (private sector, Civil Society groups and universities) in order to bridge the "digital divide" between the developed countries and the developing and least developed countries. Such global solidarity is urgently needed to provide universities in least developed countries with the appropriate financial, technical and human support required to make ICTs available and to promote capacity building so that the technologies can be adopted locally in each region;
- c) strengthen and contribute to policies and mechanisms that guarantee mutual and equitable recognition of qualifications and degrees around the world, in response to the increasing internationalization of higher education also enhanced by the use of ICTs;
- d) ensure that existing or renewed legal frameworks in regard to the protection of intellectual property and copyright are applied and respected. Regulate the risks of cyber piracy and informatics crimes including plagiarism, data manipulation, etc. These legal frameworks should secure full access for all users to knowledge and information for educational and research purposes;

2. Governments and national authorities

- a) safeguard public responsibility for higher education and research. Given the increasing trans-national for-profit higher education market, it is of particular importance that universities provide the widest and most equitable access to higher education and retain their important role in the pursuit and dissemination of knowledge in the age of ICTs;
- b) frame ICT policies for higher education systems, explicitly stating objectives, action plans and committing public funds in order to afford each university equal opportunities to benefit from the potential of and meet the challenges raised by ICTs;
- c) develop appropriate telecommunication infrastructures to allow each university access to ICTs for educational and research purposes, either free of charge or at reasonable rates. This will require the provision of reliable electrical and telecommunication facilities;

3. Universities

		 a) develop and continuously update institutional ICT policies in order to align educational and research objectives with the most appropriate technology choices and adequate financial and human resources. These policies should: b) place quality in teaching and learning as well as in research at the center of ICT-based developments at the institution, since a focus on pedagogy, curriculum and content-related questions are of utmost importance as the use of ICT tools expands. ICT application to teaching and learning should not be viewed as a substitute for teachers, but rather as a means of their empowerment. Policy should promote adoption of ICTs as a means for teachers to gain easier and wider access to information, to initiate greater exchange opportunities with peers and engage in a new, enriched interaction with students;
		 provide all members of the academic community and non-academic staff with skills to use up-to-date ICTs. Sufficient and on-going financial support should also be allocated to ensure that all students are provided with the relevant ICT skills;
		 safeguard a genuine cultural pluralism in educational and research material, given the increasing globalization of higher education, enhanced by ICTs;
		c) examine critically and on an on-going basis the use of ICTs in the educational process in order to avoid an exclusive reliance on technologies even in the case of distance learning or virtual universities. The face-to-face interaction within the academic community and thus the socializing dimension of higher education must be maintained;
		d) develop and build bilateral, regional and international networks or partnerships in research, courseware, development of information services and ICT expertise. Such partnerships, based on the principles of cross-cultural, equitable and non-commercial co-development could make a significant contribution to bridging the digital divide' between higher education institutions in developed, developing and least developed countries.
21	Procedures and Responsibility for Implementation	No specific information is available but largely resides with individual institutions
22	Procedures and Responsibility for Monitoring and Evaluation	No specific information is available but largely resides with individual institutions

23	Partnerships with Others Regarding Implementation	IAU is the UNESCO-based worldwide association of universities. It is formally partnered with the following organizations: • UNESCO • UNESCO European Centre for Higher Education (CEPES) • Swedish International Development Cooperation Agency (SIDA) • The European Network of Information Centres (ENIC)/ The National Academic Recognition Information Centres (NARIC) • Education International (IE) • Agence Intergouvernementale de la Francophonie • Council for Higher Education Accreditation • International Association of University Presidents (IAUP) • The International Union of Students
24	Relationship to Other Policies	No obvious relationship – except at individual institution level
25	Summary of Document	The International Association of Universities (IAU) acknowledges that ICT offers universities tremendous new possibilities in research and education and open wider access to information. They claim that universities have been at the forefront of ICT development as well as among the leaders in integrating and adopting these technologies into their work, especially in teaching, learning and research, as well as community outreach, library and information services and management. As universities develop and expand the use of ICTs in their activities they are strengthening their capacity to enhance quality and respond to new challenges. According to IAU, however, it must be recognized that benefits from ICTs are not equitably shared around the world. Thus, this policy statement is intended to help universities ask some fundamental questions about the role of ICT in education and society. The IAU has identified the following areas as being of particular importance: • the impact on cultural and linguistic diversity in higher education of expanded use of ICTs; • the need to safeguard university values such as academic freedom when developing the ICT policy of universities; • the need for continued attention to quality also when applying ICTs in teaching and learning; • the need to understand the impact of using ICTs in the learning process; • the recognition of the crucial socializing role of higher education institutions; • the striking and widening inequalities between developed, developing and least developed countries in terms of

		access and capacity to use ICTs; • the need to protect student involvement and influence at universities when implementing ICTs. Overall, the policy statement respects and reflects the right of intellectual freedom and the importance of university education of pursuing knowledge for its own sake wherever the search for truth may lead.
26	Relevance to Aotearoa/NZ Context	 □ Low √ Medium □ High Explanation: Although this policy is limited to universities and of international origin, it contains some valuable points for New Zealand policy-makers on the role of university education in the so-called Digital Age.
27	Actions/Strategies Related to Ministry of Education Identifiers	 □ Early Childhood □ Compulsory Schooling □ Post Compulsory Schooling √ Higher Education □ Vocational Education □ Community-based Education Small and Remote Comments (if necessary):
28	Actions/Strategies Identified for other Sub-groups	☐ Gender √ Ethnicity √ Indigenous People √ Socio-economic Status √ Diverse Learners ☐ Other [include details] Comments (if necessary): Within its focus on tolerance of divergent opinion and freedom from political interference the policy asks some serious and fundamental questions about the long-term impact of ICT on society and the nature of education.
29	Evaluative Comment	Although relatively brief and somewhat of a sidebar to national policies, the IAU policy statement underscores the unique nature of university education. Indeed, it indicates that universities have an important role in not only exploring the potential of ICT in education but also in researching the long-term effects—for better and worse. The implications for New Zealand policy-makers is that elearning policy at the national level must be sufficiently opened ended to allow the pursuit of new knowledge in directions that may not be popular or consistent with the current orthodoxy.
30	Other	The only New Zealand institutions who belong to IAU are the University of Otago and UNITEC Institute of Technology.

31	Cross References	
		UNESCO – Education
		http://portal.unesco.org/education/en/ev.phpURL_ID=42332&U RL_DO=DO_TOPIC&URL_SECTION=201.html
		International Association of University Presidents http://www.ia-up.org/