



## International K12 Online Learning Initiatives 2006

In the United States, there are more than 500,000 enrollments in online courses in grades K-12 and more than one-third of public school districts offer eLearning. Research has been done on several virtual schools in North America; however, little information can be found on current K-12 e-learning initiatives across the world. The North American Council for Online Learning (NACOL) surveyed over 30 countries in order to highlight international trends in online learning, identify online learning initiatives and projects in individual countries, and to promote international dialogue for future collaboration.

E-Learning leaders from Ministries of Education and virtual schools provided NACOL with information on the following topics: current initiatives, funding, student populations, content development and quality control, professional development, and current trends and obstacles. A summary of the highlights of each country's returned questionnaire is included in the matrix below.

	Overview of e-Learning	Extent of Adoption	Student Population	Funding
<b>Australia</b>	In the schools sector there has been a concentration on providing national statements of policy ( <a href="http://icttaskforce.edna.edu.au/icttaskforce/go">http://icttaskforce.edna.edu.au/icttaskforce/go</a> ), providing bandwidth to schools and education units, provision of high quality online services such as links, resources, collaborative spaces and shared information services through Education Network Australia ( <a href="http://www.edna.edu.au">www.edna.edu.au</a> ) provision of career information and services ( <a href="http://www.myfuture.edu.au">www.myfuture.edu.au</a> ), development and participation in online educational standards ( <a href="http://standards.edna.edu.au/standards/go">http://standards.edna.edu.au/standards/go</a> ), development of content ( <a href="http://www.thelearningfederation.ed.au">www.thelearningfederation.ed.au</a> ) and management of the national educational DNS service ( <a href="http://www.domainname.edu.au/">http://www.domainname.edu.au/</a> ).	Very strong uptake in the VTE sector (80%) and estimated uptake in schools is approximately 30% within institutions. However, outside of institutions the statistics indicate a 73% uptake which could be argued to reflect non-institutional uptake for education and training.	Rural Students are largest pop. A stronger uptake in urban schools and schools from middle and high income areas.  No gender differences or school size differences.  Informal learning use of ICT tends to be non-institutional individual use although in formal learning situations blended learning is dominant.	Funding is provided almost solely by National and State Governments.
<b>China</b>	Currently, there are few people who participate in the online education due to the high costs and Internet conditions. Online education plays an assistant role to learners because it is too expensive. Online education in China is at low levels and cannot meet the demands from most learners.  Online education has potential to be developed. If the population of those being educated rose 1%, almost 100 million new students could participate.  Specialists forecasted that online education will become a way to push the non-ideal Chinese Internet to make a profit. Websites that deliver online education can get an inexhaustible supply of money. Because of this, the future of online learning in China is promising.	Although there are increasing numbers of Internet learners, it still accounts for a low percentage of the total population of China. The development of online learning is limited by the number of online learners so that online education cannot be popularized now.  People below 22 years old account for 23%, 22-29 account for 50%, 30-39 account for 18%, and upwards of 40 account for 9%.	Most students are from urban areas due to the wideband distributions and learning costs. They regard online learning as an alternative way to absorb knowledge.  There are currently limited courses and resources which have limited the enrollment in online education.  The majority of people who use online learning are male, ages 22-29.	In the urban area, if students study by Internet, they must pay the fees themselves, except in special circumstance e.g. if they live in genteel poverty, then the government or schools can reduce their fees or they can apply for a scholarship.  In rural areas, the government will aid the students to go to school because online learning is free from any time and place.

Canada	<p>Education in Canada is a provincial government responsibility. Therefore e-Learning initiatives have been a Ministry of Education (provincial) and/or District (local) program. All provinces have made progress with regards to online learning. There have been discussions around the collaboration of consortiums across borders. There has also been some discussion around a national LOR but this is still in the beginning stages.</p> <p>There are provincial consortiums lead by both provincial governments and organized at grassroots levels.</p> <p>A cross-curricular competency focusing on the use of ICT was included in our elementary and secondary education programs. Quebec set up a structure for supporting the integration of these technologies at all levels (RECIT, <i>Vitrine APO</i>, <i>Profweb</i> and <i>Profetic</i>).</p> <p>Virtual School Society, a group working to improve and promote electronic courses for B.C. students. The LearnNowBC Virtual School was just launched for K-12 students in British Columbia.</p> <p>In Newfoundland, K-12 distance education falls under the mandate of the provincial Center for Distance Learning and Innovation (CDLI), students attend traditional schools for the majority of their courses and can enroll in web-based courses not available in their school.</p> <p>The most current reports on e-learning in Canada can be found at <a href="http://www.ccl-cca.ca/CCL/Reports/StateofTheFieldReview/StateofTheFieldReview.htm">http://www.ccl-cca.ca/CCL/Reports/StateofTheFieldReview/StateofTheFieldReview.htm</a></p>	<p>E-Learning is in every province and most Boards.</p> <p>In Ontario, all southern Boards are involved in e-Learning and most northern Boards have active programs or are investigating using these tools for delivery. In the Alliance there are close to 4000 students taking full credit courses and about 1000 in blended delivery. Across Ontario there are an estimated 25,000 students taking online course and this number will grow rapidly.</p> <p>Today, more than 50% of teachers regularly use ICT in school, while others use it at least for their administrative work. More than three quarters of Quebec households have Internet access, and 90% of these include a school-age child. Quebec students report using ICT to do their schoolwork at home.</p> <p>In Canada, 9 out of 10 children have a computer at home and 44% of students regularly use a computer at school. More than 75% of teenagers regularly use e-mail.</p>	<p>Most students are seniors taking courses they need to complete their high school diploma or for university preparation.</p> <p>There is a combination of rural and urban students, depending on the board</p> <p>Most students use online learning independently, however a slow growth of these tools in a blended delivery model is growing.</p>	<p>Costs are assumed by the School Boards. No provincial funding is provided which is a great barrier for expansion School Boards are taking money from other programs to support eLearning.</p>
Hong Kong	<p>To enable students to engage in empowering modes of learning which include collaboration, inquiry and production of knowledge products as key features anytime, anywhere, it was stipulated in the new IT in Education Strategy Policy Document "Empowering Learning and Teaching with Information Technology" published by the Education and Manpower Bureau (EMB) in July 2004 that suitably designed e-learning platforms to support above-mentioned learning activities will be provided for all primary and secondary schools. The EMB has also pledged to support research and evaluation on pedagogically appropriate e-learning platforms (Learning Management Systems), help set up such platforms in schools, provide teacher training, and to enhance courseware.</p>	<p>As Hong Kong is a small place, students can easily travel to school to meet their teachers every day. E-Learning is used as a means to provide learning support to students and to cater for the needs of individual differences. E-Learning is unlikely to take over face-to-face teaching. The use of Information Technology (with e-learning as one possible means) in enhancing student learning is practiced daily in schools.</p>	<p>E-learning is not the main theme of instruction or method of providing education to students in Hong Kong.</p> <p>No school provides full e-learning courses to students so that students could study at home without the necessity to return to schools.</p> <p>Local teachers create additional learning activities for students to work online after school or at home as a means to strengthen the lessons given during school hours.</p> <p>Students complete online tasks, collaborate or get feedback from peers or teachers online.</p>	<p>All public sector schools are funded by the government. E-Learning provided by schools to students, is funded by public money indirectly. In early 2005, all public sector schools have been provided with funding to procure e-learning platforms or upgrade their existing platforms. Series of professional development programs, in both face-to-face and online modes, continue to be organized and offered free by the EMB to equip teachers with the necessary knowledge and skills to implement e-learning in schools. Funding has also been allocated to all schools to procure e-learning materials including learning objects to facilitate teachers' development of online materials for use by students on the e-learning platforms.</p> <p>Students are not required to pay extra for taking any e-learning course or using e-learning materials offered by their schools.</p>

Iran	<p>Online education is carried out both by the private sector and by government organizations. In the government section, the Ministry of education works in three main areas: they have created a few online courses which teach the software to produce electronic content, they created intelligent schools where most of the content is either on line or on CDs, and there is an attempt to produce a network among the schools.</p> <p>In the private sector, there are a large number of companies working in e-Learning, which have online courses for high schools and give certificates which have been approved by the Ministry of Education.</p>	<p>As far as doing projects, several schools are familiar with it. A list of schools can be found at: <a href="http://www.schoolnet.ir">http://www.schoolnet.ir</a>. As for carrying out curriculum, only a few do this and on a limited basis. All together, an estimated 20,000 students participate in online activities.</p>	<p>Mainly the students in big cities are using this facility and also from large schools.</p> <p>It is not independent and is always carried out with other forms of instruction.</p> <p>Recently independent courses have been designed for first grade to high school by the private sector.</p>	<p>The courses developed by the government are free for students as the government pays for it.</p> <p>Courses developed by the private sector are more expensive and students pay for them.</p>
Japan	<p>In Japan, some universities started e-learning in the past few years, but elementary and high schools do not currently conduct any online courses nor are there any plans at this time. (There is currently only one correspondence high school that uses the Internet.)</p>	<p>The majority of the schools conduct education using the Internet, but none of the schools have adopted online learning without the exception of the one correspondence high school.</p>	<p>Students tend to be from urban areas, large schools and participate in a blended model of using the Internet with other forms of instruction.</p>	<p>All fees associated with online learning are paid by individual students.</p>
Kazakhstan	<p>Some of the larger state and private universities have started to use the Internet as a tool to provide e-Learning. Central Asia defines e-Learning as data transfer through the Internet used to gain knowledge.</p> <p>The current plan for high schools and universities is to provide University courses through the Internet to students. The elementary and secondary schools use the Internet to discuss and interact with others and to exchange their experiences and new ideas in pedagogy for use in the curriculum.</p>	<p>The current data on the percentage of students participating in online learning has not been collected, but the number is small. Online learning has been adopted by a few teachers who know how to use the computer and Internet, who know the English language, and who know how to implement collaborative projects in their curriculum, who are the new, young teachers, which there are very few of.</p>	<p>Students can be described as: ages 13–19 who already have and know how to use computers at their homes, and know some software and Internet tools.</p> <p>This is about 1 to 8% of students in each class. Such students are living in urban areas and attending large schools.</p>	<p>Online learning is paid for by governmental grants and student tuition.</p> <p>Some foreign foundations (Soros, Irex) fund online education initiatives by providing web-sites, web-spaces and Internet tools.</p>
Nepal	<p>E-Learning has been an effective way of delivering classes in Nepal. Most of the people from the area have Internet access and are benefiting from e-Learning.</p> <p>iEARN Nepal is also announcing its program and organizing seminars to introduce the learning environment through the Internet, targeting school children and teachers.</p>	<p>The government wants to promote e-Learning for managing schools to help the people involved on school management committee and parent teacher associations. They are also looking into adult education to reduce the high number of illiterate citizens.</p> <p>After the recent conflict, the government has created the "Right to Education 2015" act. They would like to use e-Learning to educate the citizens on conflict management, peace keeping, and peace management.</p>	<p>Nepal will target exceptional children, victims of war, orphans, and disabled students as the result of a long civil war of the country for e-Learning.</p>	<p>The government has funded teachers to take online courses through iEARN.</p>

New Zealand	<p>There is no separate work stream or branch of government dealing with online learning. E-Learning is defined as: 'Learning and teaching that is facilitated by or supported through the smart use of information and communication technologies' (Enabling the 21<sup>st</sup> Century Learner – An e-Learning Action Plan for Schools 2006-2010, Ministry of Education 2006.  <a href="http://www.minedu.govt.nz/index.cfm?layout=document&amp;documentid=10475&amp;data=1">http://www.minedu.govt.nz/index.cfm?layout=document&amp;documentid=10475&amp;data=1</a>).</p> <p>In regards to the plans for e-learning in NZ there are three key documents in the schools sector: the action plan referred to above, the National Digital Strategy and ICT Strategic Framework, and the ICT Strategic Framework.</p>	<p>Online learning is only one facet of the wider e-Learning picture. It is not possible to give an estimate of the number of students participating in it and therefore the extent to which it is being adopted. However there are a significant and increasing number of schools offering courses and learning via the Internet and online media.</p>	<p>Correspondence school enrollments cover remote students, or those accessing subjects not available at their local school. They also pick up students who have not had positive experiences at school.</p> <p>Maori medium students access Maori speakers in different subject areas through video conferencing.</p> <p>Many students are blending their online learning with face-to-face such as users of Study It.  <a href="http://www.studyit.org.nz/">(http://www.studyit.org.nz/)</a></p> <p>Virtual Library Helpdesk –  <a href="http://www.anyquestions.co.nz/en/anyQuestions.html">http://www.anyquestions.co.nz/en/anyQuestions.html</a></p>	<p>Generally schools use their existing operational funding to provide online learning.</p> <p>However there is specific funding available for this. This specific funding is generally for start up projects/initiatives or to pilot new projects/initiatives.  <a href="http://www.minedu.govt.nz/index.cfm?layout=index&amp;indexid=6919&amp;indexpartid=1024">http://www.minedu.govt.nz/index.cfm?layout=index&amp;indexid=6919&amp;indexpartid=1024</a>.</p>
Singapore	<p>Schools have the autonomy to decide how they want to implement the use of IT for teaching and learning, which includes online education. To date, an increasing number of schools have subscribed to learning management systems (LMS) from local vendors. A few have also developed their own system using the open source software, Moodle.</p> <p>The target is for all secondary schools (equivalent to Grades 7 to 10) and junior colleges (equivalent to Grades 11 and 12) to have an LMS by end of 2006. As of May 2006, all (100%) secondary schools and junior colleges and 134 (85%) primary schools (Grades 1 to 6) are using LMS for teaching and learning. Primary schools are also encouraged to have a LMS installed for teaching and learning but no target has been set.</p>	<p>About 75% of the schools do have e-learning systems, and the percentage is rising as the remaining schools plan to come on board. This works out to about 400, 000 students who have at one time or another engaged in e-learning activities.</p> <p>Given the small size of Singapore, e-learning is only one of the strategies to facilitate access to learning. The main focus of Singapore's IT Master plan is to develop teachers' capability and capacity to seamlessly integrate ICT into the curriculum to bring about engaged learning for the students. At present, the number of students involved in e-learning depends on the content provided by the content providers. In some schools, the LMS is often used by students to access lesson activities or assignments from home.</p>	<p>Singapore is mainly a densely-populated urbanized society, and the schools are usually large in numbers.</p> <p>A typical school has a population of between 1300 and 1700 pupils.</p> <p>The blended approach is often adopted, a mix of face-to-face instruction and online learning.</p>	<p>Schools are provided with an IT Grant by the Ministry of Education based on pupil enrollment. The IT Grant funds IT equipment, software services and professional development in the use of IT for teaching and learning.</p> <p>Since 2003, the IT Grant has been devolved to schools. This devolution approach gives schools the autonomy and flexibility to plan their own IT programs to meet their unique school needs and to embark on IT initiatives, such as online learning and customized learning management systems.</p> <p>Pupils may also pay for part of the cost using their Edusave Grant, which is provided annually by the govt. to every Singaporean pupil for their enrichment learning activities.</p> <p>There are also schemes to assist needy pupils in purchasing home PCs and Internet access from service providers.</p>
Tanzania	<p>Online education is new in Tanzania. In most cases, very few schools, colleges and even universities offer online education. Some lecturers at St. Augustine University participate in online discussions and linking topics and materials on the Internet. iEARN is working in Tanzania to create a proposal for training teachers at a few schools.</p>	<p>Specific schools are working to extend e-Learning information to neighboring schools, to teachers, and students.</p> <p>Tanzania needs online education, as there are very few resources such as books in public libraries and the current resources are not adequate.</p>	<p>For the very few that can afford doing this, they are from the urban centers where there is electricity.</p> <p>In rural areas it very difficult to access because there is no electricity and the use of the Internet and computer is very rare.</p>	<p>Funds for this initiative are an issue.</p> <p>There is a need for a proposal for funding this very important project for Tanzania.</p>

Turkey	<p>E-Learning started in Turkey in 1995 by the Turkish Education Foundation and the ERT, European Round Table of Europe. It first began in the most remote areas of Turkey in 40 rooms provided by local governments. These "learning stations were built with computers and CDs, and the Internet, but are lacking software. Now there are 100+ stations in the most remote areas of Turkey, where teachers cannot be sent due to terrorism. These stations serve 600,000 children and adults.</p> <p>The government provides all computers (1:20 computer student ration) and broadband Internet to all 40,000 schools.</p>	<p>Currently, elementary and secondary schools are servicing 200,000 students online and in two years hope to have 12,000,000 students online. High schools and vocational schools are currently educating 10,000 students and hope to raise the number to 3,000,000 in 5 years.</p> <p>A pilot run started in September for 200,000 students in selected areas. In 2-3 years it will be used by 11 million elementary and secondary school students. There are 600,000 teachers who will be trained at the same time.</p> <p>Courses will be revised every year according to world's development. All of this is financed by private business in Turkey.</p>	<p>Students in the eastern Anatolia, which consists of very poor villages, are the students accessing online learning. They have access to computers and ambitions to learn unlike children in the big cities.</p>	<p>Funds for elementary and secondary online education will be provided by private businessmen.</p> <p>The government had intended to do so but formalities have forbidden it.</p> <p>For University level, it will be funded by students.</p> <p>For vocational ed, the government and Chamber of Commerce and Industry will fund it.</p>
United Kingdom	<p>Relatively widespread in the university sector, much less common in the school sector</p>			<p>E-Learning is funded in a variety of models. Some examples are: state funding based on each student or completion rates, Grants, Student and/or School Tuition, Consortiums, and Scholarships from outside organizations.</p>
United States	<p>Online learning is done at the state level; which allows leaders of each state to approve state, district, and school-wide e-learning programs. 24 states have state sponsored online schools and the majority of the other states are using e-learning in some form.</p> <p>E-Learning programs have been created in several forms, such as: comprehensive schools, part-time programs, public, private, and charter schools, labs of students in brick and mortar schools taking online courses during the school day.</p> <p>The North American Council for Online Learning was established to serve as a resource to K12 virtual schools in North America. The organization provides professional development, resources, research and a community for practitioners and policy leaders of K12 e-Learning.</p>	<p>Online course enrollments in K-12 virtual schools have grown by more than 30% each year for the past three years with over 600,000 total enrollments in 2005. 24 states have government sponsored schools and several school districts hundreds of school districts offer virtual schools/programs as reported in the "2005 Keeping Pace With K-12 Online Learning" report.</p>	<p>Students take online courses for a variety of reasons such as: access to courses that are not available in their school, access to courses that are hard to staff, to earn credit, they physically cannot attend a school, they need to work, want to graduate early, want to work at their own pace, need to travel frequently, or they are bored in their face-to-face classrooms.</p> <p>Full-time, part-time, and blended learning models are available to students.</p>	