



## **Reviewing (traces of) European Virtual Campuses**

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**A WORLD TOUR OF VIRTUAL CAMPUSES: A SUMMARY OF KEY  
INITIATIVES, MARKET LEADERS AND LARGE-SCALE  
PROVIDERS**

# A WORLD TOUR OF VIRTUAL CAMPUSES: A SUMMARY OF KEY INITIATIVES, MARKET LEADERS AND LARGE-SCALE PROVIDERS

In this chapter, we shall begin with a short description of virtual campuses in different parts of the world. This is based on the work carried out by our research team in building up an inventory of virtual campuses around the globe and relies on a summary of the information we gathered contained both in the Re.ViCa country reports – where we looked at how virtual campuses are organised on a national basis – as well as the information we gathered on individual virtual campuses of interest, reported in the extensive list of programmes contained in the [Re.ViCa wiki](#). In this work we use an approach to categorisation described in the previous chapter of this handbook (chapter 3) which allows us to categorise virtual campuses along five axes; the UNESCO categorisation of initiative,<sup>i</sup> the political level of the initiative (national? multinational? international?), the existence of the initiative (still in operation? ceased?), the internal scale of the initiative (notable? major? giant?), and the academic level of the initiative.

As can be expected, this chapter comes with a number of important provisos. Like all “world tours”, such as the ones published by [InfoDev](#) and other organisations, we do not claim to be fully comprehensive, nor have we covered every single country where there is a virtual campus activity or interest – although we do believe that we have covered many of the main institutions of global interest. In line with our brief, we have tended to focus on institutions of higher (and further) education: thus we have not taken into account the many corporate entities and agencies of one type or another who in some countries offer degrees (this includes those degrees linked exclusively to technical education and training awards like those awarded by Cisco, Intel and Microsoft). We have examined private universities, however, where they play a significant role in the virtual campus landscape.

Finally, given the fact that we are dealing with a dynamic and changing sector within the higher education context, it is important to point out that all information contained in this chapter is as correct as it could be at the time of publication; however, specific initiatives may have changed by the time readers access the information herein. Thus, if you have a specific interest in a country or programme, it is better to follow up directly with the specific country or programme entries on the wiki.

Nonetheless, we believe that within the constraints of the resources available to us, this chapter provides a good overview of how virtual campuses around the world are faring in today’s climate. We hope it can be used to foster collaboration, stimulate debate and share experiences among those interested in the virtual campus phenomenon.

## REGIONAL DESCRIPTIONS

In order to provide a meaningful description of the virtual campus phenomenon in this part of the handbook, we have chosen to arrange entities according to “region”. Although this does raise several questions with respect to how one groups countries and programmes in this type of inventory work, it does fit with the outputs we have produced and the constraints under which we have worked. In certain regions where it seemed relevant, we have made a distinction between *open universities* and *traditional universities*, particularly in Europe where there is also

some collaboration among the open universities through the [European Association of Distance Teaching Universities](#).

In each region we have chosen several significant virtual campuses to provide illustrative examples, and have tried to draw a generic picture of what is happening with respect to virtual campuses in the region. However these sections are certainly not comprehensive, and for a more complete view, the reader is directed to the [Re.ViCa wiki](#) (from which much of this information comes). Many of the institutions and networks mentioned in this chapter have a dedicated entry in the wiki, and where this is not yet the case, we are working closely with the community of wiki editors to make sure an entry is included as soon as possible.

### *EUROPEAN ECONOMIC ZONE (EEZ)*

We appreciate that reaching a common agreement as to what constitutes “Europe” is quite a complex task and one which reaches beyond the boundaries of an e-learning project like Re.ViCa. We have therefore taken the pragmatic decision as a project team to use a definition of Europe that fits between a narrow definition of Europe as the 27 member states of the European Union and the broader geographic definition of Europe. We therefore defined Europe for the purposes of our work in Re.ViCa as including the countries of the EU, EEA and Switzerland and so have used the regional descriptor European Economic Zone (EEZ) in our inventory work.

### **Open Universities in the EEZ**

Many of the more “traditional” European open universities were slow in their deployment of e-learning, although the [Open University](#), UK and the [Open University](#), the Netherlands have always been leaders in this field. As such, they have made significant contributions to the general uptake of ICT in higher education in Europe. So too has the [Open University of Catalonia](#), which began its life as an ICT-based institution. Not only have these universities set the standard in terms of technology use, they have also led much of the research into changing pedagogical models brought about because of (or even in spite of) an increased dependency on ICT tools and services.

In recent years, practically all European open universities have opted for a virtual campus model, although the term *virtual campus* itself is not in general use in any of the open universities we examined. It is clear, however, that the [FernUniversität in Hagen](#) (Germany), [UNED](#) (Spain) and more recently the [Universidade Aberta](#) (Portugal) are all now key players – although all three have adopted a blended rather than a fully online virtual campus offering.

### **Traditional Universities in the EEZ**

In the Nordic regions of the EEZ including Finland, universities were relatively early adopters of ICT. This, coupled with a high GDP and significant regional challenges in terms of access to traditional universities brought about by geographical conditions, has resulted in a high level of virtual campus activity for many years. Practically all universities operate in the digital world, although the term *virtual campus* is no longer very common. Instead, an integrated model and way of thinking has become widespread: the key processes of services, interaction and knowledge creation are largely based on the utilisation of electronic communications and information technology. Several large-scale consortia-based efforts like the [Finnish Virtual University](#) (FVU), and the separate [Finnish Online University of Applied Sciences](#) (formerly known as the Finnish Virtual Polytechnic), have been significant providers of services. There are also several large-scale purely distance education suppliers active in this region, including [NKI](#) in

Norway, which registered more than 16,000 online course enrolments in 2006. Consortia models have been particularly popular in the past in Sweden; one of the first was founded as early as 1993 through an agreement between the universities of Linköping, Umeå, Uppsala and Växjö, and the Royal Institute of Technology (KTH). Sweden now has over a quarter of its university students studying via distance education.

In the Baltic region (Estonia, Lithuania and Latvia) there has been considerable collaboration between universities in the region and with Nordic countries through initiatives like the [Baltic Sea University of Science and Technology](#). Several significant virtual campuses have emerged in this region, including the [Lithuanian Virtual University](#).

In the UK, there are approximately six English universities with substantial operational off-campus e-learning activity. These include [Middlesex University](#) (Global Campus) and the [University of Liverpool](#) as perhaps the largest nodes of activity in terms of fully distance e-learning students.

Newer entrants include the [University of Derby](#), the subject of an in-depth case study by the Re.ViCa team and a former Global University Alliance (GUA) member. (Launched in 2000, GUA was intended as a collaborative effort linking about 10 traditional and established largely Anglophone universities in different parts of the world; it is no longer operational in its original form.) Other newer entrants include the [University of Leicester](#) (the subject of a case study in a Megatrends report)<sup>ii</sup>, [Staffordshire University](#), and the [University of East London](#).

There is also an extensive online learning offering available from [University College London](#), as well as many of the other colleges of London University via the London External System. A more specific set of courses is at the [University of Portsmouth \(Technology Extended Campus\)](#), some in conjunction with commercial partners. In Scotland, [Scottish Knowledge](#) closed down some years ago, but there was growing momentum within its partial successor, the [Interactive University](#) (based largely round [Heriot-Watt University](#)) – regrettably, now closed itself. A number of other Scottish Universities are also active, perhaps with [Robert Gordon University](#) (Virtual Campus) in the lead, closely followed by the [University of the West of Scotland](#) (formerly Paisley University). In Wales, the [University of Glamorgan](#) (another former member of GUA) was once a leading player; it later declined in importance, but recently is showing a resurgence. This cyclical movement is not atypical. In Northern Ireland, the [University of Ulster](#) (Campus One) is a key player. The UK has also experienced some significant failures with respect to large-scale virtual campus initiatives, most notable being the [UK e-University](#) – but, in line with the cyclical movement referred to, national interest is again growing in distance e-learning, with future initiatives to be funded by the [Online Learning Innovation Fund](#).

In the Republic of Ireland, while practically all universities offer some form of online course support, there is relatively little dedicated virtual campus activity. [Oscail](#), a dedicated open and distance education provider, has been operational for many years and is supported by [Dublin City University](#) (DCU). A relatively new player who is enjoying quite some success is [Hibernia College](#), a private university which offers a largely blended format to students in Ireland and the UK, and is the subject of another in-depth case study by the Re.ViCa team.

France has a complex set of e-learning activities in universities and agencies, but no clear national higher education player with an interest in promoting courseware beyond national boundaries. However, the [L'Agence Universitaire de la Francophonie \(AUF\)](#) has been successful

in encouraging a variety of virtual campus initiatives between French universities and Francophone universities in the rest of the world. The government-initiated campus numérique programmes which began in 2000 have resulted in a significant increase in the number of collaborations among French universities and staff, and the creation of shared courses and resources. The universités numériques en région (regional digital universities) initiative has also promoted collaboration and the development of online services among existing universities. Given the changes taking place in higher education in France generally, the current pressure on French universities to become internationally competitive is likely to result in an increase in the number of French virtual campus initiatives. In particular, the Digital France plan ([FRANCE NUMERIQUE 2012](#)) contains actions affecting distance e-learning in universities) – see especially actions 98 and 99.<sup>iii</sup>

National and regional state support schemes to support online educational activities have been in place for many years in Germany, and several large-scale virtual campus institutions are now in existence which cater to both undergraduates as well as postgraduates; see for example the [Distance and International Study Center \(DISC\)](#) of the Technical University of Kaiserslautern, [Europäische Fernhochschule Hamburg](#), [AKAD](#) and [Hamburger Fern-Hochschule](#). Collaborative initiatives include the [Virtuelle Universität Bayern](#) or Virtuelle Hochschule Bayern (Bavarian Virtual University) which is a cooperation between general universities and “universities of applied sciences” (Fachhochschulen, classified by Re.ViCa as “universities”) in Bavaria. Many of the national and regional support schemes have decreased their funding of late as budgets come under increasing pressure; yet at the same time, e-learning is becoming more entrenched in the normal delivery patterns of many German universities.

There is considerable blended learning activity now in many traditional universities in the Benelux countries. In Belgium, the [K.U.Leuven Association](#) – which brings together a host of tertiary-level colleges in association with [K.U.Leuven](#) – is actively promoting online learning as part of its service offer to students. The K.U.Leuven Association is the subject of an in-depth case study by the Re.ViCa team; it is seen as being of strategic value in a country which is seeing considerable change with respect to higher education. Among recent changes we find the emergence of numerous large-scale consortia and associations of institutions offering higher education opportunities. The Open University of the Netherlands operates a strategic operation in the Dutch-speaking part of Belgium called the [Open University Vlaanderen](#), which is coordinated by the [University of Ghent](#). In the Netherlands, there was considerable enthusiasm in the earlier part of the century for consortia models of virtual campuses; however, the failure of the [Digital University](#) has dampened this enthusiasm somewhat. Several universities in the Netherlands have established international reputations with respect to their research in the area of technology-enhanced learning; these include the Open University Netherlands, [University of Twente](#) and the [University of Amsterdam](#).

In Switzerland, the [Swiss Virtual Campus](#) was set up in 2000 as a way to bring together the online offerings of Swiss universities. An initiative that was set to last for a limited nine-year period (completed in 2008), it created a considerable number of joint learning activities among Swiss universities, although it is probably still too early to really judge its legacy.

In Poland, e-learning in the higher education sector is still at a relatively early stage, although there are many initiatives, projects and experiments of one type or another in evidence. The [Polish Virtual University](#) (PUW) launched in 2003 was jointly created by the [Academy of](#)

[Humanities and Economics](#) in Lodz and the [Marie Curie-Skłodowska University](#) in Lublin and initially was based on a consortium approach. At the moment, PUW online studies are provided by AHE only, which classifies the initiative as an “extension of existing institution”.

In Spain, the two open universities ([UNED](#) and UOC) have had significant impact on raising awareness of online learning generally, and both are actively promoting their courses and services in the Hispanophone world. There is also a new player in the field, the Open University of Madrid ([Universidad a Distancia de Madrid, UDIMA](#)), which is a private initiative; however, it is still too early to judge whether it will attract sufficient student numbers to be successful. This does not mean there is not a great deal of virtual campus activity going on in Spanish universities, however. One main way in which this manifests itself is in situations where traditional universities introduce online elements into their current course offerings; examples of this model include the [Polytechnic University of Catalonia](#) (UPC), the [Complutensian University of Madrid](#) (UCM), [University of Oviedo](#) (UNIOVI), [Pompeu-Fabra University](#) (UPF) and the [University Carlos III of Madrid](#) (UC3M). One significant initiative of this type is the [Universidad Politécnica de Madrid](#) (UPM) which currently offers more than 100 online courses – in 2004/2005, UPM had registered a total of 14,000 students in online courses. Collaborative models are also popular in Spain, and include the [G9 Group](#), [ADA Madrid](#), [Instituto universitario de postgrado](#) and [Universia](#).

In Italy, following the introduction of a 1990 law related to university autonomy, public-private consortia were empowered to establish distance teaching universities. The best-known higher education virtual campus initiative is [Consorzio NETTUNO](#), which has operated for almost 20 years as the Italian Open University and works on a collaborative model that involves other universities in Italy (as well as companies and other players particularly in the postgraduate sector). In 2007, more than 10,000 students were enrolled on its courses. In 2005, Consorzio NETTUNO gave rise to the [International Telematic University UNINETTUNO](#) (UTIU) which operates in close cooperation with traditional universities in Italy and abroad, including universities in Europe, the Arab World, the United States, and Latin America – and which offers courses in Arabic, English, French and Italian. Universities throughout Italy have had government support to implement virtual campus initiatives as well as to strengthen existing ICT-supported activities. In 2003 the minister with responsibility for universities was given the power to acknowledge the establishment of new telematic universities by decree. This has led to the establishment of 10 so-called telematic universities (in addition to UTIU) between 2004 and 2006. These are: [Università Telematica TEL.M.A.](#), [Università Telematica e-Campus](#), [Università Telematica Pegaso](#), [Università Telematica Leonardo da Vinci](#), [Università Telematica Marconi](#), [Università Telematica Giustino Fortunato](#), [Università Telematica delle Scienze Umane UniSu](#), [Università Telematica Internazionale Unitel](#), [Università Telematica Universitas Mercatorum](#) and [Università Telematica “Italian University Line”](#). The path taken by the Italian legislation has been full of initiatives, even if not all of them have been taken up. There also remain some questions about the compliance of certain telematic universities to national standards related to distance teaching.

Several central and eastern European countries who joined the European Union in May 2004 took part in a network of active distance education centres which was set up with the support of the PHARE Multi-Country Cooperation in Distance Education, a European Commission Programme which is now largely dormant. Many of these centres were linked to universities and have since evolved into centres of excellence supporting virtual campus initiatives within their

respective universities. These include the [Gdansk University of Technology](#) in Poland, [Brno University of Technology](#) in the Czech Republic, the [University of Ljubljana](#) in Slovenia, and the [Budapest University of Technology and Economics](#) in Hungary.

### *RUSSIA*

In Russia, one of the largest players is the [Moscow State University for Economics, Statistics and Informatics](#) (MESI) which operates from a broad administrative basis comprising 50 branches, 117 representative offices and over 100 regional partners in the Russian Federation and abroad. Partners are located in Armenia, Belarus, Bulgaria, Israel, Kazakhstan, Latvia and Ukraine.

Several of the larger engineering schools, such as the [North-West State Correspondence Technical University](#) (NWTU), are turning increasingly to online models; the [Eurasian Open Institute](#) is one which operates as a regional network with more than more than 350 online courses. Furthermore the [Ulyanovsk Consortium of Open Education](#) (UCOE) provides open and continuing education in the Ulyanovsk region. A key member of this association is the [Ulyanovsk State Technical University](#) (UISTU).

### *NORTH AMERICA (USA, CANADA, MEXICO AND THE CARIBBEAN)*

#### *USA*

The USA has a complex structure of higher education e-learning providers, including organisations offering both face-to-face and e-learning (usually blended) provision via different subsidiaries. The term *virtual campus* is not exceedingly common, although online course offerings abound, and practically every university offers at least some form of blended learning (and often wholly online degree courses as well) in line with several other countries. In the USA, the term *virtual campus* is occasionally adopted as the title to be applied to a traditional university's online course offering (e.g., for the [University of Texas](#) or the [State University of New York's](#) learning network) or a specific online manifestation of a university (like the Second Life Virtual Campus maintained by the [Ohio University Without Boundaries](#) initiative). There have been numerous consortia-type virtual campus activities like the Arizona Regents University, a virtual university for the state of Arizona (now known as [Arizona Universities Network](#)); however, universities in the USA tend to operate somewhat independently and see their independence as being vital to their survival.

It is interesting to note the annual growth rate in online enrolments in the USA – 12%-14% per annum over the last seven years, compared with 2% for on-campus enrolments – which illustrates the significant interest in online learning in this part of the world.<sup>iv</sup> Clearly related to these figures is the number of private for-profit online course providers who offer virtual campus services. Quite a number of these operate to a high standard and in some cases are quite profitable, sometimes serving as a profit-generating activity of a traditional university.

In terms of blended/e-learning provision, among the leading players in the USA we find the [University of Maryland University College](#) (UMUC), with over 110,000 online enrolments spread over 540 distinct courses online; and the [University of Phoenix Online](#), which has 109,000 internet-based students (compared with its sister organisation, the study-centre-based University of Phoenix, with 104,000 students). It is interesting to note that these two trailblazers have emerged in quite different ways, as UMUC is a traditional public university, while UOP is an Apollo Group for-profit venture. This illustrates well the diversity of structures underpinning successful virtual campus initiatives in the USA.

Significant private providers include [Kaplan](#) with nearly 50,000 online students, as well as [Capella University](#) with more than 20,000 students, [Jones International University](#) (which began originally as the Mind Extension University using television as the medium of instruction), [American InterContinental University](#), and [Walden University](#) (owned by the Laureate International Universities Network). The private nonprofit [Western Governors University](#), which started accepting students in 1999, was supporting more than 15,000 students from all over the USA at the time of writing.

A major feature of virtual campus activity in the USA is the *breadth* of deployment of distance e-learning services in HE, including significant activity overseas, from literally hundreds of universities and colleges. Many leading public universities such as the [University of Central Florida](#), the [University of Illinois](#) and [Michigan State University](#), are increasingly active in this sphere. It is also difficult not to mention the overall leadership in the whole area of technology-enhanced learning provided by globally recognised institutions such as [Massachusetts Institute of Technology \(MIT\)](#), [Penn State](#) and [Carnegie Mellon University](#). Finally, it is interesting to note the significant amount of online activity now evident in many regional US community colleges – an advanced example is [Coastline Community College](#) in California (pure distance learning), but perhaps a more typical example is the [Colorado Community Colleges Online](#) consortium.

## **Canada**

Many, if not most, Canadian universities have competence in off-campus e-learning. Several major e-learning systems past and present have come from Canada, most notably WebCT from the [University of British Columbia](#) (UBC).

However, in recent years the Canadian political climate has been less helpful to e-learning, as in several other regions of the world. The main research programme (TeleLearning) was closed prematurely; the longstanding Open Learning Agency (British Columbia) has been closed and business transferred to a new entity, [Thompson Rivers University](#); the charismatic start-up TechBC was closed and residual activity absorbed into [Simon Fraser University](#); and Téléuniversité du Québec was merged into the [Université du Québec à Montréal](#).

On the other hand, [Athabasca University](#), Canada's Open University, continues to develop and thrive, and currently serves over 37,000 students (although the bulk of Athabasca University's online programmes are still mainly at postgraduate level). Canada also boasts a national initiative, the [Canadian Virtual University](#) (CVU), which is a consortium of accredited Canadian universities offering complete degrees, diplomas, and certificates online and through distance education. CVU consists of 11 universities and a catalogue of over 2,500 courses and 350 programmes. These types of consortia models are popular in Canada, and many Canadian researchers consider the notion of consortia involving several universities in a collaborative online effort to be synonymous with the term *virtual campus* – unlike in the USA, where the term is more commonly applied to a traditional university's online or digital offerings.

Several single universities boast quite considerable virtual campus offerings; these include the Memorial University of Newfoundland with an extensive online course offering, along with the University of British Columbia (UBC), Simon Fraser University (SFU), Thompson Rivers University (TRU) and the [Royal Roads University](#) as well as the more modest offerings from [Queens' University](#) and [Cape Breton University](#) in Nova Scotia.

Another group of organisations that include [BCCampus](#), [eCampus Alberta](#) and [Contact North \(Ontario\)](#) are worth mentioning as virtual campuses, as they provide one-stop shopping/web calendars for online courses from provincial institutions, funding for online course development, technical support, and faculty development opportunities, as well as provincial articulation committees which assure credit transfer between institutions within these provinces. (Note that these virtual campuses mainly serve two-year colleges rather than universities.)

It is important to point out that Canada does not have a single national educational policy; this means that each province is responsible for deciding its own policies and priorities – which does mitigate against large national networks. Mobility and inter-operability are facilitated by the fact that in principle the US credit system works throughout the USA and Canada, which means that a standard three credits in Newfoundland is the same as three credits in British Columbia. However there are still significant cross-provincial barriers to credit transfer, especially into Ontario universities from other provincial universities. It should however be noted that Athabasca University has more students from Ontario than from Alberta.

## **Mexico**

In Mexico, probably the best-known virtual campus is that of the [Tecnológico de Monterrey](#) (also known as the Monterrey Institute of Technology and Higher Education – or ITESM) which is a nonprofit association operating as a multi-campus university system with academic centres in different regions of Mexico. Interestingly and not atypically in such situations, it is classified by the government of Mexico as a private university. ITESM established its virtual campus in 1989 as a separate entity from ITESM (with its own vice-rector); it now extends its services to various countries in Central and South America. ITESM uses a variety of technologies and offers postgraduate academic programmes; continuing education programmes for directors of Mexican and Latin American companies, as well as governmental and non-governmental organisations; programmes for elementary and secondary school teachers; and programmes for the development of marginalised communities. Nearly all postgraduate programmes are fully online, and undergraduate programmes are offered in a blended learning mode through face-to-face teaching on regional campuses (with online components).

Several other players are emerging in Mexico, promoted by government support programmes and external factors. This includes an initiative which aims at creating a consortium of public universities currently called [ECOESAD](#) (Common Area for Distance Higher Education); this consortium could be a preliminary step towards a national distance university. [The Universidad de Guadalajara](#) operates a significant virtual campus called Universidad de Guadalajara Virtual which, like Monterrey, operates as a separate “campus” from the other physical campuses, with its own vice-rector. [Universidad Nacional Autónoma de México](#) (which established its open university programme in 1972) and [Universidad de Veracruzana](#) also have significant online offerings.

## **Central America**

Despite the many challenges faced by people in this part of the world, there are still a number of institutions in the region actively promoting their programmes, and it is clear that Spanish language providers like UNED, UOC and ITESM are active in this region. In Honduras there are active programmes in both the [National Autonomous University of Honduras](#) and the [University José Cecilio del Valle](#), while in Costa Rica, the [Universidad Estatal a Distancia](#) (UNED) has a mission to offer higher education to all social sectors. In Guatemala the relative newcomer, the

[University of Galileo](#), has a focus on information technology, and has been developing distance learning programmes along with e-learning support services for existing students. The [Universidad Francisco Marroquín](#) in Guatemala has a large-scale distance education programme. In Panama the UNIEDPA (the [Inter-American Distance Education University of Panama](#)) supports online learning while the private [Universidad Latino Americana de ciencias y tecnología](#), ULACIT (Latin American University of Science and Technology), offers tools and support services to its students to support a blended learning approach.

## **Caribbean**

The [University of the West Indies](#) (UWI) is an autonomous regional institution supported by and serving 16 English-speaking countries and territories in the Caribbean, and is the best-known higher education institution in the region. UWI has been involved in distance teaching for many years and recently began a number of substantial blended learning initiatives aimed at increasing its virtual campus services. Another notable activity in the region is [CUPIDE](#), a collaborative distance education project financed by the Japanese Funds-In-Trust for Capacity Building through the United Nations Educational, Scientific and Cultural Organization (UNESCO), bringing together the activities of several universities in the region (including UWI). CUPIDE was instrumental in establishing the Caribbean Regional Association for Distance and Open Learning ([CARADOL](#)); however, this does not appear to be active at the moment.

Several ministries in the region are also directly involved in the [Virtual University of the Small States of the Commonwealth](#) (VUSSC), which brings together interests from 30 countries and focuses on creating skills-related online courses in areas such as tourism, entrepreneurship, professional development, disaster management and a range of technical and vocational subjects.

In the Francophone region of the Caribbean, AUF operate a bureau in Haiti and run projects linking universities in the region with French universities. They employ e-learning tools and services in their work with universities which include the [Université d'Etat d'Haïti](#) (UEH), [Université Action pour l'éducation et la culture](#) (UNAPEC) in the Dominican Republic and the [Université des Antilles et de la Guyane](#) (UAG) which supports higher education in Guadeloupe, Martinique and French Guyana.

## *SOUTH AMERICA*

The term *virtual campus* (*campus virtual* in Spanish) is commonly used in this region and generally is understood to refer to online course offerings. As already mentioned, significant efforts have been made by UNED, ITESM and UOC in South America, and a number of strategic alliances exist between these universities and the universities and agencies of South America.

## **Brazil**

In Brazil, the level of interest in distance education among universities is generally quite high despite an unhelpful regulatory climate, as reported by several researchers. Private universities are the foci of innovation, including in e-learning. Plenty of initiatives exist and there are considerable ICT-supported services offered by Brazil's rapidly expanding corporate university sector. The government set up the [Universidade Aberta do Brasil](#) (Open University of Brazil; UAB) in 2005. This is a consortium of several state institutions that aims to coordinate the efforts of different educational entities, at federal, state, and municipal levels, in offering higher education in different modalities of distance education. One of the major activities within this

project is the creation of local centres in areas where access to higher education is scarce. Brazilian universities also cooperate through other collaborative models, e.g., the Universia mentioned earlier in relation to Spain, and [FUNIBER](#) Virtual Campus.

There are a number of other Brazilian universities who have been actively engaged in virtual campus initiatives in recent years. These include [FGV](#) (Fundação Getúlio Vargas), [FATECE](#) (Faculdade de Tecnologia, Ciências e Educação) and the virtual campus located at [Universidade Gama Filho](#). Furthermore, the [School of the Future](#) at the University of São Paulo has developed an international reputation in this field. Brazilian universities also participate in collaborative models, joining consortia such the Center for Distance Learning of the State of Rio de Janeiro ([Cederj](#)) and the Network of Catholic Institutions of Higher Education ([CVA-RICESU](#)) in an attempt to provide online courses.

### **Hispanic South America**

In Argentina, the [Virtual University of Quilmes](#) has a significant virtual campus initiative which has attracted over 6,500 students. Two private universities, located in Buenos Aires, the [University of Salvador](#) and [Universidad Maimónides](#), also offer online courses.

One of the largest online programmes in Chile is offered by the public UTEM Virtual ([Universidad Tecnológica Metropolitana](#)). [Universidad UNIACC](#) is also a major player and has over 3,000 students across three campuses interconnected by multimedia technology. It grants diverse academic degrees, and offers 31 academic programmes, diplomas and master's degrees. [DuocUC](#) (Instituto Profesional y Centro de Formación Técnica) is the technical education branch of the private [Pontificia Universidad Católica de Chile](#) (UC), and it too offers online courses and support services.

In Uruguay the largest private university, [Universidad ORT Uruguay](#), is an active promoter of ICT-supported learning for both campus-based and distance education students.

In Bolivia, the [Universidad Andina Simón Bolívar](#) (UASB), which also has campuses in Peru and Venezuela, has been applying new technologies in diverse educational programmes that use distance learning for several years.

In Ecuador, the [Universidad Técnica Particular de Loja](#) (UTPL) provides both on-campus and distance education supported by ICT. In Peru, the [Universidad Nacional Federico Villareal](#), (UNFV) is a public institution which includes a College of Distance Education with different offices around the country, aimed at facilitating distance education.

In Venezuela, the [Universidad Nacional Abierta](#) (UNA) is an open university operated as a public institution, which operates through a network of centres in more than 60 locations. It uses a variety of technologies to support its teaching, and provides significant e-learning knowledge and experience in the region.

### **AUSTRALIA AND NEW ZEALAND**

Most universities in Australia and New Zealand developed substantial capability in distance learning in the 1980s, and several have now migrated this to e-learning. They are supported by a plethora of associations, government initiatives, state agencies and other support mechanisms, which has meant that both Australia and New Zealand now boast significant virtual campus activities. Even if the term *virtual campus* is not widely used in the region, it is clear that virtual

campus activity is known and widely respected in this area, and considerable expertise and experience is available.

## **Australia**

The [Open Universities Australia](#) (OUA), formerly Open Learning Australia, is Australia's national specialist distance tertiary education agency, established by the Australian government to ensure that the highest quality tertiary education be open to all Australians. Owned and operated by a consortium of seven Australian universities, it operates as Australia's Open University and has over 16 respected universities and other tertiary education providers offering courses. In terms of national initiatives, the [Australian Flexible Learning Framework](#) is also worth mentioning. Although focused on technical and vocational education, in the opinion of many researchers, it comes closest to a definition of *virtual campus* in Australia.

Many traditional universities in Australia also provide large-scale virtual campus offerings. The larger and better-known of these include the multi-campus [Charles Sturt University](#) in New South Wales and the Australian Capital Territory. [Curtin University of Technology](#) in western Australia operates seven campuses and six regional centres, and promotes its online courses widely, including to Malaysian students. [Deakin University](#) and [Edith Cowan University](#) also have considerable online offerings. Finally, the [University of Southern Queensland](#) is a major multi-campus university which was an early adopter of online learning, which has been recognised both nationally and internationally for its substantial distance education programmes.

## **New Zealand**

All eight of New Zealand's universities offer some form of online support or service to their existing student base. Some, such as the [University of Canterbury](#), [Universal College of Learning \(UCOL\)](#), [University of Auckland](#), [Victoria University of Wellington](#) and the [Auckland University of Technology](#), have developed considerable expertise in the use of ICT, and are actively engaged in promoting the university beyond geographical borders with a view to attracting students for both online and offline course entry. One of New Zealand's largest universities, [Massey University](#) has a considerable distance learning offering, and in 2007, 17,000 enrolled students were distance learners. The [Open Polytechnic of New Zealand](#) is a specialist institution in distance learning and has just over 34,000 students, equating to around 7,000 full-time equivalent students. Funding for online course activity in higher education has been the subject of government funding, through for example the New Zealand Consortium for e-Learning.

## *ASIA*

We are indebted in our description of virtual campuses in this region to the extensive analysis provided by Colin Latchem and Insung Jung in their recent publication "Distance and Blended Learning in Asia" which provides an extensive overview of virtual campus initiatives in this region while pointing out that "until recently the use of the word "virtual" in Asian contexts was largely rhetorical but that now there are some interesting examples of universities and colleges and consortia that not only teach and manage through the Internet but in some cases lack a physical location apart from an administrative unity".

Distance teaching has a long and impressive history in Asia and a significant number of the large "mega" open universities first described collectively by Sir John Daniel in the early 1990s<sup>vi</sup> are located in this region. Many of these open universities are members of the [Asian Association of Open Universities](#) (AAOU), which brings them together and which has been recording how they

have been evolving since the AAOU began in 1987 (although in recent years AAOU seems to be scaling down its activities and member services). Most of the region's mega open universities are experimenting with at least some form of virtual or digital offering.

## **Middle East**

There are a number of notable virtual and open universities in this region. In Syria, the [Syrian Virtual University](#) was set up in 2002 to provide a significant number of online courses to students in Syria and other Arab countries. While it does create much of its own courseware, it is also a significant broker for courses from traditional Arab universities and other parts of the world, including the UK and the USA.

In Saudi Arabia, a joint venture by MeduNet, King Saud University and Sure Technology and Consulting has resulted in the launch of the [Knowledge International University](#), which offers bachelor's degree programmes using a blended approach. In addition, there have been a number of incentives put in place to encourage traditional universities in Saudi Arabia to adopt e-learning. These include the establishment of the [National Centre of E-Learning and Distance Learning](#); the work carried out by this centre has led to potential uptake of online course delivery among several leading Saudi Arabian universities.

In Iran, the first universities to take up e-learning were the medical universities. The [University of Tehran](#) began providing online courses in 2001; the [Sharif University of Technology Graduate School of Management and Economics](#) offers a joint online MBA with Canada's Royal Roads University. Iran also is home to two large open universities, the private [Islamic Azad University of Iran](#) and [Payam-e Noor University](#), Iran's largest public university. However, development of online programmes in these universities has been limited up to now, possibly constrained by limitations in ICT infrastructure.

The largest university in Israel with 40,000 bachelor's and master's degree students, the [Israeli Open University](#) now offers a considerable number of programmes online. Despite efforts on behalf of the Israeli authorities to encourage other Israeli universities to adopt e-learning, the movement towards offering online programmes has been slow. This is despite the fact that the Israel Council for Higher Education established an Inter-University Center for e-Learning as early as 1999.

[Al-Quds Open University](#) in Palestine is the only open distance education institute in the Palestinian territories, and has over 60,000 students studying in 24 educational regions and centres distributed all over the West Bank and the Gaza Strip.

In Jordan, the [University of Science and Technology](#) and the [Hashemite University](#) are starting to offer online courses.

[Anadolu Open University](#) in Turkey is the national leader when it comes to distance learning, and has put considerable effort into increasing the number of online programmes it offers in recent years. [Ankara University](#) and [Sakarya University](#) have now established distance education centres and deliver undergraduate and postgraduate programmes online, although on a much smaller scale than Anadolu.

A key player generally in the Middle East is the [Arab Open University](#), which collaborates in a significant way with the UK Open University, and is permitted to adopt and adapt UKOU learning

materials for its own uses. AOU has its main campus in Kuwait and branch offices throughout the Middle East.

### **Central Asia**

In central Asia, the [Almaty Distance Technological University in Kazakhstan](#) uses technology to support its distance education programme, while the [National University of Uzbekistan](#) is actively developing open learning centres and ties with other universities in the region in an effort to extend the reach and value of its correspondence courses. A cross-border initiative, the [University of Central Asia](#), may also have an impact in this region in the future.

In Ukraine, the [National Technical University of Ukraine](#) (Kyiv Polytechnic Institute) is making strides in offering its students online support services, while the Institute of Distance Education and Institute of Postgraduate Education at [Lviv Polytechnic National University](#) has been active in efforts to establish a Ukrainian Open University.<sup>vi</sup>

Throughout central Asia, efforts to improve connectivity among research universities through projects like the Virtual Silk Highway<sup>viii</sup> are likely to increase interest in online course offerings among traditional universities.

### **China**

There have been major developments in e-learning in mainland Chinese higher education, with the first online courseware available from [Hunan University](#) in 1997. The Chinese ministry actively supports what it describes as “modern distance education (MDE) – the provision of ICTs-based DE using multimedia computer facilities and the Internet”<sup>ix</sup> as a fast and cost-effective way to meet the demand for higher education in China. At the same time, the number of links with foreign universities is on the rise, and collaborative models linking traditional universities with private enterprise are increasingly popular.

By the end of 2003 there were 2.3 million enrolments in MDE programmes across 68 pilot universities. Higher education generally has received considerable financial support, and since 1998, 10 universities have been targeted by the Chinese government to become “world-class”, including [Beijing Normal University](#) and [Tsinghua University](#). China has received educational aid from UNESCO and many other international organisations and sources, including the World Bank, which recently loaned China \$14.7 billion for educational development. This effort has included considerable spending in relation to establishing virtual learning opportunities for on- and off-campus students. There has already been significant progress within information technology, including digital libraries, virtual laboratories and online courses, leaving a “profound indelible imprint on higher education”.<sup>x</sup> Both [Peking University](#) and [Fudan University](#) are collaborating with other universities and industry partners both in and outside of China in their creation and delivery of online learning programmes.

China has a network of independent radio and television universities (RTVUs) coordinated by the [China Central Radio and Television University](#) which are based on traditional media. One of the oldest and best established of these, which has an extensive distance learning project, is the [Shanghai Television University](#) (STVU; SHTVU). Its virtual campus now offers eight learning platforms serving different groups which include underdeveloped and disadvantaged communities, 400 rural schools, 4 million immigrants and the elderly. It is worth noting that the China Central Radio and Television University changed its name in autumn 2009 to the [Open University of China](#). In 2003, the Chinese Ministry of Education, Beijing Normal University, China

Central Radio and Television University, and the China Education TV station set up the Teacher Education Networking Union to provide online courses to China's teachers.

Most Hong Kong universities have considerable on-campus e-learning activity, but report that students are reluctant to study off campus via e-learning. However, there is an active [Open University of Hong Kong](#) (OUHK), as well as a CyberU branch of one of the more commercially minded universities, [Hong Kong Polytechnic University](#). Movements towards distance teaching on the mainland have recently encouraged Hong Kong universities to rapidly develop online capability; leaders among these include the [University of Hong Kong](#), [Hong Kong Baptist University](#) and the [Chinese University of Hong Kong](#).

## **Taiwan**

In Taiwan, practically all universities are now offering programmes online and many collaborate in order to extend their e-learning offerings to working professionals and other non-traditional target groups. An early adopter of online course delivery was the [National Sun Yat-Sen University](#), which also collaborates with [Peking University](#) in mainland China in its online course offering.

## **India**

India now has three of the world's largest so-called open mega universities (institutions in which over 100,000 students use largely distance learning methods). It is home to the [Indira Gandhi National Open University](#), which is not only the largest open university in the world but also the world's largest university, with an estimated 2 million students. In addition, there are several other very large open universities – in fact, one in almost all regions of India, including the [Dr. B. R. Ambedkar Open University](#) in Ahmedabad and [Yashwantrao Chavan Maharashtra Open University](#) in Maharashtra. All of these open universities have extensive pilot activities underway with the aim of setting virtual campus initiatives in place; however the relatively poor state of infrastructure available to students in this region has had a significant impact, and none of these have demonstrated a large-scale online presence to date.

The private-sector operation [NetVarsity](#) (part of NIIT), as well as [University18](#), a nonprofit private-sector initiative (in partnership with the [Karnataka State Open University](#)), each represent a significant development in the region which may well have impact in the near future.

## **Pakistan**

Pakistan is home to one of Asia's oldest open universities, the [Allama Iqbal Open University](#), which was set up in 1974 and which for many years was the only provider of open or distance learning opportunities in the country. It has now been joined by the publicly funded nonprofit [Virtual University of Pakistan](#), which opened in 2003 and which provides programmes in computer science, IT and business administration through a variety of blended learning media (utilising 76 real and virtual campuses in Pakistan and Saudi Arabia).

## **Malaysia**

There has been considerable growth in the number of Malaysian virtual campuses in the last couple of years due to a significant effort by the Malaysian government to increase higher education enrolment – which in turn has stimulated growth, particularly in the private sector. This has led to the establishment of a number of private universities which operate online, including the [Malaysia Multimedia University](#), [Universiti Tun Abdul Razak](#) (UNITAR), [Wawasan Open University](#) and the [Open University of Malaysia \(UNITEM\)](#). The Open University of

Malaysia was set up in 2000 by Multimedia Technology Enhancement Operations (METEOR), and now has about 40,000 students. Wawasan Open University provides courses across borders through its collaboration with four other open universities in the region: Allama Iqbal Open University in Pakistan, Bangladesh Open University, Indira Gandhi National Open University and the Open University of Sri Lanka.

[Universiti Sains Malaysia](#) and [Universiti Teknologi MARA](#) are more traditional distance education providers in Malaysia who are moving more and more to an online or at least blended model. Other universities worth noting in Malaysia include [Universiti Kebangsaan Malaysia](#), [Universiti Malaya](#), [Universiti Malaysia Sarawak](#), [Universiti Putra Malaysia](#) and the [Universiti Teknologi Malaysia](#).

## **Singapore**

In Singapore, higher education institutions have been at the forefront in experimenting with ICT and in putting forward ICT-supported services for their existing and potential students. Leading institutions in the country have included [Nanyang Institute of Technology](#), the [National University of Singapore](#) and the [Singapore Polytechnic](#), as well as the recently opened private [SIM University](#) (UNISIM, UniSIM). However despite strong R&D activity and being the base of more than one virtual campus consortium, Singapore does not appear to have a dedicated virtual campus initiative distinct from the existing higher education providers.

## **Bangladesh**

The [Bangladesh Open University](#) (BOU) is the only distance learning university in Bangladesh, and has been in operation since 1992. It qualifies as a “mega” university, enrolling about 300,000 students in its first 10 years, and producing about 90,000 graduates.<sup>vi</sup> Through formal and non-formal programmes it aims to give educational opportunities to a large section of the population, helping in the human resource development of the country. BOU operates as a traditional open university with a lot of print materials and traditional media, including radio and television, although there is increasing interest in the use of ICT. The [University of Liberal Arts](#) in Bangladesh is actively engaged in promoting the use of ICT and offers a range of ICT-supported services to its students, many of whom study part time. The [University of Engineering and Technology](#) has also launched two professional development courses combining CD-ROM and online delivery.

## **Philippines**

In the Philippines, the [University of the Philippines Open University](#) is part of the national university, which is made up of seven constituent universities. It offers courses using a blended approach and operates through a network of support centres in the Philippines and Hong Kong. [The Polytechnic University of the Philippines Open University](#) (PUP-OU) offers a wide range of courses: doctoral, master’s, and bachelor’s degrees, as well as “technopreneurial” courses available through traditional and open, flexible or distance learning. The [Pamantasan ng Lungsod ng Maynila Open University](#) based in Manila is a dedicated open and distance teaching institute that was set up in 2002 and has enrolled about 13,000 students. The [SAIDI School of OD](#) (Southeast Asia Interdisciplinary Development Institute School of Organization Development, SAIDI) supports postgraduate distance education in the Philippines. It is a small but well-established entity, with about 600 graduates in 2009.

## **Sri Lanka**

The [Open University of Sri Lanka](#) (OUSL) was set up by the Sri Lankan government in 1978 and supports approximately 30,000 students through its four Regional Centres, 16 Study Centres and five Teaching Centres. Courses are usually delivered via traditional distance education means, although there have been several pilot activities linked to capacity development programmes in the university to gear the university more towards e-learning. In 2006, the [University of Colombo](#) launched an online bachelor's-level programme in information technology, and also offers some English and Mathematics courses online.

## Thailand

Virtual campus activity at the [Sukhothai Thammathirat Open University](#) (STOU), and in both Thai public- and private-sector universities, is growing, and the number of registered students is impressive. Universities particularly active in this respect include the public [Ramkhamhaeng University](#) which functions as an open university, the private [Assumption University](#), [King Mongkut's College of Medicine](#) and [Chulalongkorn University](#), all of which offer online courses. In 2005, the Office of the Commission on Higher Education established the [Thailand Cyber University](#), a portal service through which Thai universities are welcome to share OpenCourseWare and to deliver online programmes. Some 27 Thai universities are reported to be working with this portal, with over 50,000 course registrations for the more than 400 courses available.

## South Korea

South Korea hosts its own [Korea National Open University](#) (KNOU), which was founded in 1972 as a branch of Seoul National University. It now has over 200,000 full-time, degree-seeking students for four-year university programmes, and some part-time students for non-degree, lifelong education programmes. It also offers online postgraduate degree programmes in several major areas. The university has campuses in 12 major cities of South Korea, including the capital, Seoul.

There is considerable virtual campus activity generally in South Korea, with 85% of the public and private universities providing courses online. More than 50% share online courses and courseware through consortia, partnerships, or national or international networks like [U21Global](#) and the [Asia-Europe e-Learning Network](#).<sup>xii</sup>

The term *cyber university* is popular in South Korea, and there are now 17 cyber universities as well as many online initiatives offered by conventional universities. Among the most significant virtual campus activities is the [Ewha Womans University](#), which hosts the International Cyber University (ICU). Others include the [Hanyang Cyber University](#) (HYCU). The [Korea Virtual Campus](#) consortium was founded in 1997 with 10 member universities. Participants have included KNOU and EWHA. The [Daegu Cyber University](#) (DCU) supports fully online degree education in South Korea, while the [Kyunghee Cyber University](#) and the [Sejong Cyber University](#) are both linked to conventional universities (although they have their own buildings, faculties, deans and students). Both the [Open Cyber University](#) and the private [Seoul Digital University](#) (SDU) are based on a consortia model. SDU, which opened in 2001, recently boasted enrolment of 10,000 students from South Korea and 23 other countries.

## Japan

The term *virtual campus* is not commonly used or understood in Japan, and although many Japanese universities now use ICT to support the services they offer, it is difficult to identify a

significant discrete Japanese virtual campus initiative. This may have something to do with the Japanese regulation system, which requires that open or distance learning providers be regulated in a very different way from traditional universities. This has led to a situation where open and distance learning has had a rather poor reputation. A large-scale collaborative effort among 18 Japanese universities in 1999 resulted in the establishment of the International Network University Consortium (INUC) with the aim of developing and sharing online courses for students in the members institutions; however INUC is reported to have had difficulties due to a number of factors.

This situation is changing and the [Open University of Japan](#), formerly the University of the Air (Hoso Daigaku), has recently been researching regulation policies in other countries with a view to streamlining regulation policies in Japan. [Tohoku University](#) in the Miyagi prefecture and [Shinshu University](#) in Nagano offer online learning opportunities, and two top private universities, [Keio University](#) and [Waseda University](#), are also very active in this sphere. In addition the new Japanese [Cyber University](#) supports fully online bachelor's degree education and is Japan's first four-year online university. Japan also launched its first for-profit, online professional postgraduate university in 2005, the [Kenichi Ohmae Graduate School of Business](#).

#### *AFRICA*

Several regional and continental associations like the [Association of African Universities](#) (AAU), the [African Council on Distance Education](#) and the [Southern African Regional Universities Association \(SARUA\)](#) are fostering institutional collaboration, and the role of external agencies like the L'Agence Universitaire de la Francophonie (AUF) in promoting the use of ICT in African Francophone universities is significant. Furthermore, three East African higher education regulatory agencies, including the Kenyan Commission for Higher Education, signed a memorandum of cooperation in July 2006 intended to streamline and harmonise accreditation and quality assurance practices and procedures in the region. This is expected to enhance access to quality higher education and accelerate the response to new opportunities for e-learning, use of virtual universities, and other modes of distance and open learning.<sup>xiii</sup> At the same time, cooperation agreements between individual universities in Africa and those in the developed world like the ones promoted by the [Flemish Interuniversity Council \(VLIR\)](#) in Belgium are greatly increasing the uptake of ICT in the region.

In terms of consortia, the [African Virtual University](#) is a key player and has operations in several African countries, with courses in both English and French. Francophone Africa has the [Campus Numérique Francophone](#). Other types of collaboration also exist, particularly in relation to the development and use of open-source tools and resources, one of the most notable of which is the [African Virtual Open Initiatives and Resources \(AVOIR\)](#) which aims to build capacity in software engineering in Africa using Free Software (Open Source) as a vehicle. AVOIR is a partnership of 16 African universities in an alliance that includes partners in North America, Europe, and Afghanistan, with a node in each member institution.

Although there are considerable ties among nations throughout the continent of Africa, commentators often view the continent as being made up of two distinct regions, North Africa and Sub-Saharan Africa. In addition, due to the high level of activity in South Africa, we have also included a separate description here for South Africa.

#### **Sub-Saharan Africa**

The level of interest among Sub-Saharan African (SSA) universities in establishing a virtual campus of one type or another has rapidly increased in recent years. This has been brought about by a number of factors. First of all, the demand for university places in this part of Africa is extremely high, and traditional universities simply cannot meet the demand for access. At the same time, university enrolment is considerably lower in SSA than in other parts of the globe, with only 0.4% of the total SADC (Southern Africa Development Community) population enrolled in higher education. If South Africa is excluded, the percentage drops to 0.2%. Most countries fall into the 2-4% range. Only Mauritius (16% in 2005) and South Africa (14%) have tertiary gross enrolment ratios of above 8%. In comparison, the world-mean on this statistic for lower and middle-income countries currently stands at 19%.<sup>xiv</sup> Couple this with other problems in the region as described in a recent report<sup>xv</sup> which states that the SADC (Southern Africa Development Community) region “suffers from a high degree of poverty and from the worst HIV-Aids crisis in the world. In addition, challenges include high infant mortality rates, low life expectancies, low literacy rates, low gross domestic products, low levels of technology development, and low levels of education participation”.

Countries in this region with relatively advanced online offerings include Kenya, Tanzania, Botswana, Ghana and Uganda. In Kenya, the [University of Nairobi](#), [Kenyatta University](#), [Maseno University](#) and [Moi University](#) are all exploring the use of VLEs to support on- and off-campus students. In Tanzania, the [University of Dar es Salaam](#) has built up considerable capacity in relation to online learning generally, and now Tanzania also has an [Open University](#) which has been taking considerable steps recently towards enhancing its e-learning offer. In Botswana the [University of Botswana](#) has hosted an LMS for quite some time and supports its distance and local learners in a variety of ways using ICT. The university offered 343 online courses in 2006, supporting more than 13,000 students. In Ghana, the [University of Ghana](#) is very active, as is the [University of Education, Winneba](#), which is actively promoting e-learning as a way to support its efforts to up-skill teachers. Uganda’s largest university, [Makerere University](#), offers several different degree-level courses at a distance and is making every effort to move more towards an online model.

In Rwanda, the [National University of Rwanda](#) hosts an e-learning unit which promotes the uptake of technology to support teaching on- and off-campus students.

In Francophone SSA, Senegal and Cameroon are actively pursuing e-learning goals in higher education, with Senegalese universities [Université Cheikh Anta Diop](#) and [Université Gaston Berger](#) both hosting active pilot initiatives with the support of AUF. In the Cameroon, [Université Yaoundé 1](#) is working towards greater online provision in a planned and strategic manner.

### **North Africa**

In North Africa, Egypt hosts a large branch of the Arab Open University and a new entity, the [Egyptian E-Learning University](#) (EELU), emerged in 2008. On a national level, there are several programmes operating to address the issue of e-learning centres at the higher education level, and there is a [National E-Learning Centre](#) (NELC) which forms part of the Supreme Council of Universities (SCU). Considerable numbers of Egyptian universities offer online courses, with [Cairo University](#), [Mansoura University](#), [Ain Shams University](#), [Al-Azhar University](#), [Assiut University](#) and [Helwan University](#) all being of particular note.

In Tunisia, the [Université Virtuelle de Tunis](#) (UVT) was established in 2002 as a government initiative and forms the country's tenth public university, offering open and distance education using multimedia technologies, while the [École Nationale d'Ingénieurs de Tunis](#) is also extending its competence in the area of e-learning with a view to offering online courses. In Morocco, [Université Cadi Ayyad Marrakech](#), [Université Sidi Mohamed Ben Abdallah](#) and [Université IBN Tofail](#) all have e-learning initiatives in place.

## **South Africa**

Universities in South Africa lead the continent in terms of virtual campus offerings and there are extensive and growing programmes in practically all universities in the country, including the [University of Pretoria](#) and [Tshwane University of Technology](#). The largest open university on the continent is the [University of South Africa](#) (UNISA) which has an active Online Campus; in 2006, UNISA had a registration total of more than 223,000 students and offered approximately 6,900 different courses. The [University of the Free State](#) has offered an online Bachelor of Commerce degree in partnership with a private-sector company, while [Potchefstroom University](#) supports its online facilities with 53 study centres in 53 different locations. The [University of Johannesburg](#) has also adopted a blended approach which includes online delivery, and [Stellenbosch University](#) and [University of the Witwatersrand](#) are both transferring significant amounts of courseware to online delivery to meet the significant demand for seats that all South African universities face.

## *GLOBAL INITIATIVES*

In addition to the regional, national and institutional initiatives, there have been a considerable number of global initiatives, many initiated by leading universities in an effort to meet the needs of students in the less developed parts of the world – as well as those which operate on a broad regional basis as opposed to a national one. Several of these have already been mentioned in relation to specific regions like the African Virtual University and the University of the West Indies. Three others worth mentioning here are the [University of the Arctic](#), the [University of the South Pacific Online Learning \(USP\)](#) and the [Virtual University for the Small States of the Commonwealth \(VUSSC\)](#).

The University of the Arctic refers to itself as a coalition of institutions of higher education seeking to overcome barriers to education in the circumpolar region, involving a range of universities in a mix of face-to-face and online tuition.

The University of the South Pacific (USP) is a public, regional university co-owned by 12 Pacific Island countries: Cook Islands, Fiji, Kiribati, Marshall Islands, Nauru, Niue, Samoa, Solomon Islands, Tokelau, Tonga, Tuvalu and Vanuatu. USP offers distance education through the People First Network's Distant Learning Centre Project. In 2003, USP supported just over 15,000 students.

The Virtual University for Small States of the Commonwealth is hosted by the Commonwealth of Learning and is still in the process of being set up. Considerable efforts are being made to create content for this start-up, which will involve agencies in 30 countries around the globe.

New global partnerships continue to spring up on a regular basis, although some of these have been very mixed in terms of the quality of the learning opportunities offered, and the degree to which they have been successful. Virtual campus initiatives of this type worth mentioning include the [Worldwide Universities Network \(WUN\)](#), [Universitas 21](#) set up in 1997, [U21 Global](#)

(bringing together a wide range of affiliated universities), and the [Global Virtual University](#) set up under the auspices of the United Nations University (UNU) in 2002. The Worldwide Universities Network (WUN) is a partnership of 15 research-led universities from Europe, North America, South East Asia, Australia and Africa. The first of its type that is still in existence, Universitas 21 is an international network of 21 leading research-intensive universities in 13 countries. U21 Global, which was established in 2001, markets itself as an online postgraduate school that works with an international network of universities in 11 countries. The Global Virtual University is somewhat different, as it is very much focused on development-related issues and describes itself as working to enhance learning for environmental sustainability.

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