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# THE DEVELOPING WORLD OF BORDERLESS HIGHER EDUCATION: MARKETS, PROVIDERS, QUALITY ASSURANCE AND QUALIFICATIONS

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## THE DEVELOPING WORLD OF BORDERLESS HIGHER EDUCATION: MARKETS, PROVIDERS, QUALITY ASSURANCE AND QUALIFICATIONS

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#### Introduction

Overestimating change in the short term and underestimating it in the long term is a common phenomenon when revolutions are underway. Many commentators argue that we are indeed in the throes of a revolution as we move from an industrial to a 'post-modern information age'. Some of the characteristics of this information age include high-speed communication and transaction systems, widespread access to codified knowledge and global interdependence of economic and environmental systems. While regions of the world are differentially affected by the information age, none are immune from it any more than they are immune from the impact of globalisation that is a feature of the age.

Within the context of tertiary education, the concept of 'borderless education' has been used to describe and capture some of the emerging features of the changing educational landscape. The term was originally coined by a team of Australian researchers who were investigating the potential competitive impact on Australian higher education of developments in the world of 'new media' (Cunningham et al, 1998). Out of this initial study, the researchers concluded that competition for traditional providers was more likely to come from the emergence of corporate and virtual universities than from global media businesses. A second study was therefore commissioned by the Australian Education Ministry to examine the potential threat from corporate and virtual universities and to explore the growing commercialisation of aspects of higher education (Cunningham et al, 2000).

In parallel to the second Australian analysis of 'the business of borderless education', a British study mapped 'borderless' developments in different parts of the world (in the USA, UK, continental Europe and the Commonwealth). The British team were seeking to assess the strategic implications of borderless developments on the management, leadership and organisational systems of traditional higher education institutions, including quality assurance, finance, human resource arrangements, teaching and learning systems. They also sought to identify particular issues of relevance for the wider national and European regulatory context (CVCP, 2000). These developments in borderless education, linked to the emergence of new providers and markets in higher education, form the chief focus of this paper, alongside an analysis of their implications for quality assurance, accreditation and the recognition of qualifications.

The first part of the paper provides a brief resume of the concept of 'borderless education' and offers a description, with examples, of the kind of developments that are characteristic of the territory. The second part of the paper identifies some of the key implications of such developments, particularly in relation to quality assurance, accreditation and the recognition of qualifications. In many respects, 'borderless developments' and the issues they raise provide a rationale for the establishment of the Global Forum and an agenda for its work.

#### Part 1: Borderless (Higher) Education

#### Concept

The term 'borderless education' is used to describe educational provision that crosses conventional boundaries of time, space and geography. In crossing these boundaries, many of our current conceptions of education (and higher education in particular) are also transgressed with a number of consequences that will be discussed throughout the paper.

The kind of boundaries that are crossed include (Middlehurst, 2002):

- Levels and types of education, such as further and higher education, vocational and academic education, adult and continuing education; in some case this represents a genuine effort to create seamless life-long learning opportunities;
- Private and public, for-profit and not-for profit education: combining "public good" and "private gain" organizational structures and forms of provision;
- State and country boundaries, for example, between business and the public sectors and higher education, creating new corporate universities, transnational consortia as well as joint ventures and strategic alliances;
- Boundaries of time and space in the creation of virtual learning environments, online learning programmes and e-universities.

The nature and range of 'borderlessness' varies from country to country for a variety of reasons. Firstly, the extent and penetration of new information and communication systems will determine how far traditional modes of distance education are becoming 'virtual', that is, fully mediated by forms of electronic learning and student support, capable of crossing boundaries of time, location and geography. Second, countries differ in their responses to increasing demand for initial and continuing higher education (whether academic, professional or vocational). Some seek to combine these levels and types of education in one institution or in alliances between institutions, others segregate them within different kinds of institution, subject to different regulatory arrangements. Third, some countries have strict rules about the status of particular forms of delivery, with face-to-face education typically being seen as more desirable than distance education. Fourthly, some types of provider and educational purpose are regarded as the proper domain of the state and are regulated and protected in this domain. Other types of provider, provision and educational purpose are seen as the legitimate domain of the private, for-profit sector, subject to the opportunities, disciplines and vagaries of the market.

Some of these differences, country by country or region by region, will become clear as we examine the kinds of providers and provision that now exist in higher education and as we examine some of the quality assurance implications.

#### A changing educational map: examples of borderless education categories

The Australian and British studies of borderless education were motivated by concerns about increasing levels of competition for higher education institutions from outside the sector, a potential loss of market share in relation to overseas' students and the general impact of change consequent on ICT developments and globalisation trends. The reports aimed to identify the 'new competitors', what particular features of organisation or education they embodied and what kind of a threat they posed to traditional forms of higher education. The

British researchers sought to categorise the 'new providers', but with an important caveat: some providers were not new, but in a changing economic and social context, they appeared to be extending their scale of provision, thereby reaching new levels of prominence in national and international spheres. The original categories identified in the 2000 reports are constantly being extended to include developments (such as national e-university initiatives) that have emerged since the reports were published.

The categories of provider and provision that are part of the commercial sector include:

- Corporate universities (public sector and private sector organisations);
- Private and for-profit providers;
- Media and publishing businesses;
- Educational services and brokers.

The types of development that are emerging from publicly-funded, not-for-profit, higher education (and which may or may not be commercial) include:

- Regional and international consortia;
- Forms of transnational education;
- National virtual university initiatives.

In some cases the two categories intersect, creating clear examples of 'borderless education', in other cases the two exist in parallel, either co-existing or in competition with each other.

#### Corporate universities

Corporate universities have developed rapidly in the US in the last twenty years (but with some, like McDonald's Hamburger University, established in 1962, having a longer history). Examples of corporate universities are also evident in Europe and Australia (Taylor & Paton, 2002). Recent estimates suggest that there are more than 2000 such initiatives among large companies (such as Ernst and Young or Lufthansa) and large organisations such as the US Army or the UK's National Health Service (http://www.corpu.com). Corporate university initiatives vary in scale and scope; some involve little more than a re-organisation and 'rebranding' of internal training and human resource functions while others are a more systematic attempt to connect human resource strategies, skills' development and continuing education, knowledge management, organisational learning and culture change. Very few initiatives are seeking accreditation in their own right to award university-level qualifications; the Arthur D. Little School of Management is the only corporate university known to have regional accreditation in the US. Others gain access to accreditation through alliances with existing institutions (for example, Ford Motor Company). Very few are engaged in research and only the more established or those with valuable specialisms, such as IT skills, are seeking to extend their educational and training services from employees to customers, suppliers and the general public. Together with existing universities and colleges, corporate universities can make a valuable contribution to the expansion of opportunities for lifelong learning.

#### Private and for-profit providers

Many countries, such as Japan or Indonesia, have a higher education system where private higher education institutions predominate. In other countries such as France or Canada, this

situation is reversed with state owned or publicly-funded institutions in the majority. In recent years, a growing demand for foundation-level higher education (for the 18-25 age group) in several parts of the world (such as the Far East) and for continuing and specialist education has resulted in the establishment of new private higher education institutions. Poland, for example, had almost no private institutions in 1989; now more than 180 private institutions have captured a third of the student body (Newman & Couturier, 2002). In addition, due to the regulatory regimes in different countries, some institutions designated as public and not-for-profit in their home countries become private entities if offering programmes off-shore (such as Monash or De Montfort University campuses in South Africa).

Some of the private providers were established from the outset - and as early as the late 1970s - as for-profit providers. Market leaders with origins in the US include the University of Phoenix (now with more than 100,000 registered students studying 'virtually' or at centres in the US, Canada, Puerto Rico and Germany) and Sylvan Learning Systems with on-campus programmes in Chile, Mexico, Spain, Switzerland, and most recently, in France. Sylvan has also made an approach in India. Many of the for-profit providers offer specialised curricula (in engineering, IT, healthcare, business and management and teacher training) to the niche market of working adults (Ryan, 2002).

#### Media and publishing businesses

In some countries, such as China, the US or UK, national media organisations have long been involved in the delivery of education. In China, the main providers of distance education in the public sector are the 44 government-supported Provincial Radio and TV Universities (PRTVUs) with 841 branch 'schools' at city or prefecture level and almost 1,800 study centres. It is estimated that the PRTVUs have around 1.5 million students enrolled in higher education programmes mainly at undergraduate level, representing about 25% of all students in higher education (British Council, 2001). In the US, the Public Broadcasting Service (PBS), a not-for-profit television service offers provision on television from numerous higher education institutions. In an alliance with Microsoft, PBS can now transmit web-based material to television sets (through Microsoft's web TV Network Service) thus delivering content from local universities and colleges to adult learners in their homes. PBS, through Project ACCESS, is also providing a national information service on distance learning to enable students to find provision that best meets their needs (CVCP, 2000). And in the UK, the British Broadcasting Corporation (BBC) has had a long-standing alliance with the Open University. This alliance is now being extended to include other institutions.

Some global media businesses, such as News Corporation, have entered the higher education market. A subsidiary company of News Corporation, Worldwide Learning Ltd, has established a successful alliance with an educational broker in the UK, Scottish Knowledge. The latter is a consortium of 15 Scottish Universities and 20 commercial companies including General Accident, Shell UK, BP, Ernst and Young and the Bank of Scotland, set up in 1997 to market Scottish higher education programmes globally, particularly in North America, the Middle East, Malaysia and China. Scottish Knowledge invests both in the development of distance learning (and e-learning) programmes and in developing educational centres with local partners. For example, in the United Arab Emirates, Scottish Knowledge has planned the development of five training and research institutes (CVCP, 2000).

Publishing businesses are also active in alliances with universities, colleges and other educational service providers. The global publishers, Pearsons and Thompson Learning are market leaders in the field. Pearsons' initial partnerships were with traditional universities in the UK and US. More recently, they have extended their alliances so that they can offer a wider range of learning services. For example, in partnership with AOL, Pearsons has commenced its 'Learning Network', with the University of Phoenix it is able to provide customised electronic content based on Pearsons' textbooks and with ITT Educational Services, another for-profit post-secondary provider in the US, Pearsons is able to offer an online e-commerce programme using its own textbook content. Thompson's strategic partnerships have been equally wide-ranging. In 2000, the company invested in U21 Global (now Universities Global), a consortium of 16 research-led universities from across the world. In 2001 it entered a partnership with Brainbench (an online examination and certification company). Thompson's also acquired selected parts of Harcourt's business (another large publisher in higher education and in the corporate and assessment businesses). Thompson entered into partnership with Informatics in Singapore to offer IT courses in Asia and began to market Cardean University's courses. Cardean University, a venture begun in 1998, is a consortium that includes the London School of Economics and Columbia University, among others. (Data obtained from the Observatory on Borderless Higher Education, 2002). In all the examples described, the publishers are able to use their core skills in marketing, distribution, content and electronic delivery systems in alliance with those who provide learning, assessment and accreditation services to offer new products and services to existing and new markets.

#### Educational services and brokers

An example of an educational broker, Scottish Knowledge, has already been given. Other examples include Western Governors' University (WGU) in the US or Learndirect in the UK. WGU brings together a range of partners to deliver new kinds of programmes (based on a competency model) to new groups of students. Courses are developed and delivered by more than 30 participating organisations including universities, colleges and commercial companies such as Apple, KPMG and Microsoft. WGU offers online courses, provides access to assessment services through Sylvan Learning Systems and enables students to accumulate credits towards qualifications, either through formal courses or through experiential learning. Quality assurance of the combined products and services is provided by WGU through three councils. The programme councils govern the integrity of academic content; the provider council reviews and approves individual providers (ie institutions and training providers who supply teaching staff) and the assessment council oversees the reliability of assessment instruments.

Learndirect, which started life as 'the University for Industry' is a national initiative in the UK (with a separate Scottish organisation) funded by government and private investment. It acts as a broker between learners and companies and providers, giving access to 'courses and learning packages' through electronically equipped learning centres in a range of convenient locations. A nation-wide guidance service helps to put learners in touch with appropriate provision. Learndirect aims to increase demand for learning and to facilitate access to learning for the whole population, including the most disadvantaged.

The Australian team researching into 'borderless education' (Cunningham et al, 2000) noted the huge growth in educational brokers of all kinds. They also reported on the expansion of educational services, including educational guidance, testing and assessment, learning

support and electronic libraries, and accreditation services. The technology vendors (both hardware and software companies) are also heavily involved in this field as each kind of service becomes increasingly dependent on electronic media. Many corporate universities rely on contractors for the development of tools, templates and expertise not available inhouse and some educational service companies will offer to set up and run the corporate university for you, providing enrolment systems and facilities management services. Increasingly, as traditional universities invest in large-scale networked learning to develop 'managed learning environments', they too are becoming dependent on commercial educational service providers.

#### Regional and international consortia of universities and colleges

In all parts of the world, groups of institutions or departments are developing consortia arrangements. Regional examples include the University of the Arctic, a consortium involving Scandinavian, Russian and Canadian institutions and the Oresund Science Region, a network of 11 universities and science parks in Sweden and Denmark and a range of private companies and local government organisations. These types of consortia aim to encourage both economic and social development in their localities.

Larger international groupings include Universitas 21 with eighteen member universities, the Global University Alliance with nine members or UNext with six member institutions from the US and UK. Some consortia, such as the Coimbra Group in Europe, have been in existence for some time, others are more recent. Their purposes vary from enabling student and staff exchanges to promoting research collaborations, developing international curricula or increasing access to markets for international students. The possibilities opened up by developments in information and communications technologies mean that some of these consortia are seeking partnerships with companies (such as that between Universitas Global and Thompson Learning mentioned earlier) to develop commercial opportunities for their educational programmes and services in several parts of the world.

#### Forms of Transnational Education

In addition to regional and international consortia, a variety of other forms of transnational education have emerged to add to the traditional modes of staff and student exchanges between countries. In the UNESCO/Council of Europe Code of Good Practice in the Provision of Transnational Education (2001) these are categorised in terms of collaborative and non-collaborative arrangements. The former include franchising, twinning and joint degrees whereby study programmes, parts of a course of study, or other educational services of the awarding institution are provided by a partner in another country. The latter include branch campuses, off-shore institutions, corporate and international institutions whereby study programmes, parts of a course of study, or other educational services are provided directly by an awarding institution in one country to another country or countries.

Transnational education can be delivered in a variety of forms: through distance learning (using printed, electronic, audio and video-based media) and face-to-face. It is in the field of transnational education that concerns have been raised about the volume, nature and quality of provision that is being exported from (mainly) industrialised countries to developing countries, including parts of Central and Eastern Europe and Africa. Other countries, such as Malaysia and Hong Kong welcome foreign providers having developed good systems of

regulation. By 2001, for example, Hong Kong was hosting more than 150 overseas providers of higher education, often in collaborative arrangements with local providers (Olsen, 2002).

#### National Virtual University Initiatives

It is not always institutions by themselves that are seeking to join forces to exploit the use of new technologies to enhance their own provision or to extend their provision to new markets. National initiatives, as well as numerous inter-state initiatives (as in the US) are also evident. Countries across the world have announced virtual university initiatives of various kinds, for example, Pakistan, Greece, Sweden, UK, France, Malaysia, Finland and sub-Saharan Africa. Some of these initiatives are intended to extend and enhance local provision while others are targeted at international markets. The form and purpose of these virtual universities differ as can be seen from the following examples.

**Pakistan:** led by the Ministry of Science and Technology, the aim is to establish a virtual university to deliver IT education, initially at undergraduate level, through branch campuses across the country. Tutors will be drawn from both public and private sectors and delivery will be initially through video and subsequently through high-speed computer networks.

*Greece*: the Hellenic Open University was established in 2000 with funding from the Greek government and the European Commission to provide access to undergraduate, graduate and doctoral programmes for previously excluded groups of students: those without first degrees or without access to state universities because of family or work commitments.

**Sweden:** the Net University is a network across Sweden that will provide access to the online courses offered by many universities. Each of the 39 state universities are able to decide whether or not to participate in the network and in participating, must recognise completely the coursework done by students through other institutions in the network. The aim is to provide access to study programmes for those who live in isolated areas and for those at work and to enable students to combine courses from different institutions.

*UK*: e-Universities Worldwide, initiated by the Department of Education and Skills, but with public and private investment, aims to increase the UK's share of the international student market. It is principally a commercial venture, although with some specific programmes designed to widen participation in higher education in the UK. All universities in the UK are members of the holding company. Online programmes are being developed and will be available from January 2003 with initial target markets in Malaysia, Singapore, Hong Kong, China and the Middle East.

*France*: the government is sponsoring 'digital campuses' to boost the provision of online courses. Each consortium is discipline-based, specialising in areas such as law, business, healthcare or engineering, some include foreign partners and all are linked to the National Distance Learning Centre (CNED) although students enrol with individual universities. The Ministry of Education is seeking to attract traditional students, employees wanting to upgrade their professional training and teachers wanting to enhance their knowledge and skills. In the international domain (which involves 59% of provision), the purpose is to assert the French language, culture and educational approach in an area of international competition (Loing, 2002).

*Malaysia*: Unitem is a consortium of the country's 11 public universities, established in 1999 as a private company. The aims of this initiative are to streamline the management of distance learning programmes and facilitate the sharing of resources across universities, to produce more skilled workers with a science and technology background, to offer quality courses more cheaply, to increase the democratisation of education and enable Malaysia to become a regional hub for education (Singh, 1999).

*Finland*: The Finnish Committee of University Rectors, supported by the Ministry of Education, is establishing a National Virtual University and National Virtual Polytechnic. This is a consortium between higher education providers, local and regional agencies and businesses. The purpose is to enhance collaborative teaching, promote joint research with industry, preserve national culture and language and promote access to higher education for a widely dispersed population (Karran and Pohjonen, 2001).

Africa: The African Virtual University was initially established as a World Bank project and is now an independent non-profit organisation, serving 18 countries in sub-Saharan Africa through multi-mode delivery of courses at undergraduate and post-experience levels. Since its inception in 1997, more than 24,000 students have completed courses in technology, engineering, business and sciences and more than 3,500 professionals have attended executive and management seminars (www.avu.org).

#### Part 2: Impact and implications of 'borderless' developments

#### Features of borderless education

There are several features of borderless developments that are particularly pertinent in relation to issues of trade and quality assurance. They are worth brief elaboration:

**Technology dependence**: There is widespread and growing use of and dependence on ICT for delivery of programmes, for administration of student services and for learning support. Standardisation of processes and compatability of systems across institutions and between all partners in a consortium are becoming increasingly important issues.

**Dissolving boundaries:** Boundaries between previously discrete categories of provider and provision (on-campus and distance learning, company and college) are dissolving and distinctions between roles are also blurring. Dissolving boundaries make categorisations difficult and raise questions of identity, role, structure and regulation (what is a university, for example?). They also make it difficult to collect accurate and comprehensive data to assist with the sharing of information across countries, while at the same time creating an urgent need for common vocabularies and typologies.

Emerging boundaries: Where some boundaries are blurring, others are becoming more sharply defined as organisations concentrate on their core business and outsource non-core aspects to other providers. Most UK universities, for example, offer student accommodation as part of the 'community experience' for students. Increasingly, the building and maintenance of such accommodation is being out-sourced to private companies. With the expansion of educational service companies, many other aspects of educational provision can also be out-sourced, including admissions, registration, assessment, teaching and learning support. Universities need to address the question of what is core to their business and where they have a unique or specialist role and what is non-core (though arguably, no less

important). As functions are disaggregated and shared between a chain of providers, institutions will need to pay particular attention to quality assurance to ensure that the end user (the students) experience programmes and learning opportunities that are relevant and coherent. Institutions will also face important issues of copyright and ownership of intellectual property.

Educational value: Individuals and companies value a variety of education and training outcomes and do not necessarily wish to create barriers between them. These outcomes may include skills training delivered through short courses, cognitive and attitudinal development delivered through longer programmes leading to qualifications, work-based experience, cultural development and opportunities for personal growth. Learning may for some groups of learners need to be relevant, focused and immediately useable rather than generalised, theoretical and focused on longer-term value. 'Just-in-time' learning will be more valuable for some than 'just-in-case' learning. Institutions may need to re-evaluate their provision in the light of different value-systems and requirements.

Subject spread: Many (though by no means all) borderless developments are commercially driven, both in terms of income generation to providers of education and in terms of the return on investment for purchasers of education. The range of subjects and programmes offered can often be narrower than traditional university curricula, focusing particularly on vocational and professional areas such as engineering, IT, healthcare, language training, and business. If educational quality, particularly at undergraduate level, is measured by range of subjects studied as much as by depth of engagement in any one discipline, then there are aspects of curriculum control that need to be exercised both at institutional and national levels.

Collaboration: Partnerships, alliances, acquisitions and mergers are developing between many different sectors. For example, Fathom.com is a collaboration between institutions, museums and libraries to provide access to a range of cultural and learning resources. Collaborative arrangements require mutual understanding and respect at individual and group level. They also require good information about potential partners and the ability to tailor products and services to meet diverse needs. Mobility, flexibility and exchange are important elements and require collaborative systems (such as credit transfer arrangements) to be developed across a range of territories and organisations. This is another challenging area for quality assurance, accreditation and the recognition of qualifications.

#### **Quality assurance implications**

A detailed analysis of the quality assurance implications of new forms of higher education and a descriptive typology of the new variables in higher education arising from 'borderless developments' has been published by the European Network of Quality Agencies (Middlehurst, 2001). Some of the key points of the analysis are collected here.

Perhaps the most significant point that runs through the ENQA report is that all aspects of the educational process are potentially affected by 'borderless developments'. To argue the case from an economic perspective: new kinds of students with different requirements, governments in search of life-long learning and businesses in need of new skills and retraining opportunities all affect the demand side of higher education. The supply side is affected by new media, by varied locations for higher education (homes and offices as well as formal institutions and centres), by new curricular forms and content (such as competence-

based education and experiential learning) and changing qualifications (practitioner doctorates and international degrees, for example). All these changes have some impact on quality assurance insofar as they create a variation from the model of a single subject academic degree offered by one formally designated university or college operating in one country. Over time, quality assurance systems have adapted to change (as Europe is doing in adjusting to the Sorbonne and Bologna Declarations) but without needing to make fundamental revisions. Arguably, developments in transnational higher education, particularly when combined with ICT developments may require more fundamental changes in quality assurance arrangements.

Examples of the new variables, highlighting some of the implications for quality assurance are listed below.

#### Types of provider and provision

Five kinds of provider and provision can be identified. These are: individual providers who offer the full range of educational processes from enrolment to assessment and certification, consortia who do the same, part or joint providers and multi-agent providers which each offer a part of the educational process and 'self-assembly' arrangements where the learner assembles their own provision, with guidance and subsequent certification from elsewhere. In the first category, quality assurance arrangements are familiar, covering regulatory and governance issues, management and operational arrangements and criteria and systems for determining the quality and standards of curricula and qualifications.

The second category adds complications where partners in the consortium are not traditional higher education institutions from one country. Any one of the aspects of quality assurance described above (such as the laws of different countries, the arrangements for accreditation and licensing of educational establishments or the authority to make judgements about quality and standards) may vary and require negotiated agreements or statutory changes. The third and fourth categories raise other issues. For example, if one provider is responsible for the design of curricula, another for teaching and another for certification, it may be necessary to have quality assurance arrangements that are fitted to each function. It would then be possible to 'accredit' each function independently; indeed, organisations such as the Open and Distance Learning Quality Council already offer this service and organisations, including universities, are gaining accreditation for their learning centres or assessment systems.

The fifth category poses a significant challenge in that control of the curriculum is not solely in the hands of academics, but requires negotiation between learners (or companies) and a certifying body, which may or may not be an academic institution. Judgements about the quality and standard of attainment of the learners may parallel those made in relation to the award of degrees and diplomas of more traditional varieties, but it is also possible that they need to be different in kind. A key issue is the form of the negotiation and resulting agreements; these will need to specify the responsibilities of participants as well as the ownership of and authority over curricular coherence, integrity and outcomes.

#### Delivery: modes, media and locations

The distinctive characteristics of new modes of delivery include the co-location (or not) of students and tutors and the amount and type of interactions between groups of learners and tutors, between learners themselves and between learners and other resources for learning.

The support systems – social, academic and technological – to which learners have access are important aspects of quality assurance. Another consideration is the extent to which the media add value to the learning experience – in terms of quality, accessibility or relevance.

The quality assurance implications of 'delivery' are both practical and obvious and less tangible. For example, technical standards, technical capacity and support as well as issues of security, privacy and reliability are important aspects of e-learning and are directly linked to the quality of provision and the nature of students' learning experiences. More subtle are issues arising from the increasingly fluid boundaries between knowledge, information, learning and entertainment; quality assurance arrangements will need to promote clarification and verification of purpose and outcomes of 'an educational experience'. Perhaps more significantly, certain advances in technology are likely to make some underpinning principles of quality or academic standards redundant or at least, increasingly difficult to achieve. For example, a criterion underpinning the award of a PhD involves 'the creation of new knowledge which makes a significant contribution to the advancement of the discipline'. Can this be sustained? Some of these issues are universal, affecting higher education practice in any location, while others (such as access to particular media and the value placed on particular forms of delivery) are particular to different countries or regions. Such differences become significant in relation to the quality of transnational higher education and the recognition of qualifications across national boundaries.

#### New curricula and content

In discussing 'borderless developments', the emphasis has been largely on teaching and learning and how new providers and provision are affecting the educational side of universities and colleges. However, the generation of new knowledge through research and development activities must also be part of the picture. The academic world does not have a monopoly on the generation of new knowledge or on determining the particular requirements of 'knowledge in application' for different contexts. The authority to design and determine 'content' (and to assure its currency and credibility) is likely to become more widely shared – with implications for standards, assessment and qualification frameworks. In some countries, different institutions and different frameworks and systems cater for different kinds of curricula, in other countries, the merging of institutions, as well as emerging consortia and partnerships, are blurring these distinctions. Given the increasing variety of suppliers of content, issues of level, recognition, currency and equivalence are important, with a need to negotiate agreements about such matters across organisations and countries.

#### **New qualifications**

New types of qualifications (joint and multiple awards, integrated degrees – incorporating academic requirements with a licence to practice and professional certification) as well as non-certificated learning (such as experiential learning) raise some of the quality assurance issues associated with new content. Ownership and authority for the award is a key issue, with differences noticeable across countries and within countries, particularly in relation to professional areas. Clearly the value of the award is also an issue, with a need to verify the provider, accrediting agency or other recognition arrangements. Where credit is gained towards qualifications, credit accumulation and transfer systems become important, as the European Credit Transfer System recognises.

#### Crossing borders: national, organisational, functional, temporal and spatial

A classic feature of borderless education is the crossing of boundaries. Previously discrete aspects of education now exist in more complex, inter-related forms and systems. Yet barriers still exist which prevent the provision or experience of education from being seamless, particularly in a global context.

#### Crossing national borders

In transnational education, barriers include national legislation and higher education policies, visa and customs' regulations, telecommunications laws and costs, intellectual property rights and the quality assurance arrangements of different countries. Reducing these barriers is a declared aim of the World Trade Organisation, through negotiations on the General Agreement on Trade in Services. Various mechanisms are used to achieve a reduction in barriers, many of which are relevant to UNESCO's goals – sharing of information, common vocabularies, templates and formulae to aid transparency, reciprocal recognition, codes of practice and conventions which formalise agreements. At the outset, many of these schemes are voluntaristic, but over time, they tend to become more tightly co-ordinated and systematic within and across regions and countries.

#### Crossing organisational boundaries

Across organisations, barriers include legal and funding arrangements, technical competence and capacity, management structures and organisational cultures. Some of these issues (such as technical standards) require action at supra-national and industry-wide levels, while others are more likely to be solved by negotiation built on shared experience and understanding of difference at local and regional levels. Where multi-national corporations are involved, there is already a wealth of experience to bring to higher education in the development of mechanisms that support and assure the quality of transnational and cross-cultural education.

#### Crossing functional borders

Where functional borders are crossed, particularly where long chains of providers are linked together, a particular challenge is to specify and agree where responsibilities for the delivery and assurance of quality lie and to ensure that appropriate operational structures and systems exist. A matrix approach to quality assurance may be the answer. As a first stage, each part of the supply chain can be 'accredited' against a set of agreed criteria. In this way, we should be able to get closer to common understandings (or even common standards) related to learning centres, learning resources, assessment systems, curriculum design and pedagogical approaches. At a second level, over-arching systems of agreement (contracts) make transparent the responsibilities and accountabilities of each party in the chain. And at a third level, organisational arrangements (such as WGU's quality assurance councils) ensure that processes run smoothly and that outcomes are fit for purpose according to the needs of different learners and purchasers of learning. At an international level, it is possible to agree the components of such a system and, over time, to agree the quality criteria that should underpin their successful operation.

#### Crossing borders of time, space and location

The flexibility potentially created by ICT developments through removing or reducing barriers of time, space and location has brought new expectations and opportunities, both positive and negative. Some specific quality assurance requirements include:

- Consumer protection against the claims of non-authorised or disreputable providers;
- International conventions to cover the import and export of online learning;
- Registration and protection of domain names;
- Security systems of various kinds, from registration and payment systems to assessment and student records;
- Tracking systems for progression in learning, for marking and grading of assignments and for recording attainment and transfer of credit;
- Quality standards to govern technical functioning, curriculum and content design and learner support;
- Review systems specifically geared to online learning;
- Validation systems to approve individual or group designed programmes, learning experiences and learning outcomes.

These quality assurance requirements are likely to be independent of type of provider and may well require conventions and agreements that apply across sectors as well as across countries. The price of flexibility for the learner or purchaser of education is likely to be an increase in standardisation for providers; this is already recognised in the practices and procedures of distance education institutions. In the context of borderless education, traditional higher education providers will need to join with others now involved in the education business to ensure that their particular values and purposes are recognised in any moves towards standardisation.

#### **Conclusions**

This paper has sought to range widely over the type of developments that are emerging in higher education in different parts of the world and to draw attention to some of the consequences that arise for quality assurance and recognition systems. The regional studies presented at the Global Forum will add further to our collective knowledge and understanding of these issues.

The paper has not sought to draw out the wider social, political, economic and cultural issues that are attendant upon the changes that technology and globalisation bring. However, these wider issues are primary motivators behind the demand for UNESCO's Global Forum. They are also important dimensions for Forum participants to remember when considering the shape of international quality assurance arrangements that are fit for the many purposes and needs of UNESCO's diverse constituents. Higher education is growing in complexity through multiple inter-connections. Our old binary distinctions between education for 'public good' or 'private gain' seem increasingly anachronistic. We should challenge ourselves to find more sophisticated categories linked to quality assurance arrangements that recognise and give value to diverse forms of learning – and learners - in both local and global contexts.

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