THE VIRTUAL UNIVERSITY

Models & Messages	Lessons from Case Studies

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A world of borderless higher education – impact and implications

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List of abbreviations

ICT	Information and Communication Technology
IT	Information Technology
PBS	Public Broadcasting Service
UNESCO	United Nations Educational, Scientific and Cultural Organization
WGU	Western Governors' University

1. Introduction

Overestimating change in the short term and underestimating it in the long term is a common phenomenon when revolutions are under way. 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'. 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 the globalization that is a feature of the age.

Higher education is both deeply affected by and involved in wider social and economic change. Many current studies seek to document and examine the effects of change on higher education, as well as the role that universities and colleges are playing in shaping a new educational landscape. Three related studies (which form the foundation for this chapter) have developed and used the concept of 'borderless education' to describe and capture some of the features of the emerging landscape. The term 'borderless education' was originally coined by a team of Australian researchers investigating the potential competitive impact on Australian higher education of the growth of global media businesses and developments in 'new media' (Cunningham et al., 1998). Concluding from this first study that greater competition for traditional universities was likely to emerge from the developing phenomena of corporate and virtual universities, a second study examining these new providers soon followed (Cunningham et al., 2000).

In parallel with 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, the UK, continental Europe and the Commonwealth). The British team was seeking to assess the strategic implications of borderless developments on the management, leadership and organizational 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 (Committee of Vice-Chancellors and Principals, 2000). These developments in borderless education, linked to the emergence of new providers and markets in higher education, provide the focus for this chapter, alongside an analysis of their policy and management implications.

2. Borderless (higher) education: concept and categories

2.1 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 this chapter.

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 cases this represents a genuine effort to create seamless lifelong 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.

2.2 A changing educational map: categories of borderless education

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 Information and Communication Technology (ICT) developments and globalization trends. The reports aimed to identify the 'new competitors', what particular features of organization or education they embodied and what kind of threat they posed to traditional forms of higher education. The British researchers sought to categorize 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 organizations);
- 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 coexisting or in competition with each other.

Corporate universities

Corporate universities have developed rapidly in the USA in the past 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 and Paton, 2002). Recent estimates suggest that there are more than 2,000 such initiatives among large companies (such as Ernst and Young or Lufthansa) and large organizations such as the US Army or the UK's National Health Service. Corporate university initiatives vary in scale and scope; some involve little more than a reorganization 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, organizational 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 USA. 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 Information Technology (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 (Couturier and Newman, 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 USA include the University of Phoenix (now with more than 100,000 registered students studying 'virtually' or at centres in the USA, 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 specialized curricula (in engineering, IT, health care, 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 USA or the UK, national media organizations 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 with 841 branch 'schools' at city or prefecture level and almost 1,800 study centres. It is estimated that the Provincial Radio and TV Universities have around 1.5 million students enrolled in higher education programmes mainly at undergraduate level, representing about 25 per cent of all students in higher education (British Council, 2001). In the USA, 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, the 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. The 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 (Committee of Vice-Chancellors and Principals, 2000). In the UK, the British Broadcasting Corporation has had a long-standing alliance with the Open University. This alliance is now being extended to include other institutions.

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 the USA. More recently, they have extended their alliances so that they can offer a wider range of learning services. For example, in partnership with America Online, Pearsons has commenced its 'Learning Network': with the University of Phoenix it is able to provide customized electronic content based on Pearsons' textbooks; with ITT Educational Services, another for-profit post-secondary provider in the USA, 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 Universitas Global), a consortium of sixteen research-led universities from across the world. In 2001 it entered a partnership with Brainbench (an online examination and certification company). Thompson 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

Examples of educational brokers include Western Governors' University (WGU) in the USA 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 thirty participating organizations 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 the university through three councils. The programme councils govern the integrity of academic content; the provider council reviews and approves individual providers (i.e. institutions and training providers that 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 organization), 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 nationwide 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 '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 in-house 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 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 eleven universities and science parks in Sweden and Denmark and a range of private companies and local government organizations. 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 USA and the 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 has 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 categorized 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, offshore 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) industrialized 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

As this volume of case studies illustrates, 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 interstate initiatives (as in the USA) are also evident. Countries across the world have announced virtual university initiatives of various kinds, for example, Pakistan, Greece, Sweden, the UK and Finland, as well as those included in this volume. Some of these initiatives are intended to extend and enhance local provision while others are targeted at international markets.

3. Perspectives on the policy and management impact of borderless education

In order to tease out the policy and management implications of borderless developments, it is helpful to dissect the concept and categories described earlier in a number of different ways. In this section, three perspectives are presented and their implications discussed: general features of borderless education, cross-border dimensions and new educational variables.

3.1 Features of borderless education

There are some general features of borderless education that are worth brief elaboration in order to draw out their policy and management implications.

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. Standardization 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 categorizations 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 organizations 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 outsourced to private companies. With the expansion of educational service companies, many other aspects of educational provision can also be outsourced, 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 usable rather than generalized, 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 and college curricula, focusing particularly on vocational and professional areas such as engineering, IT, health care, 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. 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 organizations.

3.2 Crossing borders: national, organizational, 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, interrelated forms and systems. Yet barriers still exist that prevent the provision or experience of education from being seamless, particularly in a global context. Removing barriers of various kinds is a key policy issue.

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 Organization, 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 formalize agreements. At the outset, many of these schemes are voluntaristic but, over time, they may become more tightly coordinated and systematic within and across regions and countries.

Crossing organizational boundaries

Across organizations, barriers include legal and funding arrangements, technical competence and capacity, management structures and organizational 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 multinational 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, overarching systems of agreement (contracts) make transparent the responsibilities and accountabilities of each party in the chain. At a third level, organizational 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 on the components of such a system and, over time, to agree on 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 implications for policy and management include the need for:

- consumer protection against the claims of non-authorized 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 requirements are likely to be independent of the 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 standardization for providers; this is already recognized 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 recognized in any moves towards standardization.

3.3 New educational variables

In this section, some of the critical *educational* features of borderless developments are considered, including type of provider, modes of delivery, curricula and qualifications.

Types of provider and provision

Five kinds of provider and provision can be identified. These are:

- individual providers that offer the full range of educational processes from enrolment to assessment and certification (including public, private and for-profit providers engaging in face-to-face, distance and dual-mode provision);
- consortia that offer the same full range of provision;
- part or joint providers of programmes and degrees;
- multi-agent providers, each of which offers a part of the educational process;
- 'self-assembly' arrangements where the learners assemble their own provision, with guidance and subsequent certification from elsewhere.

In relation to the first category, the policy and management impact tends to be felt at national and international levels in relation to regulatory and governance frameworks, funding and quality assurance arrangements and the wider telecommunications infrastructure. At institutional level, leaders and managers face issues of increasing competition with the commensurate need to address questions of mission, regional and global positioning, and market opportunities.

The second category adds complications, particularly where partners in the consortium are not traditional higher education institutions from one country. The legal frameworks of different countries (and their application to education and business) are an important element of the policy context, for example in relation to arrangements for accreditation and licensing of educational establishments or the authority to make judgements about quality and standards. At institutional level, governance arrangements, financial systems, staffing and staff training, technology infrastructures and quality assurance arrangements will all feature in strategic debates and plans. The third and fourth categories raise some of the same as well as other issues. For example, in relation to quality assurance, 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 with 'accreditation' or 'kite-marking' of the different parts. There will also need to be clear arrangements for managing and integrating the different functions and for sharing information about enrolments, assessments and grading. Where joint or multi-agent providers involve traditional institutions and companies, new organizational arrangements, with staff on different kinds of employment contracts, may need to be developed.

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. Both at policy and management levels, issues of funding, accreditation, credit transfer and recognition of qualifications become significant.

3.4   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. Another consideration is the extent to which the media add value to the learning experience, in terms of quality, accessibility or relevance.

The operational 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; the nature of students' educational experiences as well as the value placed on them is changing. Higher education leaders will need to reassess the nature of their educational offerings so that they fit the needs of increasingly diverse learners. 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 transnational education and the recognition of qualifications across national boundaries.

3.5   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 enterprise. 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 to 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 organizations and countries.

3.6   New qualifications

New types of qualifications (joint and multiple awards, integrated degrees, incorporating academic requirements with a licence to practise 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 recognizes.

4.   Conclusions

This chapter has sought to range widely over the type of developments that are emerging in higher education systems in different parts of the world and to draw attention to some of the consequences that arise for policy and management at different levels. Given that 'borderless developments' have a particular impact on the educational enterprise, most attention has been given to implications for student learning, qualifications and quality assurance systems. However, other aspects of policy and management such as legal frameworks, ICT systems, funding arrangements, governance and human resource management will all be affected by the developments discussed here. Indeed, in recognition of the wide-ranging impact on universities and colleges of 'borderless developments', institutional leaders in the UK have joined with the Association of Commonwealth Universities to establish an 'Observatory on Borderless Higher Education'. The Observatory will provide a continuing strategic information service on a subscription basis to institutions to assist their planning and decision-making processes as they strive to meet the challenges arising from a changing global, regional and local education landscape.

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