

MODULE 1: *HIGHER EDUCATION IN A GLOBAL WORLD: THE CONTEXT OF QUALITY ASSURANCE*

UNIT 4: QUALIFICATIONS: TYPES, TRANSFER AND RECOGNITION

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Introduction

With this unit the focus of the module moves to the qualifications awarded by higher education institutions and explores responses to a world in which individuals move from country to country for study and work purposes. Globalisation and the accompanying internationalisation of higher education have led to increased mobility of professional and skilled labour.

The unit gives an overview of the qualifications and degrees awarded by tertiary institutions with particular emphasis on the degree systems of many different countries. It also shows how countries are moving to embed qualifications in conceptual frameworks – *national qualifications frameworks* or NQF – to allow linkage of qualifications from different education sectors and to demonstrate the expected learning outcomes to meet the needs of industry and the professions.

Further efforts to link qualifications this time to cross national boundaries have occurred with impressive leadership from within Europe. The last two decades have seen significant developments in developing a range of new mechanisms to facilitate the recognition of qualifications and transfer of credit for incomplete qualifications. The unit deals with recent developments in cross-national recognition of credit and qualifications that make it easier for graduates from one education system or country to work elsewhere.

You will also explore a number of the current trends in course delivery that have evolved in response to the changing demographic of the student population from the massification of education.

When you have completed this unit you will be able to:

- Describe the systems of qualifications and degrees in a number of countries
- Discuss the emergence of national qualifications frameworks (NQF)
- demonstrate understanding of the processes of transfer and recognition of academic credit and qualifications;
- appreciate the nature and scope of the Bologna Process and its possible implications for other countries; and
- Describe the impact of changed student demographics on the modes of delivery of courses

Part 1: Types of Qualifications

Generally tertiary education covers skills, vocational and technical and academic qualifications. For the purposes of this section, skills qualifications are excluded from the discussion as variations between countries are too wide to result in any coherent outline.

1.1 Vocational and Technical Qualification

Vocational Education and Training (VET), also called *Career and Technical Education* (CTE), prepares learners for jobs that are based on manual or practical activities, traditionally non-academic and totally related to a specific trade, occupation or vocation. It is sometimes referred to as *technical education* as the learner develops direct expertise in a particular group of techniques or technology.

Generally, ‘vocation’ and ‘career’ are used interchangeably. Vocational education may be classified as teaching procedural knowledge. This is contrasted with declarative knowledge as used in education in a usually broader scientific field concentrating on theory and abstract conceptual knowledge which is characteristic of tertiary education (Cunliffe: 2005). Vocational education can be at the secondary or post-secondary level, and can interact with the apprenticeship system. Increasingly, vocational education is recognised in relation to prior learning and partial academic credit transfer towards tertiary education, at a university. However, vocational education for example, is rarely considered on its own merits to fall under the traditional definition of tertiary education.

Up until the end of the twentieth century, vocational education focused on specific trades such as an automobile mechanic or welder, and was therefore associated with the activities of lower social classes. As a consequence, it had little prestige. However, as the labour market becomes more specialised and economies demand higher levels of skill, governments and businesses are increasingly investing in the future of vocational education through publicly-funded training organisations and subsidised apprenticeship or traineeship initiatives for businesses. At the post-secondary level, vocational education is typically provided by an institute of technology or by a local community college.

Table 1 shows some examples of the countries and their conduct of vocational and technical training.

Box 1: Examples of Vocational and Technical Education in Selected Countries

Countries	Features of Providers of Vocational and Technical Education
Australia	Central/State. The Vocational Education Training (VET) sector and training providers are Registered Training Organisations. Has own framework and incorporated into the national higher education framework.
Finland	Under the jurisdiction of the individual municipality. Forms part of the secondary school system. Funding can be central.

Germany	Central. Legislated through the <i>Berufsausbildungsgesetz</i> in 1969 which regulated and unified the vocational training system and codified the shared responsibility of the state, the unions, associations and chambers of trade and industry.
India	Largely independent providers. Full-time program are generally offered through industrial training institutes. Part-time program are offered through state technical education boards or universities.
Malaysia	Both public and private providers. Polytechnics and Community Colleges offer local qualifications whilst private colleges offer foreign and local qualifications. It is incorporated into the Malaysian Qualifications Framework.
New Zealand	Central and provided by Industrial Training Organisation.
United States	Community Colleges and private independent providers. Varies from one state to the next.

1.2 Certificates and Diplomas

Any discussion of the types of qualifications cannot be complete without a brief mention on certificates and diplomas which are many and varied, not to say confusing. In many countries, certificates signify qualifications in higher education offered by a university or other higher education provider. These certificates are for courses that are shorter than a degree or diploma course. In other countries, a certificate is awarded at the secondary level of education. Yet further variation occurs where there is an influence from the British education system in which case certificates are often tertiary-level qualifications usually reflecting the initial stages of a first degree.

In Australia, certificates are generally provided by TAFE colleges or non-academic Registered Training Organisations (often workplaces). In the United States, a certificate may be offered by an institute of higher education and is awarded to students who have reached a standard of knowledge of a certain vocational subject.

A diploma, like a certificate, generally denotes a qualification below that of a bachelor level unless it is preceded by the adjectives of postgraduate (or graduate as the case may be). In countries such as Australia, a diploma is a specific academic award or academic level in addition to that of Bachelor/Masters/Doctorate. Diplomas are usually signified by a stole rather than an academic hood, the latter being used only for those of graduate status. In the U.S., the word ‘diploma’ usually refers to the actual document received at the end of higher education. It also can refer to a specific academic award, for example in the field of nursing, the Diploma in Nursing is offered by hospital-based schools. In other parts of the world, diploma often refers to the actual education or indication of the amount of time spent in study.

There are also some variations to the term ‘diploma’ to indicate the level of knowledge or graduate competencies. An example is the ‘Advanced Diploma’ or ‘Higher Diploma’ which usually caps the graduate competencies at a more advanced level, higher than that

of a diploma. In India and Pakistan, a diploma may also be a specific academic award usually awarded in professional/vocational courses e.g. Engineering, Pharmacy and Designing. In countries that adopt the continental (German) education system, diploma is the standard academic degree, comparable with the Bachelors and Masters.

Perhaps, one of the better known diplomas is the International Baccalaureate (IB) Diploma which is a pre-university qualification taken by students in the final two years of their high school and is equivalent to the A Levels in the UK. Diplomas and certificates may also have adjectives such as 'graduate' or 'postgraduate', indicating the level of the qualifications. For example, in Scotland and Malaysia, the term 'graduate' indicates a diploma below the level of a bachelors degree whilst 'postgraduate', a diploma below Masters but above bachelors.

In summary, the use of the terms certificate and diploma could be described as idiosyncratic and almost entirely determined by the context in which certificates and diplomas are awarded.

1.3 Academic Degrees

A degree is any one of a wide range of undergraduate qualifications conferred by institutions of higher education such as universities, normally as a result of successfully completing a program of study. Elsewhere in this unit the movement in Europe to standardise structures of qualifications is discussed. This 'Bologna' process is having major impacts across Europe and further afield as countries seek to rationalise their higher education systems in the interests of graduates and their capacity to operate in a global economy.

Some examples of specific degrees follow each level of qualifications.

1. Associate's degrees: AA (Associate in Arts), AS (Associate in Science), AAS (Associate in Applied Science), AGS (Associate in General Studies)
2. Bachelor's degrees: BA (Bachelor of Arts), BFA (Bachelor of Fine Arts) , BSc (Bachelor of Science), BBus (Bachelor of Business), BVSc (Bachelor of Veterinary Science), B Eng (Bachelor of Engineering), BBA (Bachelor of Business Administration)
3. Master's degrees: MA (Master of Arts), MSc (Master of Science), M.Div (Master of Divinity), MPIA (Master of Public and International Affairs), MAS (Master of Applied Statistics), MMus (Master of Music), M.J (Master of Journalism), M.Des. (Master of Design)
4. Licentiate degrees: LDS (Licentiate in Dental Surgery), JCL (Licentiate in Canon Law)

5. Specialist degrees: Ed.S. (Education Specialist) SCIP (Specialist in Clinical Psychology)
6. Logistician's degrees: CPL (Certified Professional Logistician)
7. Engineer's degrees: Ch.E. (Chemical Engineer), C.E. (Civil Engineer), E.E. (Electrical Engineer), Env.E. (Environmental Engineer), Sys.E. (Systems Engineer), Nucl. E. (Nuclear Engineer)
8. Professional Doctoral degrees: BM BS (Bachelor of Medicine and Surgery), ND (Doctor of Naturopathic Medicine), D. C. (Doctor of Chiropractic), Au.D. (Doctor of Audiology), PharmD (Doctor of Pharmacy), P. Th. D. (Doctor of Pastoral Theology), D. Th. P (Doctor of Practical Theology) Ed.D (Doctor of Education), DProf (Doctor of Professional Studies)
9. Research Doctoral degrees: Ph.D (Doctor of Philosophy), DSc or ScD (Doctor of Science), J.C.D. (Doctor of Canon Law), DTech (Doctor of Technology), J.S.D. (Doctor of Juridical Science), LL.D (Doctor of Laws), DPM (Doctor of Project Management), DSocSci (Doctor of Social Science)

Abbreviations for degrees can place the indication of the level of the qualification either before or after the indication of faculty or discipline, depending on the institution. For example, DSc and ScD both stand for the (higher) doctorate in science. Abbreviations may also vary between institutions, for instance, both BS and BSc stand for 'Bachelor of Science'.

There are efforts to standardise degree abbreviations such as that utilised by the Association of Commonwealth Universities (ACU). ACU members use a standard list of abbreviations though, in practice, there are still some variations. Most notable is the use of the Latin abbreviations 'Oxon.' and 'Cantab.' for the Universities of Oxford and Cambridge, which is superseded by (little used) English 'Oxf.' and 'Camb.'. For universities of different Commonwealth countries sharing the same name, such as York University in Canada and the University of York in the UK, a convention has been adopted where a country abbreviation is included with the letters and university's name. In this example, 'York (Can.)' and 'York (UK)' is commonly used to denote degrees conferred by the respective universities.

The doubling of letters such as in LL.B., LL.M., LL.D. is because these degrees are in laws, not law. The doubled letter indicates the Latin plural *legum* as opposed to the singular *legis*. Degree abbreviations can also be circumstantial as in the case of the degree in surgery. Ch. B. and Ch. M. are from Latin *chirurgiae* and often indicate a university system patterned after Scottish models. The combination of M.B. with Ch. B. arose from a need to graduate the students at the time of year allocated to graduation rituals but the legal inability to confer the M.B. before they had been properly approved

by professional regulatory bodies. Thus the Ch.B. was conferred first, and the M.B. was conferred later, after registration, and without ceremony.

1.4 Examples of Degrees

Bachelor

A bachelor's degree is usually an undergraduate academic degree awarded for a course or major that generally lasts for three, four, or in some cases and countries, five or six years. It may also be the name of a postgraduate entry degree such as a Bachelor of Civil Law, the Bachelor of Music, or the Bachelor of Philosophy. The Bachelor's degree worldwide falls into three categories namely the American system, the British system which is followed in almost all Commonwealth countries, and the continental European system.

Master

A Master's degree provides a mastery or high-order overview of a relevant field of study or area of professional practice. Graduates of a Master's degree possess a range of academic and vocational skills, including advanced knowledge of a specialist body of theoretical and applied contents; high order skills in analysis, critical evaluation and/or professional application; and the ability to solve complex problems and think rigorously and independently within the area studied.

The Master of Arts and Master of Science degrees are the basic degree types in most subjects, and they may be course-based, research-based, or more typically, a mixture of the two. A dissertation may be required, depending on the program. There are various degrees of the same level such as engineering degrees which have different names for historical reasons.

There is a range of pathways to the degree, with entry based on evidence of a capacity to undertake higher degree studies in the proposed field. The master degree is usually offered at a postgraduate level, although it is also offered in some cases as an undergraduate degree. Some university program provide for a joint bachelor's and master's degree after four or five years.

Doctorate

A doctorate is an academic degree that in most countries represents the highest level of formal study or research in a given field. In some countries, it also refers to a class of degrees which qualify the holder to practise in a specific profession such as law or medicine. The best-known example of the former is the PhD (Doctor of Philosophy), while examples of the latter include the US degree of Doctor of Medicine and the Dutch Professional Doctorate in Engineering.

In some countries, the highest degree in a given field is referred to as a terminal degree, although this is, by no means, universal. Practice varies from country to country, and a

distinction is sometimes made between terminal professional degrees (such as the J. D.) in the US and terminal research degrees (such as the LL. D or S.J.D). There are four types of doctorates;

- research doctorate
- professional doctorate
- higher doctorate and
- honorary doctorates

Research doctorates are awarded in recognition of both the mastery of research methods and academic research that is ideally publishable in a peer-reviewed academic journal. It is assessed by submission and defence of a thesis or dissertation. The best-known degree of this type is that of Doctor of Philosophy (PhD/DPhil) awarded throughout the world but others include the US degrees of Doctor of Engineering (DEng) and Doctor of Education (EdD), the UK Engineering Doctorate (EngD), and the German degree *Doctor rerum naturalium* (Dr.rer.nat.).

The minimum time required to earn a doctorate varies by country and can be as short as three years, excluding bachelor's and master's studies. However, some candidates can take anywhere from five to ten years to complete. The mean number of years to completion of doctoral degrees for all fields in the US is seven years. Doctoral applicants were previously required to have a master's degree but a few program will now accept students with undergraduate qualification. When so admitted, the student is expected to have mastered the material covered in the master's degree even though the student does not officially hold a master's degree itself.

Professional doctorates are awarded in certain fields where most holders of the degree are not engaged primarily in scholarly research, but rather in the practice of a profession such as law, medicine, pharmacy, music or ministry. Examples include the US degrees of Doctor of Medicine (MD) and *Juris* Doctor (JD), the Dutch Professional Doctorate in Engineering (PDEng), and the Czech degrees of Doctor of Dental Medicine (MDDr.) and Doctor of Veterinary Medicine (MVDr.).

The term Professional Doctorate is also used to refer to research doctorates with a focus on applied research or research as used for professional purposes. Among others, these include the degrees of Doctor of Practical Theology (DPT), Doctor of Business Administration (DBA) and Doctor of Professional Studies (DPS in the U.S. or DProf in the U.K.), Doctor of Education (EdD), Doctor of Science in Physical Therapy (DSc or DScPT), and some others in various specified professional fields.

The *higher doctorate* is found in a number of countries such as United Kingdom, Ireland and some Scandinavian, Commonwealth nations or former USSR countries. This is a higher tier of the research doctorate and is awarded on the basis of a formally submitted portfolio of published research of a very high standard. Examples include the Doctor of Sciences (DSc/ScD) and Doctor of Letters (DLitt/LittD) degrees found in the UK, Ireland and some Commonwealth countries, some older Norwegian doctorates like dr.techn.

(technology) and dr.agric. (agriculture), and the Danish doctorate (e.g. *dr.theol.*, *doctor theologiae*, Latin for Doctor of Theology).

The German ‘habilitation’ post-doctoral qualification is sometimes regarded as belonging to this category, even though, strictly speaking, the habilitation is not an academic degree but rather, a professional license to teach at a German university.

Honorary doctorates are awarded when a university wishes to formally recognise an individual's contributions to a particular field or philanthropic efforts. A doctoral degree *honoris causa* (i.e., ‘for the sake of the honour’) is awarded and the university waives the usual formal requirements for bestowal of the degree. In this sense the honorary doctorate is not earned in the same way as other qualifications.

Exercise 1:
 Can you identify the strengths and weaknesses of the various qualifications system described above?

As will be clear from the discussions above there is great variety in the nomenclature and underlying structures of degree awards from country to country. The box below summarises some of the differences and provides you with some further reading on individual country systems

Box 2: Some Examples of Degree Systems by Country

<p>Austria</p>	<p>In Austria, there are currently two parallel systems of academic degrees:</p> <ul style="list-style-type: none"> • the traditional two-cycle system of <i>Magister/Diplom</i> followed by the Doctorate, and • the three-cycle system of Bachelor, Masters and Doctorate as defined by the Bologna process. <p>With a few exceptions, the two-cycle degree system will be phased out by 2010. http://en.wikipedia.org/wiki/Academic_degree_-_cite_note-8 Some of the established degree nomenclature has, however, been preserved, allowing universities to award the ‘<i>Diplom-Ingenieur</i>’ (and for a while also the ‘<i>Magister</i>’) to graduates of the new-style Master's program.</p> <p>Primary source: Kasparovsky, H. and Wadsack, I. (2004). <i>Higher education in Austria</i>. 2nd ed. Vienna: Federal Ministry of Education, Science and Culture, Austria.</p>
<p>Brazil</p>	<p>Undergraduate students in Brazilian universities normally graduate either with a <i>Bacharel</i> degree (equivalent to an American BS or BA) or with a professional degree (modeled on the old German <i>Diplom</i>).</p>

	<p><i>Bacharel</i> degrees are awarded in most fields of study in the arts, humanities, social sciences, mathematics, or natural sciences and normally take four years to complete with some exceptions e.g. law. Professional degrees are awarded in state-regulated professions such as engineering, pharmacy, dentistry and are named after the profession itself, e.g. a degree of <i>Engenheiro</i> (engineer), <i>Arquiteto</i> (architect), or <i>Médico</i> (physician/surgeon).</p> <p>In addition to the standard <i>Bacharel</i> and professional degrees, Brazilian universities also offer the <i>Licenciatura</i> degree, available for students who want to qualify as school teachers. <i>Licenciatura</i> exist mostly in mathematics, humanities, and natural sciences. Individuals who hold either a <i>Bacharel</i> degree, a professional diploma or <i>Licenciatura</i> are eligible for admission into graduate courses leading to advanced master's or doctoral degrees.</p> <p>Master's degrees are classified into academic master's degrees or professional master's degrees and the titles are reflective of the field of study. Similar practice is used in the award and naming of doctorates.</p> <p>Finally, a small number of Brazilian universities, most notably the public universities in the state of Sao Paulo still award the title of <i>Livre-Docente</i> which is of higher standing than a doctorate.</p> <p>Primary source: Schwartzman, S. (1991). 'The Future of Higher Education in Brazil', paper presented at <i>Higher Education in Latin America: the prospects for change and reform in the 1990s</i>, XVI International Congress, Latin American Studies Association, Washington, April 4-6 1991, accessed on 14 November 2008.</p>
<p>Chile</p>	<p>In Chile, students may opt to be '<i>Profesionales</i>' (Professionals) or "<i>Técnicos</i>' (Technicians). After completion of high school, students may follow professional or technical studies at Universities or Technical schools. Only Universities and the Academies of the Armed Forces can confer academic degrees. In general, traditional professions require an academic degree, but there are many professions that do not require the degree because they were conceived as strictly 'professional' not academic. The degrees are as follows:</p> <ul style="list-style-type: none"> • '<i>Licenciado</i>' is similar to the Bachelor but it necessitates at least eight semesters of study on the subjects which are part of the Major. This degree is sufficient to embark on an academic career but not professional practise. In order to practice, an additional year or two is required thus obtaining both the professional title and a <i>Magister</i>. • '<i>Magister</i>' is the equivalent to the Master's degree in English-speaking countries. • '<i>Doctorado</i>' is the equivalent to the Doctorate or Ph.D. There are no

	<p>separate classifications for Professional Doctorates.</p> <p>Primary source: Division of Higher Education (2005), <i>Higher Education in Chile: Aiming for Quality</i>, Santiago: Ministry of Education, Chile, accessed on 14 November 2008.</p>
Colombia	<p>In Colombia, the system of degrees is similar to the US model. After completing their high school or '<i>bachillerato</i>', students have two options. The first is called a 'Profesional' which is similar to a Bachelor's degree requiring from nine to eleven semesters of study and the second, a '<i>Técnico</i>' which is a three years of study and prepares the student for technical or mechanical labours, similar to the associate's degree given in the U.S.</p> <p>Formal education after the Bachelor's level is the Master's degree with the title of '<i>Magíster</i>', and Doctorate's degree known as '<i>Doctorado</i>'. Students may also do a specialised degree, '<i>Especialización</i>', after their bachelor's rather than the more formal Masters and Doctorate pathways. In Colombia, a student may go directly to the '<i>Doctorado</i>' without having to take the '<i>Magister</i>' or '<i>Especialización</i>'.</p> <p>Primary source: <i>Columbia Higher Education</i>, at http://www.wes.org/ca/wedb/columbia/cohigher.htm accessed on 14 November 2008.</p>
England and Wales	<p>The standard first degree in England and Wales is the Bachelors degree with honours (e.g. BA (Hons.) for arts subjects, BEng (Hons.) for Engineering and BSc (Hons.) for science). Honours degrees are usually categorised by one of four grades:</p> <ul style="list-style-type: none"> • First class honours (1st) • Second class honours, divided into: <ul style="list-style-type: none"> ○ Upper division, or upper second (2:1) ○ Lower division, or lower second (2:2) • Third class honours (3rd) <p>Students who do not achieve the standard for the award of honours may be given an ordinary or pass degree, without honours.</p> <p>Some students study an integrated Masters which is still a first degree. The 4-year MEng degree, in particular, has now become the standard first degree in engineering in the top UK universities, replacing the older 3-year BEng.</p> <p>Due to earlier specialisation in education, Master's degrees may take only one year of full-time study, and the usual amount of time spent working for a Ph.D is three years, full-time. Therefore, whilst the usual amount of time spent studying from Bachelor's level through to doctorate in the United</p>

	<p>States is nine years, it is, in most cases, only seven in the United Kingdom, and may be just six, since a Master's degree is not always a precondition for embarking on a Ph.D.</p> <p>Recently, there has been a significant rise in the number of courses offering "Postgraduate Diplomas", often in very specific, vocationally-related subjects. Many institutions (e.g. The Open University) offer these courses over a year, with an additional year required for the award of a master's degree. The popularity of these courses is, in part, due to legislative requirements to demonstrate managerial competence in public-sector related functions.</p> <p>A Foundation degree can be awarded for having completed two years of study in what is usually a vocational discipline. The Foundation degree is comparable to an associate's degree in the U.S., and can be awarded by a university or college of higher education.</p> <p>Primary source: http://www.hero.ac.uk/uk/studying/education_and_qualifications_in_the_uk</p>
Europe	<p>The Bologna Process aims to create a European Higher Education Area by 2010, in which students can choose from a wide and transparent range of high quality courses and benefit from smooth recognition procedures. The Bologna Declaration (pdf format) of June 1999 has put in motion a series of reforms needed to make European Higher Education more compatible and comparable, more competitive and more attractive for Europeans and for students and scholars from other continents. Reform was needed then and reform is still needed today if Europe is to match the performance of the best performing systems in the world, notably the United States and Asia. The three priorities of the Bologna process are: Introduction of the three cycle system (bachelor/master/doctorate), quality assurance and recognition of qualifications and periods of study</p> <p>Primary Sources: http://ec.europa.eu/education/lifelong-learning-policy/doc44_en.ht http://ec.europa.eu/education/policies/educ/bologna/bologna_en.html</p>
France	<p>In French universities, the first degree was the <i>baccalaureat</i> (completed after high school), then the two-year <i>diplôme d'études universitaires générales</i> (DEUG General Academic Studies Degree) or <i>premier cycle</i> (undergraduate education), then the one-year <i>licence</i>, the one-year <i>maîtrise</i> (master's degree), the two forming the second cycle (graduate education), the 1-2 years <i>Diplôme d'Études Approfondies</i> (DEA), Special Studies Degree and the three-year doctorate, the two forming the <i>troisième cycle</i> (postgraduate education).</p>

	<p>With the Bologna process, the system is now much simpler: <i>baccalauréat</i> (A-levels), <i>licence</i> (= Bachelor), masters (a new two-year degree merging <i>maîtrise</i> and DEA), and doctorate. This is known as the ‘LMD’ system which means licence-masters-doctorate.</p> <p>Primary source: <i>Higher Education in France</i> (2005) at http://www.univ-rennes1.fr/english accessed on 14 November 2008.</p>
Germany	<p>Traditionally in Germany, students graduated after four to six years either with a <i>Magister Artium</i> (abbreviated M.A.) degree in Social Sciences, Humanities, Linguistics and the Arts or with a <i>Diplom</i> degree in Natural Sciences, Economics, Business Administration and Engineering. Those degrees were the first and, at the same time, highest non-Ph.D/Doctorate-title in many disciplines before its gradual replacement by other, Anglo-Saxon-inspired degrees. From the level of academic study, a <i>Magister</i> or <i>Diplom</i> has to be considered equivalent to a master's degree.</p> <p>A special kind of examination is the <i>Staatsexamen</i>. It is not an academic degree but a government licensing examination that future doctors, teachers, lawyers, judges, public prosecutors, and pharmacists must take and pass to practise. The first <i>Staatsexamen</i> is at a level which is equivalent to a M.Sc. or M.A.</p> <p>Since 1999, the traditional degrees are gradually being replaced by Bachelor's (<i>Bakkalaureus</i>) and Masters (<i>Master</i>) degrees (as a result of the Bologna Process) and universities are required to make the transition by the end of 2007.</p> <p>Doctorates are issued under a variety of names, depending on the faculty: e.g. <i>Doktor der Naturwissenschaften</i> (Doctor of Natural Science); <i>Doktor der Rechtswissenschaften</i> (Doctor of Law); <i>Doktor der medizinischen Wissenschaft</i> (Doctor of Medicine); and <i>Doktor der Philosophie</i> (Doctor of Philosophy. Multiple doctorates and honorary doctorates are often listed and even used in forms of address in German-speaking countries. A <i>Diplom</i> (from a <i>Universität</i>), <i>Magister</i>, Masters or <i>Staatsexamen</i> student can proceed to a doctorate. The doctoral promotion (e.g. to Dr.rer. nat., Dr.phil. and others) is equivalent to a Ph.D degree and is therefore the highest academic degree to achieve.</p> <p>Sometimes incorrectly regarded as a degree, the <i>Habilitation</i> is an academic qualification that allows further teaching and research endorsement after a doctorate. It is earned by writing a second thesis (the <i>Habilitationsschrift</i>) or presenting a portfolio of first-author publications in an advanced topic.</p> <p>Primary source: http://www.hochschulkompass.de accessed on 14 November 2008.</p>
Italy	<p>In Italy, access to a university is possible after gaining the high school</p>

	<p>degree, called <i>diploma di maturità</i> which is obtained at the age of 19. After the diploma, one can enter university choosing any faculty (e.g. physics, medicine, chemistry, engineering, architecture). Almost all faculties today offer two academic degrees. A first degree (called <i>laurea triennale</i>) is obtained after 3 years of study and a short thesis on one subject. The second degree (called <i>laurea Specialistica/Magistrale</i>) can be obtained with two additional years of study and specialisation (e.g. particle physics and nuclear engineering). The <i>laurea magistrale</i> involves some academic research or an internship in a private company. Alternatively, after obtaining the <i>laurea triennale</i> and the <i>laurea magistrale</i> one can attend a so-called Masters, (first-level Masters after the <i>laurea triennale</i>; second-level Masters after the <i>laurea magistrale</i>). The <i>Dottorato di ricerca</i> (equivalent to a Ph. D) is mainly research based.</p> <p>Primary source: <i>Structure of Education System in Italy</i>, The European Education Directory, At http://www.euroeducation.net accessed on 14 November 2008.</p>
<p>Japan</p>	<p>Postsecondary education includes junior colleges, college of technology and universities. The bachelor's degree is a four-year training course though there are also six-year program leading to a professional degree. Upon the completion of the bachelors, students may opt to continue to the Masters level and thereafter to the doctoral level.</p> <p>Primary Source: Oba, J. (2005) <i>Higher Education in Japan – Incorporation of national universities and the development of private universities</i>, At http://www.tr.emb-japan.go.jp/T_04/Education.pdf accessed on 3 January 2009.</p>
<p>Russia, Ukraine and some other former USSR republics</p>	<p>In Russia, Ukraine and some other former USSR Republics, they strongly distinguish between educational academic degrees and academic degrees connected with scientific research.</p> <p>The educational degrees are awarded after finishing college education. There are several levels of education one must choose between the second and third year of studies.</p> <ul style="list-style-type: none"> • Bachelor degree - usually takes 4 years of college education. • Specialist degree is awarded after 5 years of college (4 + 1) • <i>Magister</i> degree is awarded after 6 years of college (4 + 2) <p>Usually Specialist or <i>Magister</i> degrees incorporate a Bachelor degree in them but only a high level degree is stated in the final diploma. Specialist and Bachelor degrees require taking final state exams and written work on practical application of studied skills or research thesis and are roughly equivalent to a Master's degree.</p> <p>The highest academic qualification, equivalent to a U.S. Ph.D, is called</p>

	<p>‘candidate of ... sciences’ for example, Candidate of Engineering Sciences, or Candidate of Historical Sciences). Slightly lower than the above is the Doctor of Sciences.</p> <p>Primary source: <i>Structure of Education System in Russia</i>, The European Education Directory, at http://www.euroeducation.net accessed on 14 November 2008.</p>
<p>Scotland</p>	<p>The standard first degree in Scotland is either a Master of Arts (in the four ancient universities of Aberdeen, St. Andrews, Edinburgh and Dundee), Bachelor of Arts, for arts and humanities subjects, or a Bachelor of Science, for natural and social science subjects. These can either be studied at general or honours level. A general degree (BA or BSc) takes three years to complete and an honours degree (MA or BSc Hons) takes four years to complete.</p> <p>Honours are classified into three classes:</p> <ul style="list-style-type: none"> • First class honours • Second class honours, divided into <ul style="list-style-type: none"> ○ Division one (2:1) ○ Division two (2:2) • Third class honours <p>Students who complete all the requirements for an honours degree but do not receive sufficient merit to be awarded third-class honours may be awarded a Special Degree.</p> <p>Postgraduate degrees in arts and humanities are usually designated Master of Letters (MLitt); in natural and social sciences, as Master of Science (MSc). Non-doctoral postgraduate research degrees are usually designated Master of Philosophy (MPhil) or Master of Research (MRes). First doctoral research degrees in arts, science and humanities are usually designated Doctor of Philosophy (PhD).</p> <p>Primary source: A Framework for Higher Education in Scotland: Higher Education Review Phase 2, At http://www.scotland.gov.uk accessed on 14 November 2008.</p>
<p>Switzerland</p>	<p>Before the Bologna Process, because there are three official languages in Switzerland (German, French and Italian), the university degrees were different, depending on the language. In French-speaking universities, the first academic degree was the <i>Licence</i>: 4 to 5 years of study, equivalent to the Master's degree in the U.K. or the U.S. The postgraduate degree was the <i>diplôme d'études approfondies</i> DEA or DESS: 1-2 years of study, equivalent to the Master of Advanced Studies. In the Swiss-German universities, the first degree was called <i>Lizentiat</i>, a 4-year degree, and the second was the <i>Diplom nach dem ersten akademischen Grad</i>. In the Italian-speaking universities, the first degree was called <i>Licenza</i>, a 4-year degree;</p>

	<p>the second was the <i>post laurea</i>, which took 1-2 years. The Doctoral degree is the last stage at all the universities; it requires 3-5 years, depending on the field of study.</p> <p>Primary source: Higher Education in Switzerland, at http://www.crus.ch/ accessed on 14 November 2008.</p>
<p>United States</p>	<p>In the United States, a threefold degree system of bachelor, masters and doctorate, like that of U.K., has been in place but one that follows a slightly different pattern of study from the European equivalents.</p> <p>In the United States, most standard academic program are based on the four-year bachelor's degree (most often Bachelor of Arts, BA, or Bachelor of Science, BS), a one- or two-year master's degree (most often Master of Arts, MA, or Master of Science, MS) and a further one or two years of coursework and research, culminating in comprehensive examinations in one or more fields, plus perhaps some teaching experience, and then the writing of a dissertation for the doctorate (most often Doctor of Philosophy, Ph.D or other types such as EdD, Psy.D, Th.D).</p> <p>Some schools, mostly junior colleges and community colleges and some four-year schools, offer an associate's degree for two full years of study, often in pre-professional areas. This may stand alone or sometimes be used as credit transfer towards completion of the four-year bachelor's degree.</p> <p>In the United States, there is also another class of degrees called 'First professional degree'. These degree program are designed for professional practice in various fields rather than based on academic scholarship. Most professional degree program require a prior bachelor's degree for admission (a notable exception being the PharmD program), and so represent at least about five years of study and as many as seven or eight in some cases.</p> <p>Some fields such as fine art, architecture, or divinity name their first professional degree after the bachelor's, a 'master's degree' (e.g., M.F.A., M.Div.) because most of these degrees require at least the completion of a bachelor's degree while the professional degrees in medicine (the M.D.) and law (the J.D.) are doctorates.</p> <p>Primary source: Eckel, P.D. and King, J. E. (2006), <i>An Overview of Higher Education in the US – Diversity, Access and the Role of the Marketplace</i>, American Council on Education, Washington, DC, accessed on 14 November 2008.</p>

Part 2: Transfer and Recognition of Degrees

Readings:

Council of Europe and UNESCO 1997
OECD 2005

3.1 Inter-institutional Articulation and Other Agreements

One major impact of internationalisation that often is not fully appreciated is the pressure created to enhance the transparency and inter-operability of tertiary education systems. This is happening through streamlining national degree structures and the development of new mechanisms for recognising credits and qualifications earned elsewhere. This convergence has been most clearly evident in Europe where on the basis of the Bologna Declaration of June 1999 by 29 European Ministers for Education serious efforts are being made to establish a European Higher Education Area by 2010.

Key elements of the Bologna Process include efforts to enhance the comparability and compatibility of higher education degree structures and degrees in Europe in order to increase the employability of European graduates (European Commission 2007). The Bologna Declaration proposed to adopt a system of easily readable and comparable degree structures based on a common two-cycle degree structure. Doctorates added in 2003 at the Berlin Ministerial Meeting making it a three-cycle structure. At the same time, the Bologna Declaration recognised the fundamental principles of autonomy and diversity to counter the impression that there was a push for standardisation and uniformity of European higher education. The Tuning Educational Structures in Europe project started in 2000 with the goal of linking political objectives of the Bologna process (and later, the Lisbon Strategy) to the higher educational sector. Over time Tuning has developed as a process to reflect the idea that universities should not look for uniformity in their degree programs or any sort of unified, prescriptive European curricula but simply look for points of reference, convergence and common understanding. (<http://tuning.unideusto.org/tuningeu/>).

The Tuning approach provides a methodology for understanding curricula and to making them comparable. Five lines of approach have been distinguished to organize higher education discussions in subject areas:

1. generic (general academic) competences,
2. subject-specific competences,
3. the role of ECTS as an accumulation system
4. approaches to learning, teaching, and assessment and
5. the role of quality enhancement in the educational process (emphasizing systems based on internal institutional quality culture).

UNESCO and the Council of Europe were the key initiators of credit transfer mechanisms while the European Ministers of Education convened the conference that led to the Bologna Declaration. OECD in 2005 took an important initiative in publishing *Guidelines for Quality Provision in Cross-border Higher Education* with the aim of protecting students and other stakeholders from low-quality provision and disreputable providers. This document was developed in consultation with UNESCO and was issued under the responsibility of the OECD secretariat following a decision of the 33rd session of the OECD General Conference in October 2005. The Guidelines recognised that cross-border provision of higher education offers students and learners with new opportunities, such as increased access to higher education, improvements and innovations in higher education systems, and contributes to building international cooperation. On the other hand it acknowledged that:

... cross-border provision of higher education has to be managed appropriately in order to limit low-quality provision and rogue providers, and that it is increasingly important for students/learners and relevant stakeholders to be better informed of the quality of higher education program, ... [and] an international framework is needed in order to minimise the risk of misleading guidance and information... (OECD 2005, p.5).

The OECD thus recommended that member countries develop appropriate frameworks for quality provision of higher education across borders, especially focussing on

'providing students/learners with adequate information resources for informed decision-making to protect them from the risks of misleading guidance and information, low quality provision including rogue providers, degree mills that offer low-quality educational experience and qualifications of limited validity and accreditation mills' (OECD 2005, p 6).

It also recommended making qualifications easy to understand and transparent to increase their international validity and portability, and making procedures for the recognition of qualifications more transparent, fair and reliable.

In the area of joint and dual degrees, in 2006 the European University Association published *Guidelines for the Establishment of Joint Masters Degrees* (European University Association 2006). These Guidelines particularly emphasised quality assurance aspects drawing attention to the need for well thought-out program objectives, a coherent structure for new joint awards, realistic implementation strategies, provisions for monitoring and assessment, and opportunities for program improvement.

Other geographic regions and their leaders are beginning to take important initiatives in terms of increased inter-country cooperation. For example, in 2004 the Third APEC (Asia Pacific Economic Cooperation) Ministers of Meeting resolved that 'economies need ... transparent, accountable, regulatory, accreditation and quality assurance systems' (Department of Education, Science and Training 2006, p ix). At the international level the International Network of Quality Assurance Agencies in Higher Education (INQAAHE) has promulgated Guidelines for Good Practice for quality assurance agencies.

Recognition of Credit

The purpose of recognition of credit is to make it possible for graduates to use their qualifications from one education system in another education system or country without losing the real value of these qualifications. The main international legal agreement that aims to further the recognition of qualifications is the Council of Europe/UNESCO Convention on the recognition of Qualifications concerning higher education in the European Region, which is popularly known as the Lisbon Recognition Convention.

The Lisbon Convention was developed by the Council of Europe and UNESCO and adopted by a national meeting of representatives of twelve European countries on 11 April 1997. Since then it has been ratified by most other European countries and by a number of non-member States of the Council of Europe including Australia, Canada, New Zealand and the United States. By 2009, the Convention had been ratified by 48 nations and the European Community.

Key provisions of the Lisbon Convention include the following:

- Holders of qualifications issued in one country shall have adequate access to an assessment of these qualifications in another country.
- No discrimination shall be made in this respect on any ground such as the applicant's gender, race, color, disability, language, religion, political opinion, national, ethnic or social origin.
- The responsibility to demonstrate that an application does not fulfill the relevant requirements lies with the body undertaking the assessment.
- Each country shall recognise qualifications – whether for access to higher education, for periods of study or for higher education degrees – as similar to the corresponding qualifications in its own system unless it can show that there are substantial differences between its own qualifications and the qualifications for which recognition is sought.
- Recognition of a higher education qualification issued in another country shall have one or both of the following consequences.
- Access to further higher education studies, including relevant examinations and preparations for the doctorate, on the same conditions as candidates from the country in which recognition is sought.
- The use of an academic title, subject to the laws and regulations of the country in which recognition is sought (Council of Europe 2009).
- In addition, recognition may facilitate access to the labour market.
- All countries shall develop procedures to assess whether refugees and displaced persons fulfill the relevant requirements for access to higher education or to

- employment activities, even in cases in which the qualifications cannot be proven through documentary evidence.
- All countries shall provide information on the institutions and program they consider as belonging to their higher education systems.
 - All countries shall appoint a national information centre, one important task of which is to offer advice on the recognition of foreign qualifications to students, graduates, employers, higher education institutions and other interested parties or persons.
 - All countries shall encourage their higher education institutions to issue the Diploma Supplement to their students in order to facilitate recognition. The Diploma Supplement is an instrument developed jointly by the European Commission, the Council of Europe and UNESCO that aims to describe the qualification in an easily understandable (Council of Europe and UNESCO 1999).

The Lisbon Convention began with agreement in 1992 between the Secretary General of the Council of Europe and the Director General of UNESCO to develop a joint convention. The thinking behind the agreement was that a single document would facilitate a common approach to credit transfer across Europe and better link the European region to other regions of the world. Another motivation was to include private institutions in any agreement on common credit transfer policy. Like any legal text, the importance of the Lisbon Convention lies in its effective implementation and that is the responsibility of each signatory country. In most cases, this means that higher education institutions are responsible for the recognition of qualifications for the purposes of further study whereas professional bodies and employers are responsible for the recognition of credit for the purposes of employment.

To facilitate the recognition of qualifications within Europe are the European Credit Transfer and Accumulation System (ECTS) and the Diploma Supplement. The ECTS has been developed as part of the Erasmus program for cooperation in higher education and is now part of the integrated European Union Lifelong Learning Program 2007-2013. It is based on the principle that 60 credits measure the workload of a full-time student during one academic year. Hence in terms of credit this usually stands for around 25 to 30 working hours. Credit in ECTS is obtained after successful completion of the work required and appropriate assessment of the learning outcomes achieved. Meanwhile the Diploma Supplement was developed as a follow up tool for the implementation of the Lisbon Recognition Convention. It is a document attached to each tertiary education qualification that provides a description of the nature, context, content and status of the studies that were successfully completed by the graduate. The Diploma Supplement is intended to enhance transparency and facilitate academic and professional recognition of qualifications.

Progress with both ECTS and Diploma Supplement has been pleasing but somewhat uneven across European nations as observed by the 2007 Bologna Process stocktaking. As far as ECTS is concerned, by 2007, 37 out of 46 participating countries allocate ECTS

credits in at least 75% of their tertiary education programs. Among participants, ECTS credits are universal in Belgium, Croatia, Finland, France, Greece, Iceland, the Netherlands, Norway, Poland, the Russian Federation, Sweden, Switzerland and Scotland. With respect to Diploma Supplement, 32 out of 46 participating countries provided a Diploma Supplement in the international format and in a widely spoken European language to their 2007 graduates (Santiago 2008, p 258).

To develop good practice and agreed understandings on credit recognition a number of centres were established: the Council of Europe, UNESCO/CEPES and the European Commission coordinate the ENIC (European Network of Information Centres in the European Region) and NARIC (National Academic Recognition Information Centres in the European Union) Networks. These develop documentation on good practice and policy, whereas individual member centres often provide information on the recognition of qualifications as well as the qualifications frameworks for the countries for which they are responsible. For example, in the United Kingdom the NARIC Centre located at Cheltenham assists with the implementation of the Diploma Supplement in cooperation with the Department of Education and Skills, Universities UK and the Quality Assurance Agency.

In 1999 the Council of Europe and UNESCO/CEPES developed a code of practice for the provision of transnational education. This was adopted in 2001 by the Intergovernmental Committee on the Lisbon Recognition Convention and in a revised form was adopted in 2007 by the Lisbon Recognition Convention Committee. This code recommends procedures and criteria for the assessment of foreign qualifications. It also sets out agreed principles for the transnational arrangements including provision that transnational arrangements

... should be so elaborated, enforced and monitored as to widen access to higher education studies, fully respond to the learner's educational demands, contribute to their cognitive, cultural, social, personal and professional development, and comply with the national legislation regarding higher education in both receiving and sending countries. In the case of collaborative agreements, there should be written and legally binding agreements or contracts setting out the rights and obligations of all partners (Council of Europe 2007).

Mutual Recognition Agreements

International accords and declarations represent major milestones in transnational recognition of accreditation decisions. The motivation behind these agreements is the growing need to ascertain that degrees of graduates from programs in one country or region be recognized in another.

A mutual recognition agreement or MRA is an international agreement by which two or more countries agree to recognize one another's conformity assessments. MRAs have become increasingly common since the formation of the World Trade Organization in

1995. These have been forged within and among various trade blocs, including APEC and the European Union. MRAs are most commonly applied to goods, such as various MRAs for quality control, but the term has also come to be applied to agreements on the recognition of professional qualifications.

With regard to accreditation in engineering, engineering technology and computing, several MRAs have been signed in the last three decades. One of the most important multinational MRAs is the Washington Accord of 1989. The Washington Accord set in motion the progression toward the mutual international recognition of engineering accreditation. The major focal point was to attain the substantial equivalency of accredited engineering degrees among the respective signatory countries. The accrediting bodies of eight countries—Australia, Canada, Hong Kong, Ireland, New Zealand, South Africa, UK, and US—were the original signatories. Additional countries are accepted as signatories every year.

Other multi-national agreements in the area of engineering include the Sydney Accord of 2001 (which complemented the Washington Accord and recognized the equivalency of degrees for engineering technologists), the Engineers' Mobility Forum of 2001 (that allows Chartered Engineers to practice in the other member countries), and the Dublin Accord of 2002 (whereby the national engineering organisations of the UK, Ireland, Canada, and South Africa agreed on the mutual recognition of qualifications for engineering technician titles). The Dublin Accord operates in the same way as the Washington and Sydney Accords.

Apart for multi-national agreements many nations and their professional associations are signatories to bi-lateral agreements. For example, in 2006 the Governments of Ireland and China signed an international agreement for the mutual recognition of higher education qualifications. At the time, China already had similar agreements with Britain, France, Germany, New Zealand, Australia and Thailand.

Professional bodies also sign bi-lateral agreements with parallel bodies in other countries. For example, Engineers Australia has entered into many mutual recognition agreements with kindred organisations overseas. These agreements are intended to promote, facilitate and extend professional, social and commercial links between Engineers Australia and the partner organisations, to the benefit of both parties and to assist in advancing the mobility of engineering practitioners and the quality of engineering practice world-wide. The Institution currently has mutual recognition agreements in place with the engineering associations listed below:

- Hong Kong: Hong Kong Institution of Engineers (HKIE)
- Ireland: The Institution of Engineers of Ireland (IEI)
- Malaysia: The Institution of Engineers, Malaysia (IEM)
- UK: The Institution of Chemical Engineers (IChemE)
- UK: The Institution of Civil Engineers (ICE)
- UK: The Chartered Institution of Building Engineers (CIBSE)
- UK: The Institution of Marine Engineering, Science and Technology

(IMarEST)

UK: The Institution of Mechanical Engineers (IMechE)

UK: The Royal Aeronautical Society (RAeS)

UK: The Royal Institution of Naval Architects (RINA)

UK: The Institution of Structural Engineers (IStructE)

USA: The American Society of Mechanical Engineers (ASME)

3.2 The Bologna Declaration and Its Implications

The Bologna Declaration stated as a key objective the intention to establish a European Higher Education Area by 2010. The Bologna Declaration marked a significant turning point in higher education development within Europe. It indicated a strong commitment by member countries to engage in coordinating their higher education policies, while at the same time respecting traditions of autonomy and diversity (Confederation of EU Rectors Conferences and the Association of European Universities 2000, p. 3). Bologna clearly was a product of the new international competitiveness in higher education. The signatory countries explicitly expressed their goal to ‘ensure that the European higher education system acquires a worldwide degree of attractiveness equal to Europe’s extraordinary cultural and scientific traditions’ (Confederation of EU Rectors Conferences and the Association of European Universities 2000, p. 4).

The original Bologna Declaration has been followed by a number of other agreements and communiqués developing the reform plans further. The most recent was the London Communiqué of 2007, which established a European Register of Quality Assurance, to be managed by institutions, students, and quality agencies. It also reaffirmed the need for strong and autonomous universities and vigorous efforts in fostering the employability of their graduates

The influence of Bologna has been widespread, especially since participants now come from 46 countries spread between Iceland, Portugal, Turkey and Russian Federation. This spread beyond the EU borders highlights the value placed on compatibility and convergence. Bologna developments are being closely monitored in many other countries, including the United States, Canada, Australia, New Zealand and China.

Another significant trend relates to profound changes in the organization and structure of higher education in European as part of the Bologna Process. Yet progress within Europe has been uneven. The stocktaking prior to the 2007 London Ministerial meeting highlighted significant progress overall, with nearly three quarters of Bologna participating countries having more than 60% of their tertiary enrolled students in a 2 cycle degree system compatible with Bologna principles. Among participants in the review, over 90% of students are enrolled in Bologna compatible degree programs in Finland, Iceland, Netherlands, Norway and United Kingdom. This proportion drops to 60-89% for Belgium, the Czech Republic, Estonia, France, Greece, Poland and Switzerland and to 30-59% in Croatia, Portugal and Spain. The implementation of Bologna is lagging behind in Sweden where legislation to reform the tertiary system passed only in 2006, and even more so in the Russian Federation where very small

proportions are enrolled in bachelors and masters degrees on the new pattern (Santiago 2008, p. 258-259).

And there are other important developments extending beyond the European area. A number of scholars see parallels to Bologna occurring with recent developments in American degree standards and the matriculation system. In addition, the University Mobility in Asia and the Pacific (UMAP) has taken steps to pilot a UMAP Credit Transfer Scheme (UCTS) based on the ECTS model for the Asia Pacific Region. UMAP is an association of government and non-government representatives of the higher education sector in the Asia-Pacific Region. Countries eligible for UMAP membership include Australia, Chile, China, Japan, Korea, New Zealand and Russia among participants of the review, as well as Canada, the United States US Malaysia.

Therefore ECTS and UCTS are likely to have major international influences in future while Australia in 2009 is introducing the local version of the Diploma Supplement using the name Australian Higher Education Graduation Statement.

Exercise 2:

Is your country one of the many signatories to the Lisbon convention on the recognition of qualifications? If so, what steps have been taken with regard to implementation of measures to assess and recognise foreign qualifications? Has your country also introduced a credit transfer scheme and the Diploma Supplement of some equivalent form of documentation provided to graduates?

3.3 Implications for Quality Assurance

Recent cross-national developments in the recognition of qualifications and the enhancement of credit transfer arrangements are to be applauded since they have the potential to substantially increase cross-national mobility of students and professionals. At the same time, they raise significant new quality assurance and accreditation issues.

At national level, there is some doubt about the supervisory capacity of governments to effectively monitor implementation of various agreements and conventions. With the Lisbon Convention, it appears that governments may be less involved than in the past in assessing qualifications and credit since responsibility for professional assessment has increasingly moved to professional associations and employers. In addition, responsibility for admission to courses on the basis of previous studies has moved to higher education institutions. Overall, there appear to be serious gaps in terms of data about the numbers of professionals and students whose qualifications are assessed and what the outcomes have been.

Apart from this, there are doubts about the capacity and scope of regulatory frameworks in many countries, especially to deal with the various aspects of cross-border higher education development. In many cases, national frameworks for quality assurance, accreditation and recognition of qualifications are not well geared to addressing the quality of cross-border and private for-profit provision. The challenge for the current

quality assurance and accreditation systems is to develop appropriate procedures and systems to cover foreign providers and program as well as national providers and program. This is essential to maximise the benefits and limit the potential downsides of the internationalisation of higher education. At the same time, the increase in cross-border student, academic staff, researcher and professional mobility has put the issue of recognition of academic and professional qualifications high on the international agenda. There is a clear need for additional national initiatives, strengthened international co-operation and networking, and more transparent information on quality assurance, accreditation and recognition of qualifications procedures and systems to respond to the emerging trends in transfer and recognition of credit and degrees. These initiatives should have a global range and put emphasis on supporting the needs, particularly of developing countries, in the process of establishing robust higher education systems. Given that some countries lack comprehensive frameworks for quality assurance, accreditation and the recognition of qualifications, capacity building will need to form an important part of the overall strengthening and co-ordination of national and international initiatives.

At institutional level, important issues relate to the extent to which institutions and their senior officers understand recent international developments with regard to the recognition of overseas qualifications and the implications for providing access on an equitable basis to students educated in other education systems and granting appropriate levels of credit for work undertaken for non-completed overseas qualifications. This, in turn, raises issues about institutional policies and procedures for granting advanced standing, including requirements with regard to the kind of documentation that should be cited for granting advanced standing. Moreover, it would be helpful if institutions were required to report on the number of cases for advanced standing considered, the outcomes of these assessments and to what extent applicants with cross-national backgrounds were involved.

Part 3: National Qualifications Frameworks

As you have seen in the earlier parts of this unit there is great variety in the range of qualifications in different countries. This variation has been a significant barrier to cross-border collaboration in higher education and a major disincentive to student and graduate mobility. Within countries also there have been difficulties for students who wish to move from system to system eg from vocational to higher education. These transitions have been far from seamless especially where courses in say, the same field of study overlap in content or level. However there are now moves to make these education systems more transparent.

The context of these developments comes from the significant changes in higher education which have included the exponential growth of both private and public providers, increase of cross-border providers, information and communication technology, the continued massification in higher education, which has dramatically changed the governance and administration of higher education institutions; the emergence of lifelong education competent authorities; qualifications earned through distance learning; a greater focus on quality assurance; lifelong learning; developing assessment tools to measure learning outcomes; and the need to build national capacity and sustainable national higher education systems. Units 1, 2 and 3 of this module sets this context out in some detail.

The result of these changes in the environment for education has been that governments and regional organizations such as UNESCO have encouraging the development of national qualifications frameworks (NQFs). These frameworks provide a way to categorise qualifications on a continuum based on learning outcomes, that is, statements of what a student knows, or can do, a result of having completed requirements for a particular qualification. Typically, an NQF is part of a national qualifications system that forms the educational infrastructure of a country that has been set up for the recognition of learning. This infrastructure includes institutions, government agencies and policies including quality assurance arrangements (Coles, 2006; Tuck, 2007; Young, 2007).

The development of national qualifications framework (NQFs) is now receiving considerable international attention. Initially, the developments of such frameworks were largely restricted to the British Commonwealth countries, such as Scotland, South Africa, Australia and New Zealand. However, over the last twenty years this interest has extended to other parts of the world and is now being incorporated into some Free Trade Agreements as countries seek ways to effectively manage the movement of labour cross borders.

The organization of qualifications is one of the most basic features of any system of education and training. Generally, NQFs do not derive from specific needs, but more

often from a national decision to establish a common framework that is comprehensive. Often NQFs are top-down initiatives led by governments or government agencies. NQFs:

- are often based on a set of general principles about how qualifications should be designed and what they should achieve;
- aim to provide a system for portability and transparency;
- establish commonality across different types of qualifications;
- specify qualifications in terms of standards, levels and outcomes rather than prescribing inputs in terms of syllabus, lengths of teaching time;
- provides a set of benchmarks against which any learning can be assessed in terms of its potential contribution to a qualification; and
- define qualifications in terms of elements (e.g. units, credits, standards).

Some of the key characteristics of a NQF are that they:

- are achieved by accumulation over time, including credit accumulation and transfer;
- are transportable i.e., units of one qualification should be used for other qualifications; and
- should be transparent – that is, learners should know precisely what learning outcomes they are required to demonstrate to achieve a qualification.

The introduction of a NQF usually involves two processes; the balance between them will depend on the level of provision in a country and the existing system that is being replaced. The first process is the redesign of existing qualifications to fit the criteria of the framework, and the second is the development of new qualifications based on the framework criteria in occupational sectors and at levels where they may not have previously existed. The extent to which an outcomes-based framework leads to a complete replacement of the old system depends on how prescriptive the criteria of the new framework are, and whether the framework criteria are made a legal requirement by the government.

Types of NQF

The format and detail of such NQFs from around the world vary from quite prescriptive to loose types of frameworks.

1. *Tacit Frameworks*. In these countries, there is no explicit expression of a framework (diagram, levels or descriptors). Qualifications levels are generally known by citizens (e.g. what qualification is needed for university, to enter the labour market as a skilled worker etc). In such frameworks, there is no link between different education and training sectors.

2. *Sector Frameworks*. These are generally a defined series of qualification levels for one or more education and training sectors (e.g. Vocational Education and Training, Higher Education, Adult). Often the Sector Frameworks will have level descriptors, but there are no explicit links between the sector frameworks for different education or training sectors.
3. *Associate Frameworks* are a weak form in which there is a set of common levels covering all education sectors which is the basis for relating to each education and training sector framework. In its strongest form these common levels can have a set of descriptors that are different to those of the sector frameworks they relate to.
4. *Integrative Frameworks* are a single set of levels and descriptors covering all education and training sectors. Each sector uses this set of levels and descriptors as its own framework. No separate sector frameworks exist. The integrating framework forms a formal link between different education and training sectors.

Separate sector frameworks exist as a basis to the associate framework. The Associate framework forms a formal link between different education and training sectors. In addition to these categories of NQFs it is also useful to distinguish between regulatory frameworks and those that do not have a regulatory function. Country regulatory and legal frameworks have a pervasive effect on strengthening quality assurance processes and this will, in turn, influence the way learning outcomes are recognised.

Apart from the four types of framework outlined above it is also possible to categorise them along the dimension 'hard' or 'soft'. A *hard* framework is prescriptive and specifies precisely how qualifications are to be segmented and specified. It may be likened to a set of pigeonholes into which the qualifications or their components must fit.

A *soft* framework is permissive, specifying a desirable structure but permitting divergence from it. It may be likened to a template in terms of which qualifications may be described. Most NQFs can be located somewhere along this spectrum.

Exercise 3:

Take a look at one or two NQF websites such as Philippines; New Zealand, Malaysia, South Africa and see if you can describe the NQFs you find relative to the 4 categories above and/or along the dimension hard/soft. Include your own country if it has an NQF

<http://apps.emoe.gov.my/qad/nqf.html>

http://www.ilo.org/public/english/employment/skills/hrdr/init/phi_17.htm

<http://www.nzqa.govt.nz/framework/>

<http://www.nqf.org.za/web/guest/home>

Another important development is the emergence of regional NQFs the most developed example being the European Union *European Qualifications Framework*. The EU along

with a number of other regions is examining ways to develop both country and regional frameworks for benchmarking qualifications.

Exercise 4:

Looking at the European Qualifications Framework (EQF) which has been described a 'Global Qualifications Framework' for the EU as a whole can you think about a situation in which your country might be part of such a movement?

http://ec.europa.eu/education/lifelong-learning-policy/doc44_en.htm.

If you are in a region affected by the efforts to develop a regional network (such as the EU) area what are the advantages and disadvantages of the EQF from your perspective? If you are outside an area attempting to establish a regional RQF - do you think it feasible for your country to be part of an agreement that covers a number of countries.

Exercise 5:

To what extent can NQFs facilitate national reform of education, training and qualifications systems, as regards to: lifelong learning and quality assurance mechanisms?

How can NQFs improve the link between Higher Education, Vocational, Education and Training sectors?

How can NQFs promote mutual trust between countries?

Part 4: Emerging Trends in Course Delivery

The recent history of higher education has been unprecedented in the rate of growth and change in the expectations of higher education systems as drivers of economic growth and social equity. Two aspects where change is particularly evident are in the way that courses are delivered and the composition of the student body.

4.1 Modes of Delivery

The modes of delivery of courses in universities have been evolving substantially in recent times and particularly with the massification of higher education. No longer is delivery mainly to 'face-to-face' interaction between lecturers and their students in the confined space of classes or lecture halls. Rising costs of construction, reduced budgets and an increasing need for distance education are factors leading to a review of delivery modes in institutions of higher learning. (Module 2 Unit 2 has further discussion of the impact of new technologies and the spread of delivery methods that are more flexible and recognise the circumstances of the diverse students who have been coming into higher education in more recent times).

In this section, e-learning or electronic learning is defined broadly to describe 'instructional content or learning experience delivered or enabled by electronic technologies' (Ong, Lai and Wang: 2004). This definition extends e-learning to include the use of internet, intranets/extranets, audio-tape and video-tape, satellite broadcast, interactive TV and CD-Rom. Usage is not confined to the delivery of lecture contents as it is extended to include interaction among participants. Further expansion includes the use of mobile and wireless learning applications.

The benefits of e-learning help to overcome (a) barriers of place and time (b) barriers of learning styles (c) physical or other disabilities as learning can be done at the pace of the students (d) the need to acquire additional skills without having to quit a job, uproot families and move to a campus.

There are many dimensions of e-learning. e-learning can be

- synchronous (real-time) or asynchronous (flexible time),
- distributed location as in distance learning or from the same place as in using a group support system in a class to work on an assignment,
- entirely independent and individual while others work collaboratively as discussion forums or chat rooms, and
- electronically delivered via technology without a face-to-face component or blended mode where E-learning is used to supplement traditional class delivery.

There are benefits from e-learning for stakeholders such as students, facilitators, online educational institutions, content and technology providers, accreditation agencies and employers. But there are also concerns. For example, students to succeed with e-learning have to develop critical thinking and evaluation skills to learn independently and with minimum interaction with their facilitators. Facilitators require a new set of skills for success as they are more of a coordinator of the content which students study at their own

pace in an asynchronous E-learning environment. Furthermore, the institution has to protect sensitive student information such as student identity. There is also the concern of accreditation agencies with issues such as the appropriateness of contents, technology platform and teaching methodology adopted, and technical support for staff and students. Finally, it is crucial for employers to recognize the validity of e-learning and focus on the learning outcomes rather than the method of delivery.

Exercise 6:

How has IT development contributed to the provision of post-secondary education in your country? Discuss the advantages and disadvantages of using IT in distance learning.

4.2 Types of Students

This section introduces two types of students in tertiary education, namely, what for want of better terms are called traditional and non-traditional students. It specifically focuses on non-traditional students given that the democratisation and massification of education has increased their numbers in higher education. With the influx of non-traditional students, higher education providers and quality assurance agencies have to use additional measures to ensure that student welfare is given due consideration and the achievement of learning outcomes are met.

Traditional Students. The term ‘traditional students’ describes the characteristics of most students attending colleges and universities. These include students between the late teens and early twenties who enrol in higher education immediately following high school, and who are full-time in status and complete a three-year degree (as in Malaysia) in three to four years, reside at the college or its vicinity, and are financially dependent on family or scholarships as the main source of income. Traditional students also generally are neither married nor responsible for other family members. Today, the topography of students, especially in the developed country is changing, the number of non-traditional students in higher education being on the increase (Keller: 2001).

Non-traditional Students. In North America, beginning about 1970, higher education institutions began to see an influx of significantly different students to whom the term *non-traditional students* was applied, especially with the growth of community colleges (Thelin: 2004). The most prominent difference was that these students were older and had had their formal education interrupted either before or after finishing secondary school. Other developed countries, for instance, the Organisation for Economic Co-operation and Development (OECD) member states also experienced increases in the enrolment of older students (OECD: 2006). In the early 21st century, some believe that non-traditional students have become the new majority while traditional students are the minority (Purslow and Belcastro: 2006).

Direct comparisons of the numbers of non-traditional students across countries are difficult because of varying frameworks of data collection. However, examples can be seen from the United States, United Kingdom, and selected OECD countries such as Canada, Germany, and Japan. Initially, the simple age criterion of 25 years or older was used to define non-traditional students. According to the National Centre for Education Statistics (NCES), the proportion of these students in institutions of higher education had grown to more than 40% by the mid-1990s (Choy: 2002).

The National Centre for Educational Statistics (NCES) study of beginning undergraduates in the mid-1990s broadened the factors defining a non-traditional to seven characteristics, including

- later than usual initial enrolment,
- financial independence,
- full-time employment,
- part-time attendance,
- responsibility for dependents other than a spouse,
- being a single parent, and
- high school equivalency assessed by means other than a diploma (Horn: 1996).

The research also classified non-traditional students as minimally (one factor), moderately (two or three factors), or highly (four or more factors) non-traditional. From this work, the study classified nearly three-quarters of beginning undergraduates as at least minimally non-traditional in character. A Canadian-American association concerned with non-traditional entrants even proposed a new classification, '*New Trads*' to include younger students attending part-time but lacking extensive adult life-experience (Maehl: undated).

Elsewhere, other factors have been applied to identify non-traditional students. A 1997 United Kingdom study described them as not only as being of a later age on entry but also included ethnic, physical disability, and socioeconomic level factors (Gorard, *et al.*: 2006). Germany explicitly included senior students and part-timers in its data gathering whilst Ireland and Japan could be seen to have increased access for non-traditional students only in the 1990s. This means they show a rate of increase that is smaller than those of some other countries. In summary it is possible to say that non-traditional students are somewhat older and have alternative qualifications for admission than those

of traditional students and, depending on the country concerned, perhaps other adult-like characteristics or situational factors as those discussed below.

Non-traditional learners are more likely to reside in urban or suburban areas rather than in rural areas. This may be related to the proximity of educational institutions. Surveys over several decades confirm that the primary motivation for non-traditional enrolment has been career improvement. For younger participants, obtaining credentials necessary to enter desired employment has been critical. People between the age of 35 and 50 years often seek to improve their career prospects with increased qualifications (European Commission: 2007). This marks an important shift in motivation towards developing one's capabilities to keep up with changing knowledge and skills demands or to assume greater responsibilities. People in their later years, on the other hand, are more likely to pursue personal enrichment goals, and even to seek degree credentials for their own sake. A great many non-traditional learners come to higher education with credits earned in earlier enrolments and are eligible for assessment of informal learning for credit transfer. Non-traditional learners, however, are likely to take longer to complete their degrees than traditional students and are likely to experience a higher attrition rate in their first year of study. Those who continue to the second year have persistence rates closer to those of traditional students.

Exercise 7:

What are the characteristics of non-traditional students in your country?

Support for Non-traditional Learners The greater maturity of most non-traditional learners and the complexity of their daily lives mean that they have different expectations for their learning experiences and different needs for services responsive to their life circumstances. Many institutions have made adjustments to assist non-traditional learners and that practical experience can be an invaluable resource to others who wish to follow those practices. These support can be in three forms, namely,

- the removal of barriers, (Spellings Commission, US Department of Education: 2006),
- orientation of learning to focus on learners and
- continuing personal and academic support.

First, there has been an effort to remove barriers, both situational and dispositional, to non-traditional learner participation. The most daunting of these barriers has been rigidity in attendance requirements that are incompatible with the economic and social responsibilities of these students. New time and place options have brought greater choice and flexibility. The growth of asynchronous distance-learning offerings through electronic technology is likely to eliminate this barrier entirely. Greater flexible access to other important services has become more common as well. Clearer information on institutions and the specific program needed for career or other learning goals is

available. Access and guidance to financial aid has improved. Program with the purpose of providing re-entry or orientation workshops to re-acquaint applicants with college-level study or to reduce anxiety are often found.

The second major change has been to reorient the learning transaction to focus on learners. Academic staff and instructors generally assume roles as facilitators or mentors to work with learners to design individualised curricula. They often work in groups and aim to establish a climate of mutual respect, trust, and feedback. This pedagogical approach takes account not only of the contribution that students' previous experience can bring but also tries to foster a spirit of critical reflection and openness to new ideas and information. The purpose to nurture self-directed and empowered learners.

Finally, non-traditional students increasingly need continuing academic and personal support. Academic support includes on-going counselling and developmental monitoring, in addition to close attention at the point of entry. The support can include preparation for leaving the program such as career counselling and exit seminars to deal with the anxiety of a new transition.

Both traditional and non-traditional learners also need a variety of non-academic services throughout their studies. These include food or refreshment services and lounge spaces in the late afternoon or evening, convenient parking and campus security, child care for young children and perhaps, personal counselling to assist with stress or unanticipated emergencies.

Exercise 8:

Is there a need for a nationally accepted system to cater for the needs of non-traditional students?

Exercise 9:

Are there sufficient systems in place to cater to the needs of non-traditional students.

Exercise 10:

How can organisations such as the Association of Non-traditional Students in Higher Education (ANTSHE) assists in providing for their members?

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