A Comprehensive Cross Analysis of e-Learning for Lifelong Learning in Nine Participating Countries of the e-ASEM Whitepaper Project

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INTRODUCTION

This cross analysis reports the current status of nine participating countries in planning, implementing and promoting e-learning for lifelong learning, as described in each country’s respective e-ASEM Whitepaper. The nine countries are Denmark, Japan, Latvia, Malaysia, the Philippines, Slovakia, South Korea, Thailand and the United Kingdom (UK). This analysis also describes policies, legal, conceptual and practical issues that affect e-learning and lifelong learning in these nine countries. The main purpose of this cross analysis is to highlight the similarities and differences of the salient features that have been captured in each of the Whitepapers.

In the following sections, the broad education system of the nine countries is first compared to serve as a background to the analysis. This is followed by a comparative description of policies and concepts relating to e-learning for lifelong learning. Finally, the analysis highlights the status of e-learning for lifelong learning, some of the typical examples provided in each report as well as a summary of the recommendations made to further e-learning for lifelong learning. This comparison is illustrated with examples of relevant practices in these nine countries.

The nine countries of the e-ASEM Whitepapers represent an interesting portrait of Asia (Japan, Malaysia, the Philippines, South Korea and Thailand) and Europe (Denmark, Latvia, Slovakia and the UK). Of the Asian countries, three represent Southeast Asia and two are from East Asia. Each of the European samples represents a different region, i.e. the Baltic States, Britain, Central Europe and Scandinavia. In order to simplify this analysis and make sense of the comparisons, some of the following sections will group the nine countries according to their respective regions.

1. EDUCATION SYSTEMS

In all nine countries, two parallel conceptualisations of education exist. The first generally involves the formal education system which stretches from primary to tertiary education. The second is the lifelong learning system which provides educational opportunities to those who may not have completed formal education, especially beyond the secondary and tertiary levels; and for those who want to upgrade their academic qualifications or professional competencies and skills for the ultimate aim of improving their quality of life. Generally speaking, the lifelong learning systems of all nine sample countries involve three categories of education, i.e. formal, informal and non-formal education. All the participating countries also have separate mechanisms for early childhood education, special education, technical and vocational education and training (TVET), continuing and adult education. In some ways, they are a part of the lifelong learning system for these countries as well.

These two complementary systems are discussed in more detail in the following sections.

1.1 Formal Education System

The Southeast Asian sample countries, i.e. Malaysia, the Philippines and Thailand, share many similarities due to their geographical proximity, including climates, demographics, cultures, ethnic groups, religions, as well as socioeconomic statuses. Correspondingly, they share many educational similarities as well. As developing nations, the main educational objective revolves around improving literacy, eradicating poverty and enhancing
employability of the people. Basic and/or compulsory education follows general international standards; whereby every individual is expected to complete up to 12 years of studying from kindergarten to secondary/high school.

Japan and South Korea, the advanced countries of East Asia, have educational goals that can be considered to be more sophisticated – equal opportunity (Japan) and humanitarianism or Hongik (South Korea) are cited as the basis of educational philosophy. Both the Japanese and South Korean systems employ a 6-3-3-4 structure, and up to nine years are offered as tuition-free schooling. For all these countries, there are separate mechanisms for special education, TVET and higher education. This is a norm for the European countries as well.

Denmark’s education system very clearly separates mainline education from adult education and continuing training. Like all European countries, its education system is based on the International Standard Classification of Education (ISCED) although some unique features exist, e.g. college education is free; an extensive system for youth education. Latvia, by reasons of history and culture alone, presents a fascinating case. As a country that has only recently re-declared its de facto independence from the Soviet Union (in 1991), Latvia has achieved remarkable progress to become one of the most developed Baltic States. Its education system is considerably highly developed as well, and is strongly embedded in European developments towards the European Qualifications Framework (EQF) as well as the ISCED.

Slovakia, also a highly developed nation, has a well-established education system based on its German and Dutch roots. The Slovak government has made long-term plans to transform its traditional schools into a modern school system. Like Japan and South Korea, Slovakia’s educational goals have also progressed beyond literacy alone as the country has already achieved a 99% literacy rate. The UK perhaps represents one of the most traditional education systems that have been adopted by many of its colonial states (including Malaysia). That said, the UK system is experiencing developments due to the country’s changing political environment. Education is free for those between the ages of five and 16 and the entire system is made up of compatible and advancing levels. The UK education system is also highly structured and regulated by region-wide examination boards as well as qualifications and curriculum authorities.

As a summary, all nine participating countries demonstrate at least two similarities in their formal education systems. First, all nine countries have similar structures. The structures can be generally broken down into six years of primary education, three years of lower secondary education; two years of upper secondary/high school education; one to two years of post-secondary education; and three to four years of tertiary education. Another common feature is that this structure constitutes nine to 12 years of compulsory education. These two common features contribute to the larger goal of achieving universal literacy amongst the school-going age population and to prepare them with the necessary academic knowledge and skills to enter the labour market upon completing their studies. The more advanced countries have expressed more sophisticated educational goals that relate to the idea of the importance of lifelong learning.

1.2 Lifelong Learning System

Despite the fact that formal education can be considered universal in its reach, there are still many individuals who do not complete basic/compulsory education and need to acquire additional qualifications and skills after leaving the formal system. In addition, there is also a
need for continuous professional improvement for working individuals already equipped with basic formal education. Others may be interested to acquire additional languages, ICT and other soft skills, in order for them to achieve better quality of life. For some countries like Japan, it is particularly important to provide learning opportunities for an elderly population in an ageing society as well. Japan is also concerned with the concept of equal opportunity; South Korea focuses on humanitarianism; while Denmark places importance on enlightenment and liberal values. These are the rationales behind lifelong learning as an alternative or complementary education system. While each country may have different national goals, all nine sample countries have put in place, to varying degrees, a lifelong learning system to complement the existing formal education system discussed above.

Depending on each respective cultural, social and economic backgrounds and requirements, the level and emphasis of lifelong learning vary for each of the nine countries. In Denmark, a member of the European Union (EU), the lifelong learning system is well-organised and formalised. This is evident in that its national education system is characterised by two parallel formal systems – the mainstream formal education system discussed earlier, and the complementary adult education and/or continuing training system. The latter, which provides formal lifelong learning and training to adults, can be divided into vocationally oriented and general education, and liberal adult education (propagated through folk high schools, private evening schools, adult education associations, and other non-formal providers). While Denmark does not have a designated open university to encourage e-learning for lifelong learning (as in the case of Japan, Malaysia, the Philippines, South Korea, Thailand and the UK), e-learning in general and distance learning in particular are available in all Danish traditional universities to cater to working adults and others to pursue lifelong learning.

In Latvia, at the tertiary level, academic and professional higher education are separated, but this is not strictly institutionalised, i.e. higher education institutions can run both types of programmes, although only academic programmes can award academic degrees. Like Denmark, adult education in Latvia is given separate focus and it is this that constitutes the major understanding of lifelong learning in the country. Adult education is monitored by the Latvian Adult Education Association and covers all formal, non-formal and informal education. Similarly in Slovakia, also a member of the EU, adult education is included as another level in its formal education system, and is considered a form of lifelong learning. Lifelong learning is acknowledged as crucial for developing a knowledge-based society. The government, therefore, adopts a mission to promote lifelong learning by providing easier access to education, recognition of new qualifications and promoting employment throughout the entire lives of citizens. Apart from improving the nation’s labour productivity and competitiveness, another influencing factor for promoting lifelong learning in Slovakia is to equip its citizens with the appropriate qualifications, competencies and skills required for labour mobility within the EU in search of jobs and education. However, Slovakia does not yet have a national strategy for e-learning, particularly as a specific feature in lifelong learning. Like Denmark, both Latvia and Slovakia do not have a designated open university. However, e-learning and distance learning are available in their traditional universities as well.

The understanding of lifelong learning in the UK is different according to each local region, although collectively, the Learning and Skills Act (enacted in 2000 and enforced throughout the UK) is tasked with providing academic and vocational training to 16 to 19 year-olds as well as vocational training, professional education, workplace training, second-chance general education and informal education to adults older than 19. In general, adult and continuing education are both state-run (by the Learning and Skills Council) and complemented by a voluntary body (the Workers’ Educational Association). There are many
ways in which non-traditional students can seek non-formal and informal learning opportunities, e.g. through adult and community learning, learndirect, adult education institutions and professional institutions. The UK’s Open University is potentially the most well-known of the world’s open and distance learning (ODL) institutions; having been established in 1969 and enrolled more than 1.6 million students so far.

In South Korea, lifelong learning is provided by Air and Correspondence High Schools. These are affiliated with public high schools around the country to provide learning opportunities via broadcast and communication distance classes, offline classes and personal feedback from tutors. The vision of these Air and Correspondence High Schools is to develop a cyber lifelong learning system that can offer e-learning to anyone, anywhere and at any time. Lifelong learning lessons are also provided by South Korea’s only distance learning university, Korea National Open University (KNOU) through television and multimedia lectures, web-based lectures and interactive distance video lectures and there are also private cyber universities that conduct courses via the internet. Finally, South Korea also has a Credit Bank System (CBS) that allows conferment of Bachelor’s degrees to those who have high school diplomas or who are recognised to have the same academic capacity as high school graduates. Lifelong learning is considered important for continuous improvement of productivity of the nation’s labour force. To individuals, lifelong learning is seen as a means to improve employability and income.

In Japan, the education system differs slightly from other countries, whereby Japan has specialised training colleges and miscellaneous schools to cater to the lifelong learning society; in particular, the ageing society. These institutions offer practical education and training in various fields that are considered useful for performing a wide range of social, cultural, sports, recreational and volunteer work, and cultivating interests in hobbies and other related activities. Another unique aspect is the notion of libraries and museums as lifelong learning facilities where Japanese people can enhance their knowledge. As such, Japan has incorporated library and museum policies to encourage lifelong learning activities in an ageing society. Japan, like South Korea, has set up its own ODL institution, i.e. Open University of Japan (OUJ) as an avenue for working adults to enhance their qualifications for better employability and income.

Malaysia too has a lifelong learning system that runs parallel to the national formal education system, albeit it is still at a stage that requires further enhancement and integration. Community colleges are considered important as lifelong learning hubs for the country, and 43 have been set up since 2000 as an alternative avenue for secondary school leavers to further their education. Private distance learning institutions and public universities have also been established to provide higher education to working adults and many others who have missed their chance to pursue higher education. One of the most prominent institutions to have stated its mission as such is Open University Malaysia (OUM) – the country’s first ODL institution. Informal activities organised by non-governmental organisations (NGOs) have also contributed to improving the people’s quality of life. Despite all these initiatives and activities, lifelong learning has not been fully integrated and formalised in Malaysia.

Thailand’s lifelong learning development is very similar to Malaysia. However, unlike Malaysia, Thailand has established a Cyber University which uses ICT for delivering courses to their students. In addition to the Cyber University, Thailand has also established two open universities that are open to both high school graduates and working individuals. At present, the lifelong learning environment in the Philippines is still nascent, and has only recently been introduced as part of the alternative education system. Much of the current lifelong learning approaches are still being delivered in a traditional manner, as the country is still
very focused on the importance of formal education to alleviate poverty amongst its people. The Philippine Education for All 2015 Plan intends to separate the formal and alternative education systems; both of which are considered as lifelong learning. However, the Philippines has already established institutions that offer ODL and e-learning, the most prominent of which is the University of the Philippines Open University.

1.3 e-Learning for Lifelong Learning

e-Learning is generally seen as the use of ICT and the internet for learning. Most of the sample countries indicate that e-learning is a tool for education. Whether or not it is used for lifelong learning has not been discussed to great detail. As part of the formal education system, reports by Japan, Malaysia, South Korea, the Philippines, Thailand and the UK all made references to their local open universities and ODL institutions as e-learning practitioners; unlike Denmark, Latvia or Slovakia. In the case of the former, e-learning is seen in a broad sense as any type of teaching and learning that involves ICT, whilst e-learning is still a new phenomenon for the latter. The South Korean report is the only one that comments on the relationship between e-learning and lifelong learning in its country; whereby the concurrent development of both has been central to what it has been able to achieve at a national level. Whatever the case may be, each of the sample countries appears to have some form of e-learning that is readily available for lifelong learning.

2. CONCEPTS OF E-LEARNING FOR LIFELONG LEARNING

The participating countries report a lack of national or official definition for e-learning for lifelong learning. Instead, the two concepts are described separately.

2.1 Concept of Lifelong Learning

Of the nine participating countries, only Japan, Latvia, the Philippines, South Korea and the UK provide definitions for lifelong learning. South Korea defines lifelong education (learning) as “the omnipresent system supporting the learning activities of anyone serving his/her interests anytime, anywhere”. In addition, South Korea’s revised Lifelong Education Act (2008) defines lifelong education as “organized educational activities taking place outside school”. This means that legally speaking, lifelong education (learning) does not occur within school premises. The South Korean concept of lifelong learning also calls for recognition of prior learning (RPL) and gives credit for learning experiences that are considered equivalent to the level of higher education. In this context, lifelong learning in South Korea has included the CBS which allows conferment of Bachelor’s degrees to those who have such equivalent knowledge.

In Japan, the Ministry of Education, Culture, Sports, Science and Technology (or MEXT) defines lifelong learning as “any kind of learning which citizens involve in throughout their lifetime in order to pursue their realization of lifelong learning society”. The term “lifelong learning society” is used to refer to a society where people can freely choose learning opportunities and learn at any time throughout their lives, and receive proper recognition for their learning achievements. Hence, the concept of lifelong learning as applied in Japan covers a wide range of activities which includes school, home or social education, cultural, sports, recreational and volunteer activities, corporate training, hobbies and learning opportunities in other areas.
The Philippine understanding of lifelong learning is broad, i.e. "lifelong learning is a learning progression beginning at birth and ending only with death which encompasses both the formal and alternative learning systems". The Philippines' lifelong learning focus revolves around the idea of complementing the formal education system with learning opportunities that can lead the Philippine people towards employment, social participation and integration as well as self-actualisation.

Of the two European countries with national definitions for lifelong learning, the UK provides greater variation, as each region has its own understanding of the concept. Some of the main points raised are "skills, knowledge, attitudes and behaviours that people acquire in their day-to-day experiences" (Scotland); and "the achievement of social justice, ensuring economic productivity and meeting the challenges of new technology" (Wales). The UK Department of Education defines lifelong learning as "an important part of government policy. Informal learning is seen as one way to remove barriers and widen participation in learning".

Latvia’s Lifelong Learning Policy for 2007-2013 defines lifelong learning as “an education process during the whole life of an individual, that is based on changing needs to acquire education, skills, experience in order to increase or change their qualification in accordance with the demands of the labour market and own interests and needs. Lifelong learning comprises non-formal learning and formal education, develops inborn abilities together with new competences.” As iterated earlier, lifelong learning in Latvia is strongly tied to adult education, which is defined by the Law of Education as “a multi-dimensional educational process of persons, which, ensures the development of the individual and his or her ability to compete in the employment market, during the course of a lifetime of a person”. Latvians are expected to engage in lifelong learning as a means to achieve humanistic and economical benefits, as well as to contribute to national sustainable development.

The other four countries namely, Denmark, Malaysia, Slovakia and Thailand have no clear definition of lifelong learning. A good idea of lifelong learning in these four countries, however, can be inferred from each respective description of practices and activities, as well as from documents released by their governments and non-governmental agencies. In Malaysia, there are several Government documents that make references to the concept and practices of lifelong learning. One of these documents is the National Higher Education Strategic Plan (NHESP), which describes lifelong learning as “...a process for the democratization of education through the acquisition of knowledge, skills and competencies via formal, informal or non-formal means based on workplace, experiences or training”. The NHESP also notes that lifelong learning is integral to support Malaysia’s human capital development and the nation’s knowledge and innovation-based economy. In addition, various other lifelong learning activities are carried out by NGOs in the country. Based on these references and examples, lifelong learning in Malaysia is understood to be characterised as comprising formal, informal and non-formal learning in support of the following objectives: development of human capital, a knowledge and innovation-based economy, improvement of individuals’ employability and personal development and quality of life. Finally, the concept of RPL, similar to the South Korean model, and the Accreditation of Prior Experiential Learning (APEL) are considered vital elements that make up a successful system of formal lifelong learning in Malaysia. At the moment, Malaysia has six operational ODL institutions that are approved to implement the RPL system. The Malaysian Qualifications Agency (MQA) is awaiting endorsement of the APEL by the Ministry of Higher Education so as to allow for full implementation.
Like Malaysia, Thailand does not include a definition of lifelong learning. However, it reports that lifelong learning was introduced in the National Education Act of 1999 as a guiding principle for Thai education to ensure economic competitiveness and sustainable development. It also reports that the Government considers lifelong learning as the foundation for a knowledge-based society which will lead to sustainable development in the country. From these official reports, lifelong learning in Thailand can be interpreted as a vehicle to achieve the objectives of developing human capital and a knowledge-based economy. Unlike Malaysia, there is no mention of improving individuals’ quality of life and employability.

The European Commission defines lifelong learning as “all learning activity undertaken throughout life, with the aim of improving knowledge, skills and competence, within a personal, civic, social and employment perspective”. It can be assumed that Denmark and Slovakia, both members of the EU, are agreeable to this definition. Lifelong learning in Denmark covers “all phases and forms of learning from pre-school to post-retirement, in the support of the objectives of personal fulfilment, active citizenship, social inclusion and employability, improving knowledge, skills and competence”. Hence, the idea of lifelong learning in Denmark appears very similar to that of Malaysia. However, the striking difference is that the Danish concept also stresses on the role of active citizenship which is conspicuously absent in the lifelong learning concepts of Malaysia and Thailand.

In Slovakia, the development of lifelong learning is influenced among others, by the “establishment of conditions for equal and constant access of citizens to acquire new and renewed skills which are necessary for participation in a knowledge-based society”. More importantly, the development of lifelong learning is influenced by the country’s policy to encourage and assist mobility of its citizens within the EU in search of jobs and education.

### 2.2 Concept of e-Learning

Among the nine nations, South Korea stands unique in its effort to formulate the concept of e-learning. Thus, e-learning in South Korea is mainly discussed in the context of educational technology instead of learning per se. Therefore, its concern is technology-oriented; for example, it is concerned with “how to design e-learning contents effectively or virtual learning interface efficiently”. South Korea defines e-learning as “a purposeful learning process through the internet in which the latest innovations in education are utilized”.

For the remaining eight countries, e-learning is generally understood as learning through the use of ICT and the internet; or all forms of teaching and learning where ICT is involved. For example, e-learning in Malaysia is clearly considered as one of the means of using ICT to foster lifelong learning. In addition, e-learning is believed to be an effective alternative approach to traditional classroom teaching in schools and institutions of higher learning. Based on this concept, e-learning initiatives have taken the form of projects such as MySchoolNet, Smart Schools, Computing Tablet, Computerisation programmes and EduWebTV at the school-level, and learning management systems, mainly in open universities and ODL institutions.

In Thailand, e-learning is defined as online learning via the internet. It is self-paced learning in which learners can study within their own capacities and interests. Learning content consists of text messages, pictures, audio, video and other media delivered via web browsers. Teachers and students can communicate via electronic tools such as e-mails, web-boards and chat rooms.
In Japan, e-learning refers to “electronic learning which utilises computers and networks”. e-Learning was introduced as a substitute for all or part of classroom education. Within the formal system, using ICT in blended teaching and learning approaches is considered as e-learning. Asynchronous forms of online learning and computer-assisted training programmes in informal education are also considered e-learning. Japan sees both types of usage as a comprehensive concept of e-learning.

In Denmark, e-learning is used as a general term covering all forms of teaching and learning where ICT is involved. e-Learning covers teaching at a distance through the internet, and all kinds of ICT-supported educational activities such as those for self-study, face-to-face teaching, on-the-job training or net-based interaction in an online course.

Like Denmark, e-learning in Latvia, Slovakia and the UK refers to teaching and learning through the use of ICT and the internet. A broad description provided by the UK’s government website, Directgov, also a common understanding in Latvia and Slovakia, is that “e-learning makes use of ICT to provide innovative ways to learn”. However, for Slovakia, there is no national strategy for e-learning and the range of e-learning activities is generally not well developed. It should be noted that when speaking of e-learning, both Latvia and the UK also directly referred to distance education and/or e-education. Although it does not have a uniform system to monitor and coordinate e-learning, Latvia considers distance learning, blended learning, online/virtual and web-based learning to encompass the total concept of e-learning. Its Lifelong Learning Policy for 2007-2013 states e-education as “a specially organised study course in which the following information and communication technologies are used in a methodically grounded way – telecommunication and computer networks, multimedia CD-ROM, as well as radio and TV broadcasting, audio/video records, interactive TV and other technologies”.

3. POLICIES, REGULATION AND FUNDING OF E-LEARNING IN LIFELONG LEARNING

Because each country looks at lifelong learning and e-learning differently, policies, guidelines and strategies are likely to follow different paths and given separate emphasis as well. For developing countries, e-Learning policies are likely to focus on improving ICT infrastructure, widening technological access and improving the people’s technological literacy. On the other hand, more advanced countries are likely to have larger goals, such as developing pedagogical approaches to leverage on ICT. The same goes for lifelong learning; where a country’s current environment and circumstances are an integral factor to developing the relevant policies and procedures.

3.1 Policies

It is evident that none of the nine sample countries have developed individual policies on e-learning for lifelong learning. Rather, it is common for policies that mention e-learning and lifelong learning separately to be established under the broader themes of education, ICT and/or social advancement. The introduction of lifelong learning in policy documents is a recent development for most of these countries, occurring around 1999 to 2002. For the Philippines, lifelong learning was only introduced into policy documents as recently as 2009 (The Philippine Education for All 2015 Plan). The availability of policies also varies – some of the sample countries, like Malaysia, the Philippines, Slovakia and Thailand, do not appear
to have detailed policies yet; however, South Korea has laid extensive foundations since 2002 and is already carrying out its second promotional plan for lifelong learning in that country.

The different levels of implementation of the available policies are attributable to each respective country’s national agenda/concepts, as well as its economic status. For example, Malaysia, the Philippines and Thailand are predominantly concerned with lifelong learning as a means for increasing national productivity and employability; hence, their policies have a tendency to address lifelong learning as a means to encourage human capital development and create a knowledge-based workforce. Nothing concrete has yet to be developed by the Philippines, although its TVET policy does propose a lifelong learning “ladderised” interface to link TVET with tertiary education – similar to the system for linking learning pathways in the Malaysian Qualifications Framework. Latvia focuses its attention to creating an information society – reflected in its National Development Plan (2007-2013) and particularly in the Informatics Programme, through which extensive ICT-based projects are currently being carried out. Latvia’s concerns concur with Malaysia’s as well, perhaps indicating the universal circumstance of countries where e-learning and lifelong learning are still very nascent. On the other hand, the policies of Denmark and Japan reflect their individual interest in the holistic social development of their citizens. Japan includes library and museum policies in its lifelong learning initiative; as these represent important social education facilities in that country; while Danish strategies encompass every level of learning, from preschool to adult and continuing education as well as liberal (non-formal) education.

In the context of e-learning policies, each country appears to focus on ICT development, its use in education and its role in fostering e-learning. In general, these policies focus on the provision of ICT infrastructure and promoting the use of ICT in each country. South Korea approaches e-learning as a section under higher education and vocational training and has established comprehensive strategies to address various aspects of e-learning, e.g. establishing a development plan, promotion system, standardisation and cultivation of a professional workforce through e-learning. At the end of its report, South Korea extends some recommendations for further policies to make e-learning more effective in lifelong learning programmes, e.g. in the promotion of greater interactivity and multi-way communication, better electronic networks and co-operation within government agencies and with other countries. The policies of Japan, Malaysia, Thailand and the UK refer to a general e-learning/ICT utilisation in education as a tool for lifelong learning, or just learning in general. Again, the Philippines has yet to come up with specific policies on e-learning, although its medium-term development plan indicates that the integration of lifelong learning into the education system is currently in progress.

As stated earlier, the idea of lifelong learning and e-learning in Latvia is strongly connected to the building of an information society. As such, Latvia has extensive policies that address this specific aim, as well as several others for the development of electronic study resources, education information system, raising the ICT competence of teaching staff and upgrading and maintenance of ICT infrastructure in education. Slovakia has only recently given focus to e-learning, although its interpretation appears similar to the other sample countries. Denmark provides the only distinctive notion of ICT usage – albeit it is considered important to boost the ICT capacity of its people; it is not expressly included in the Danish strategy for lifelong learning.

3.2 Legislation
Without definitive policies, most of the sample countries have not implemented any exclusive legislation on e-learning for lifelong learning. Japan and South Korea are the only countries to have successfully legislated lifelong learning (i.e., the Lifelong Learning Promotion Law and Lifelong Education Act, respectively) alongside various other acts that affect e-learning and lifelong learning, i.e., those involving higher education, vocational training and financial sources for lifelong learning. In 2009, Slovakia approved its act and law on lifelong learning; this law replaces the legislation for further education.

Because there are no exclusive laws for e-learning or lifelong learning in Denmark, Latvia, Malaysia, the Philippines, Thailand or the UK, they are indirectly governed by legislation in education, higher education, social education and other related themes, e.g., legislation that controls the establishment of higher education institutions and the offering of their programmes (including those of lifelong learning nature) in Malaysia; and those that control activities in adult and non-formal education in Denmark. In the Philippines, different aspects or levels of the education system are handled by different government agencies, but again, no specific legislation exists as yet. Like the UK, Denmark, Latvia and Slovakia are bound by European policies and standards, particularly, the ISCED and the EQF – perhaps representing a more regulated and systematic regional approach to education in general. Frequently, legislation also outlines the roles of relevant ministries and government agencies. Several unique acts are also present, e.g., Japan’s library and museum laws and Slovakia’s Trade Act that allows its citizens to obtain trade licences for craftwork (that can be used as professional qualifications).

### 3.3 Regulation

The information on regulation, particularly for e-learning, is quite scarce. Again, only South Korea appears to have made progress in this particular regard. Its e-Learning Industry Development Act provides legal support for various aspects of e-learning, even in areas such as standardisation and certification. In Malaysia, the single regulatory body that deals with quality assurance (QA) and accreditation for higher educational institutions is also responsible for systematically linking different qualifications and properly accrediting prior experiential learning; thus indirectly involved in the regulation of formal lifelong learning activities. Japan’s lifelong learning regulation is implied in its Support for Learning policy. This policy describes a credit certification system for adult education programmes, a ‘job card’ system for individuals who need to leverage on their vocational skills and evaluation guidelines for various proficiency tests. Under its Law of School Education (2007), short programmes offered by universities and colleges are also given certification.

The UK stands unique in its clear focus on centralised accreditation. Non-governmental and professional agencies are involved in lifelong learning through the region-wide Learning and Skills Act. The UK’s success in enforcing accreditation standards throughout the British countries is partly why its education system is so well-respected in international circles. Although not extensively discussed in the Whitepapers, both the ISCED and the EQF play critical roles in regulating and quality assuring education in the EU. The European Commission released its guide on the EQF’s role in lifelong learning in 2008. As the overarching framework for all national frameworks in Europe, the EQF promotes a European framework to link qualifications in order to encourage geographical and labour market mobility as well as lifelong learning. In fact, the EQF has served as the basis for Latvia’s qualifications framework, which was recently introduced in 2011.
For the other countries, there is indication that specific regulation for lifelong learning will be considered in the future. For instance, the Thailand Cyber University has included accreditation and regulation as the third phase in its 12-year operational plan. Currently, Thailand has already implemented a broad credit transfer system even between different types of education. Otherwise, it is clear that most have yet to implement any explicit regulation for lifelong learning. Any accreditation or QA procedure is also still under the control of education, higher education and/or training sectors.

3.4 Funding

The sample countries report multiple sources for financing lifelong learning and e-learning programmes. Many also discuss financing that is derived through national education and training budgets, as well as through payroll taxes and employer contribution (especially for professional, on-the-job training). Countries that anchor lifelong learning to national productivity also allocate funds for vocational training and corporate e-learning, e.g. Malaysia, the Philippines and South Korea. South Korea has also enacted legislation for obtaining finances for its Employment Insurance Fund, which is the major contributor for all lifelong learning programmes in the country. Slovakia reports that it receives assistance from one of the EU’s structural funds, i.e. the European Social Fund (ESF). As members of the EU, this is highly likely for Denmark, Latvia and the UK as well, although it is not stated if there is any such regional fund for the five Asian countries. Additionally, since 2001 the Danish Ministry of Education has launched various funding programmes under “ICT and Media in the Public School” to support the move from “learning to use ICT” to “using ICT to learn”. With state-of-the-art ICT facilities and large funds for various areas of e-learning, it is unsurprising that Denmark is considered to have the best capacity to leverage on ICT for social and economic development.

In the UK specifically, individuals as well as institutes can apply for funding to support educational projects from the Joint Information Systems Committee (JISC), which itself was established by higher education funding bodies in all British countries. Several other organisations, e.g. learndirect, are also given government funding. Thus, learndirect (which offers many of its courses online) is able to conduct many of its courses for free.

Informal lifelong learning is generally funded through foundations, donations and other such personal means that are not derived from government allocation. An advanced country like Denmark has also provided funds for producing digital resources for teaching and learning in schools and for developing digital educational materials for use in museums and art galleries. Slovakia is particularly concerned with consolidating its funds and incorporating this system into its lifelong learning legislation.

Funding for e-learning generally refers to provision for ICT infrastructure development in schools or other educational settings, e.g. supplying hardware and internet/broadband connection. This is a common thread across all nine countries; the only difference being the level of ICT development in each country.

4. STATUS AND CHARACTERISTICS OF E-LEARNING FOR LIFELONG LEARNING

One of the key observations from analysing the nine Whitepapers is the varying states and levels of e-learning readiness and penetration. E-Learning in the developed countries of
South Korea, Japan, the UK and Denmark has progressed several stages ahead of the developing countries of Malaysia, the Philippines and Thailand. In a sense, this is not surprising, considering that the former countries are, by virtue of their economic strength; better able to afford the high costs of setting up and maintaining the necessary infra- and info-structures that enable e-learning to take place. However, the country reports also indicate that the status of a country’s economic development does not necessarily determine the pace of its e-learning development. e-Learning in contemporary Slovakia, for instance, has had limited development and impact on lifelong learning, despite the country’s high-income advanced economy. Latvia presents an interesting case – with its recently restored independence, Latvian telecommunications have been liberalised, and this in turn has impacted the country’s digital development and its perspective on the importance of ICT in education. Remarkable development has been attained in the last 20 years alone with its wide-reaching Informatics programme and advanced ICT infrastructure that is well on its way to achieve European averages.

Collectively, the country reports indicate that, while funding for the development of e-learning is crucial, what is just as important, if not more so, are such factors as the absence/presence of clear and growth-fostering government policies on e-learning and lifelong-learning, the level of national support, coordination and funding provided by state agencies or governing bodies, the strength of cooperation between private and public sectors, the breadth and depth to which the culture of lifelong learning has become ingrained in society, and the proportion of popular mindshare that e-learning has managed to stake a claim.

Of the nine countries, South Korea, which has one of the highest internet penetration rates in the world, is by far the most successful in mobilising e-learning for lifelong learning. Through national-level support, e-learning has enjoyed significant growth since 2000 with the introduction of a comprehensive series of legislation, policies and plans to promote e-learning and lifelong learning as a means of enhancing the country’s competitive strength as a knowledge-based society.

Japan, too, has promulgated various legislation and national plans, as well as produced policy reports on the subject, albeit, as it would appear, without the same degree of comprehensiveness and popular acceptance as South Korea. Japan’s country report notes that, largely as a result of the government’s push, e-learning has been adopted and widely used by universities. It notes also that there is clear recognition in the country of the potential benefits of e-learning, as attested by the various government initiated measures that have been taken to expand the use of ICT in education. Japan has been described as being in “a large-scale transition period”, where e-learning is gradually overcoming various spatial and temporal obstacles that have traditionally prevented the masses from partaking in various educational opportunities.

While e-learning in Japan is expected to grow and diversify beyond the mere use of ICT in learning to involve organisational, technical and pedagogical dimensions, South Korea has already actively applied e-learning for the most part, if not on full scale, on all levels, including elementary, middle and high schools, traditional and cyber universities, and continuing education (including vocational training, teacher training and public service training).

Against the foregoing background, Denmark, with its well developed digital infrastructure, makes an interesting case for comparison. Denmark does not have a separate open university that runs programmes in e-learning or blended mode, like the rest of the sample countries,
since e-learning is “a responsibility of all [Danish] universities to develop as part of their general educational offers.” Notwithstanding, Denmark already has in place a national strategy for e-learning which aims to increase the usage and quality of e-learning in the country. In terms of e-readiness, it is has been ranked as the country with the highest score in potentially transforming digital opportunities into social and economic development. Use of the internet for continuing education by adult learners is on the increase, as is e-learning for staff training by enterprises. The same upward trend is evident also in the Danish schooling system, although, as the country report highlights, the knowledge sharing ICT systems are used primarily for administrative use and to supplement conventional teaching-learning, rather than for active sharing of knowledge among teachers and between teachers, learner and parents. Another interesting aspect of e-learning highlighted in the Danish country report is that, in the area of non-formal adult education, particularly in personal development and general democratic education, distance learning or fully online learning are of no immediate interest to many schools and associations. This is due mainly to the mode in which such types of courses are typically run; that is, they require learners to physically attend meetings and to live with other learners for a certain period. As well, legal restrictions apply to some school types which prohibit some courses from running across municipalities.

Despite the relatively advanced penetration of e-learning in lifelong learning in South Korea, Japan and Denmark, there remain formidable challenges to be addressed. Some of these challenges appear unique to some countries, while others are shared in varying degrees across all sample countries. Duplication of efforts by the government and the private sector in providing e-learning to elementary, middle and high school students represent an area identified as requiring optimisation in South Korea. Another area requiring redress concerns the proliferation of South Korean cyber (or private distance) universities at a time when there is reportedly decreasing national demand for tertiary-level education. The worry is that this phenomenon may cause an oversupply of higher education and threaten the very survival of existing universities in South Korea. Concerns have also been voiced about the quality of learning and other ethical issues related to the provision of e-learning by cyber universities in general.

Aside from these, two other issues have been identified in the South Korean country report. The first relates to the yet to be realised objective of developing an international e-learning network to leverage on the global applicability of the internet. At present, e-learning in South Korea, although already well developed, remains constrained within national boundaries, in part due to language barrier. The second concerns the persistence of the “old tradition” of teaching and learning, namely rote learning, which is widely considered to be incompatible with e-learning. (Within the dominant constructivist paradigm, e-learning requires learners to go beyond passive memorisation to active co-construction of knowledge through two-way interaction with peers and/or instructors.) This too is an area of concern highlighted in the Danish country report, which notes that teachers’ expectations from young learners may be “rather traditional” and insufficiently flexible to capitalise on collaborative learning. The Danish report also highlights the need for Denmark to step up efforts to utilise e-learning not simply as an ICT project but more importantly as a pedagogic and didactic experience.

Some of the aforementioned challenges confronting developed economies such as South Korea and Denmark are also shared by the other sample countries. Malaysia, for instance, too faces the problem of some duplication of efforts in part due to the lack of immediately tangible incentives to collaborate and the lack of comprehensive national-level coordination of e-learning development. While Malaysia has adopted some initial policies to support the growth of e-learning in the country, state agencies and the few parties that have actively promoted e-learning in the context of lifelong learning have yet to successfully coordinate
their efforts in any significant degree to avoid duplication of each other’s work and to maximise the limited resources at their disposal. Malaysia’s report underscores that the country is currently in the ‘embedding’ stage and has a long way to go to ensure a holistic enculturation of e-learning in lifelong learning. Its utilisation of e-learning is limited to the formal level; as well, there is a clear need for more funding and strategies to encourage more players and practitioners to enter the field and to make e-learning more cost effective. It has also yet to establish something akin to South Korea’s CBS which allows learners to accumulate credits for the knowledge, skills and competencies gained previously through non-formal means.

Nonetheless, despite these gaps, Malaysia has progressed a considerable distance in making available more e-learning opportunities for Malaysians to continually upgrade their knowledge and skills. Implementation of e-learning has been more active at the higher education level, as compared to the school level, although, in the latter case, a series of initiatives have been launched to deepen and widen the utilisation of ICT in education. The Malaysian country report also highlights for-profit e-learning in the corporate training sector which, although still a relatively new phenomenon, has the potential to help accelerate employee development.

Likewise, e-learning in Thailand, while yet to reach its full potential or to approximate the gains already made in South Korea, is nonetheless recognised as a means of expanding educational opportunities for the people. The Thai country report states that Thailand already has in place “clear policy supporting the expansion” of lifelong learning supported by e-learning. It places the country at what might be discerned as the embedding stage, where focus is placed primarily on establishing the networks and partnerships necessary for the provision of e-learning that leverages on the sharing of learning resources and avoids wasteful duplication of efforts. Available literature outside the country report reveals also that an array of international partnerships has been forged to advance e-learning penetration in Thailand. Among these partnerships are with Microsoft (Partners in Learning), Intel, Japan International Cooperation Agency, UNESCO, and UNICEF.

The Philippines perhaps has the most catching up to do, particularly in implementing e-learning specifically for lifelong learning. At present, institutions offering programmes and courses via e-learning can be said to encompass traditional/formal education only; and most of the government-based initiatives tend to focus on developing basic ICT skills. Despite the presence of several institutions that have created considerable impact through ODL (like Malaysia), the extent to which e-learning has benefited lifelong learning (beyond formal education) requires further investigation. Much still needs to be done for lifelong learning to be successfully cultivated as an alternative learning path in the Philippine Education for All 2015 Plan.

Of the other three European countries involved in these Whitepapers, i.e. Latvia, Slovakia and the UK, the latter provides the more traditional and conventional approach towards e-learning. British politics and the Browne report (delivered in 2010) are two factors that have greatly influenced the current education environment in the UK, specifically, in terms of reduction of funding and subsidies. The Open University has played an important role in the UK education dynamics, as it has become a popular alternative for higher education. The e-learning component in this case is clear, as the Open University delivers its programmes via ODL. Other forms of education that have benefited from e-learning include both non-formal and informal examples, e.g. basic skills (learndirect). Latvia makes for a more contemporary example and provides extensive evidence of the initiatives made towards greater use of ICT in education for the purpose of improving digital literacy. Various instances where e-learning
has been assimilated into traditional education are given, e.g. upgrading of in-service teachers, development of study materials, education information systems and hardware in schools, e-learning in vocational schools and the TVET context as well as distance education centres. Integrating e-learning into higher education is in progress, but a blended pedagogy (leveraging on ICT) is already commonly practised. e-Learning in non-formal and informal forms is also applied, particularly for training job seekers and the unemployed (a programme under the ESF).

Of the nine country reports, Slovakia’s is arguably the most candidly revealing of the situation on the ground. First, though, it needs to be qualified that the many challenges facing Slovakia with respect to education in general, and lifelong learning and e-learning in particular, are not all entirely unique to the country. Concerns over the quality and adequacy of national education to meet the demands of the labour market in a globalised world, for instance, are shared by many more countries than the nine sampled here. What is unique about the Slovakian country report is the sobering admittance that the Slovakia’s education system has in the last decades been insufficiently responsive to the changing world. As well, it would appear that Slovakia has the biggest gap to bridge in terms of e-learning readiness and penetration. At present, according to the report, not only is there an absence of a national strategy for the development of e-learning in the context of lifelong learning in Slovakia, there is also still no official recommendation by the Ministry of Education to include e-learning as a standard tool in the education system. Among other things, this has had a discouraging effect on school directors and teachers who, perhaps due to the lack of incentive, are reluctant to include e-learning in the teaching process. e-Learning in Slovakia is increasingly becoming accepted in specific subjects offered in some universities. Even then, its utilisation at the university level is patchy at best. It is limited mainly in urban areas where broadband internet is available and where most universities are situated. e-Learning in the corporate sector is employed primarily by big companies with foreign capital or major domestic IT companies. The majority of small and medium enterprises do not use e-learning, while in the public sector, the situation differs between central and local state administrations. The Slovakian country report highlights several areas requiring urgent redress – areas which the other five sample countries too have identified, if not already addressed. Legislation and national coordination of e-learning development are required, as are support, funding, and a policy advisory committee.

5. TYPICAL CASES OF E-LEARNING FOR LIFELONG LEARNING

How each country utilises e-learning in lifelong learning contexts is as unique as its understanding of the concepts. As has been reported in the earlier sections of this analysis, the most evolved forms of e-learning for lifelong learning appears to be Japan and South Korea, followed by Denmark and the UK. Latvia, Malaysia, the Philippines, Slovakia and Thailand are similar in terms of their focus on creating greater ICT awareness, improving ICT infrastructure in schools and finding alternative pathways to higher education – all are basic and fundamental building blocks if they are to expand both e-learning and lifelong learning in the sphere of national education.

In particular, Japan and South Korea have been able to establish various initiatives in lifelong learning that quite clearly utilise e-learning. Both countries have designated open universities (i.e. the OUJ and KNOU, respectively) that deliver programmes through distance learning. To this day, OUJ employs a blended mode that incorporates television and radio programmes to supplement print materials and face-to-face interaction. While many other open universities have moved on to web-based content and delivery, OUJ continues to produce
broadcast material, which is now in high definition digital formats. Two fascinating explanations behind this is that many OUJ students are in the older age bracket; and that there is a persistent perception that broadcasted instruction has an authentic and credible air. Japan has also initiated a Japan Opencourseware Consortium (JOOW) and NPO CCC-TIES consortium to share learning resources over the internet. Any distribution and exchange of content among universities and corporations is strictly facilitated by the Accreditation Council for Practical Abilities (ACPA), a member of the International Network for Quality Assurance Agencies in Higher Education (INQAAHE). The MEXT has played a major role in driving e-learning implementation across various sections of Japanese society.

South Korea shares many similar milestones with Japan. Its open university, KNOU, also started by using broadcasted instruction but this has now been mostly replaced by web-based delivery. The uses of e-learning for lifelong learning in South Korea is diverse and widespread, no doubt a consequence of the country’s well-established policies and legislative environment on lifelong learning. South Korea has been able to incorporate e-learning at all levels of study, from non-degree to degree levels and from preschool, K12, undergraduate degree and finally, to graduate education as well. Like Japan, e-learning has been applied in various contexts, including training for civil servants, military personnel and the ‘socially alienated’. Additionally, South Korea’s CBS is one of the most outstanding examples of an organised approach towards systematic lifelong learning – no other sample country has established anything similar. The exhaustive scope of the South Korean system is certainly one to be lauded.

The European sample countries of Denmark, Latvia, Slovakia and the UK exhibit different approaches towards e-learning for lifelong learning; perhaps a reflection of the various factors that have been discussed in these Whitepapers (e.g. concept, educational philosophy, ICT infrastructure, availability of policies, regulation, legislation and funding). As discussed in the previous sections, Denmark’s highly advanced ICT environment has proven that it is not the only crucial factor needed to boost e-learning for lifelong learning. Awareness, acceptance and acculturation of the concept of lifelong learning play an important role too. The Danish report provides two cases where e-learning has been used in formal education and in informal situations. The former is similar to many other academic programmes delivered via ODL as it employs a blended pedagogy that uses online workspaces, video conferencing and other online communication tools. However, it appears that e-learning has been best utilised in informal settings. Like Japan, the role of museums and science centres in encouraging learning is considered important; and much has been done to include some form of digital/electronic component to their collections as well as to how these are disseminated to the public.

Despite lacking a national strategy for e-learning for lifelong learning, Slovakia has managed to implement e-learning in various ways. Most commonly, companies and training institutions have used e-learning to train employees. However, the opportunity for unemployed and physically disadvantaged people is still not forthcoming as digital literacy remains a problem. That said, there are numerous examples where e-learning has been successfully integrated, from the conventional use in schools, universities, administrative processes to a school unique to voluntary rescue services. The DIVES programme (from 2005 to 2007) is similar to the UK’s learndirect, where people of all backgrounds can enrol into free courses to upgrade their knowledge and look for jobs. Like several of the other sample countries, Latvia has implemented some e-learning-based programmes at formal and informal levels. The University of Latvia has experimented with offering a joint Master’s programme with several other European universities utilising a blended pedagogy. Similar to the Malaysian MyGfL project, the Latvian government launched Uzdevumi.lv – a web portal
with various study resources targeted at school-going children. In the UK, there are numerous learning opportunities for continuing education outside its extensive formal education system. Examples of the use of technology (e-learning) in the latter include basic skills (learndirect), post-compulsory education (the Open University) and postgraduate education (University of London).

For the developing countries of Malaysia, the Philippines and Thailand, e-learning for lifelong learning mainly encompass rather basic initiatives outside the formal academic programmes offered by open universities and ODL institutions. ICT awareness ‘campaigns’ and basic skills courses like the eBario Project of Sarawak (Malaysia) and the eSkwela Project (the Philippines) are to be expected in an environment where neither e-learning nor lifelong learning has been fully acculturated. Thailand’s concern with using technology to enhance the efficiency and effectiveness of teaching and learning is reflected in the Thailand Cyber University (TCU) project, which aims to spearhead educational reforms in Thailand as well as bring together all of the nation’s universities and higher education institutions in a collaborative, knowledge-sharing network.

6. RECOMMENDATIONS, PROSPECTS AND CONCLUSION

There is no doubt that all the nine countries recognise the importance of lifelong learning in complementing existing formal education systems for greater national productivity, employability and improved quality of life. All nine sample countries, too, recognise the importance of using ICT more broadly in education as well as for improving access to educational opportunities and for better utilisation of e-learning in lifelong learning endeavours. Some, like Slovakia and the UK, are wise to heed that ICT is not an end, but the means towards creating opportunities for development and for better prospects in lifelong learning. As such, it is worthwhile to note that the development of e-learning for lifelong learning varies between the sample countries; with South Korea, Denmark and Japan ahead of Latvia, Malaysia, the Philippines, Slovakia, Thailand and the UK in terms of conceptualisation, implementation and progress.

While it is universal for lifelong learning objectives to include meeting national goals like productivity, employability as well as social needs for improved quality of life, there are clear contrasts in its emphasis as reflected in the given policies, funding and implementation. For example, Japan emphasises on meeting social needs for an ageing society; South Korea and Latvia give marked consideration to the human dimension; and Denmark is concerned not only with filling in gaps in the labour force, but also with the broader social context of lifelong learning for self-fulfilment. The other sample countries have more basic goals, such as productivity, employability and competitiveness, before they can move on to more sophisticated aims. These differences mark individual concerns and cultural features that are unique to each country, and they of course have had great bearing on educational priorities that directly address lifelong learning and e-learning or at the very least, influence them on a national scale.

While the reports have highlighted the current stage of e-learning for lifelong learning in the respective countries, they also point to many weak areas and missing gaps that need to be strengthened and closed. It is these areas that provide the basis for future direction of developing better systems and features that can be more specific to e-learning for lifelong learning. Each country faces a different set of challenges to overcome that are openly acknowledged or at least, intimated in these reports. The comprehensive list of recommendations that have closed each report can certainly serve as input for developing the
roadmap to improve e-learning for lifelong learning in the respective countries. The reports collectively are also a snapshot of e-learning and lifelong learning practices in each sample country; and can certainly serve as an introductory study to the avid reader.

The following table is a summarised guide to the recommendations and key points as described in the Whitepapers by each of the sample countries. This matrix may be helpful in identifying how each sample country uniquely looks at its own experience in exploring and implementing e-learning and/or lifelong learning. The recommendations thus relate to the country’s experience, current status, concept, philosophy and environment. Any exclusion does not point to a lacking in the part of any country or its government, rather, the list merely sketches the key concerns that each country considers important in furthering e-learning for lifelong learning in the present day. For instance, the Latvia report does not indicate a need to define e-learning or lifelong learning as it appears to be already at ease with its current concept of economic and humanistic importance. The only necessary point to note is that recommendations from the UK report relate to the international context, i.e. in the effort towards creating a global community of policy sharers for e-learning in lifelong learning. In addition to the recommendations provided in the table, the UK report provides other suggestions, including identifying the best national provider, creating an international pamphlet under e-ASEM and nominating one country to champion the cause of e-learning for lifelong learning.
Establish definitions for e-learning and lifelong learning  
Establish the relevant policies  
Establish the relevant legislation  
Establish the relevant regulatory & quality assurance mechanisms  
Establish sources & systems for funds  
Establish standards & frameworks for various aspects of e-learning and/or lifelong learning  
Build/improve ICT infrastructure  
Improve access & inclusion (especially disadvantaged groups)  
Establish national agency/committee to oversee e-learning and/or lifelong learning  
Improve/strengthen local coordination  
Promote/improve awareness for e-learning and lifelong learning  
Conduct more research on e-learning for lifelong learning  
Build capacity of implementers (teachers, course developers, experts)  
Take a learner-centred approach  
Design new pedagogical and didactical approaches  
Customise teaching & learning processes; acknowledge various learning styles & characteristics  
Encourage collaborative learning, content development & knowledge sharing between stakeholders & between learners  
Personalise learning content  
Include/develop Open Educational Resources  
Provide greater focus to TVET  
Address security issues (authentication & content)  
Benchmark against other countries  
Create national/international content database/repository  
Rejuvenate national educational philosophy  
Create international network & global community

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<td>Conduct more research on e-learning for lifelong learning</td>
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NB: ✓* indicates recommendations at an international level

Table 1: A Summarised Matrix of Recommendations from Each Sample Country
REFERENCES

Nine Whitepapers on e-Learning for Lifelong Learning, prepared by Denmark, Japan, Malaysia, Slovakia, South Korea and Thailand (2010); and Latvia, the Philippines and the United Kingdom (2011).

