

RESEARCH ARTICLE

The Harmonization Process and Implementation of Higher Education in ASEAN

Nopraenue S. Dhirathiti and Gamolporn Sonsri
Mahidol University, Thailand
nopraenue.dhi@mahidol.edu

Abstract: The force of regionalization has become the main discourse in public policy for many years, especially in the extent of what a regional integration would contribute to the success of the objectives set out to promote economic, political, and social cohesion. Following the completion of the integration process of the Association of Southeast Asian Nations (ASEAN) in late 2015, the higher education sector is one of many policy branches where the force of regionalization has touched. Although Europe has ventured on the route towards a deeper integration and harmonization of higher education to establish a platform where graduates and educational staff can benefit from aligned higher education systems for teaching and learning, research and mobility, the same scenario does not seem to hold true in Southeast Asia despite the move toward a deeper ASEAN integration. This study takes on the main objectives to, firstly, do a stocktaking of policy discourses and implementation in ASEAN countries regarding the harmonization of higher education in the region using the key harmonization dimensions set up in the Bologna Process. Despite policy rhetorics at the ASEAN Secretariat and by some political leaders, each member country seems to move along the process at a different rate and varieties. The second objective is to examine the role of the key actors in the region in promoting the process, ranging from the national governments, higher education institutions, and regional higher education networks. Depending on the governance structure of each country, the development of the harmonization process seems to be shaped by all three main actors, with a different degree of involvement and success.

Keywords: harmonization of higher education, ASEAN Community, ASEAN Higher Education

ASEAN integration has become more than a policy catchphrase among policymakers and has been a reality of the 10 member countries in the region. The term ASEAN integration itself has connoted many messages and meanings based on the pillars of cooperation including political security, economic, and socio-cultural aspects (ASEAN, 2008). Although the integration in the areas of political security and economics are being seen as more institutionalized (through concrete international frameworks like

the ASEAN Regional Forum or other economic instrumentalization of free-trade and investment areas, free flow of labor, as well as other taxation policies), the integration in terms of socio-cultural area is still fairly vague. Policymakers across ASEAN governments have rallied for “ASEAN One” without making a concrete implementation plan for this pillar of integration. Unlike the European integration experience where the harmonization of higher education, also known as the Bologna Process, has been utilized by the European

governments as a platform for the promotion of higher education cooperation to create the so-called “European Higher Education Area: EHEA.” In ASEAN, a formal platform or mechanism where the harmonization process is formally and systematically taking place is still lacking, except the Erasmus-like Asian versions of mobility programs. A great diversity of higher education practices across the region also begs a question about how these mobility programs are shaping the citizenship education as part of the harmonization of higher education. (Deng, 2013). Without a platform or social and cultural connection, the integration process will be much lacking.

Through the Bologna Process, Europe has made it clear that the role of higher education in facilitating the process of social and cultural integration, or the “social cohesion” in Europe, is one of the utmost important factors. Higher education sector and higher education institutions have voluntarily played a major part in aligning the diversified systems in Europe so that it opened up the opportunities for students and staff to mobilize across the continents to the establishment of European Higher Education Area. The most important idea is the shift from policy and legislation to the implementation at the higher education institutions (European University Association, 2007). In ASEAN, the policy discourse on social and cultural integration, which may have led to the materialization of ASEAN One, has not been present until recently. Despite the lack of policy inputs and concrete implementation from ASEAN countries, the higher education sector has gradually replicated the process happening in Europe. Despite differences in the regionalization onset and other political, economic, and social contexts, in this study, it is still beneficial to take stock of the key processes and dimensions leading to the harmonization of higher education in ASEAN. As Kuroda, Sugimura, Kitamura, and Asada (2018) remarked, the process of harmonization and internationalization of higher education is progressing amid an intricate web of motives, interests, positions of national governments, higher education institutions (HEIs), and higher education networks. Therefore, the possibility of where it is heading in the future as well as the role of the national government, higher education institutions, and regional networks involved in the process are still worth examining.

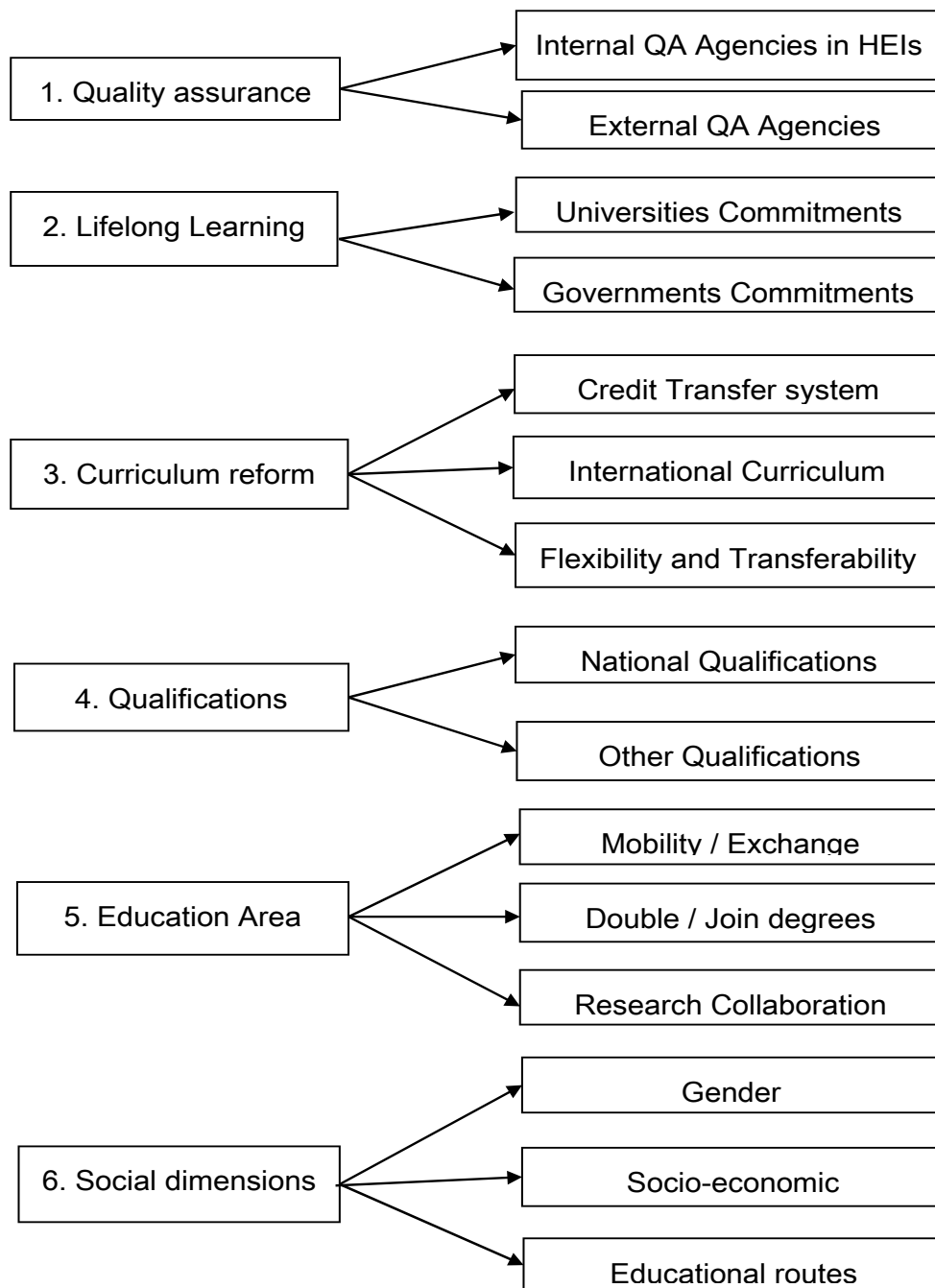
Literature Review

One of the most relevant arguments is the debate about education as a public or private good and how important it is for long-term development. Pasque (2010) vouched for both the benefits in the public and private sphere. Although citizens are being provided better access and quality of education, higher education can be viewed as a lucrative business for those who take part in providing the services. The provision and the reformation of higher education, in general, does not only yield benefits only in terms of the private or public sphere but also in the economic and social dimensions. The better the quality of higher education provision, the better the quality of the workforce in the labor market and a better-developed society. McMahon (2009) agreed on the same notion that the improvement of higher education would yield a better public result of economic and social orientations, including personal and social happiness, increasing economic investment, political stability, sustainable development, democratization and human rights, less poverty, social cohesion, dynamic growth process, and so on.

In recent years, the development of the higher education sector cannot be seen as isolated and is pursued out of any individual country’s national interests. On the contrary, there is regional movements towards the harmonization of higher education systems and the development of reference points for future collaboration. The movement and mobility of people, students in particular, have paved the way for the future. As students are more mobile and move around beyond their borders, systems of comparability have therefore been developed in many regions to support the changing nature of higher education and academic activities. The term “harmonization” was coined in the context of the development of reference points in various areas starting from the Bologna Process declared in the Lisbon Convention in 1997. The Bologna Process was seen as an evidence or a solid proof of policy endeavors in promoting the reformation of higher education sector in Europe. Its key aim was also to create the so-called European Higher Education Area. Under the process, several actors have been participating in the process and contributing to the increasing number of mobility as well as a number of other academic and research activities covering

higher education institutions across Europe. The Bologna Process has contributed to several areas of regionalization success which involved many actors. From its onset, the Bologna Process has encompassed the development of sub-systems such as quality assurance, curriculum reforms,

qualifications frameworks, areas of knowledge and research, and the promotion of social cohesion. Each of the subsystems of the Bologna Process was detailed into implementation stages which have been adopted voluntarily by higher education institutions (Corbett, 2006, 2011; Elken & Vukasovic, 2014).



Source: Authors' figures

Figure 1. Key areas of the Bologna harmonization process.

In addition, studies have been done in examining the impacts of the harmonization process on society in the past years. Yagci (2010) addressed the issue by focusing on the students. The increasing mobility due to a more comparable degree and unified systems of quality assurance and credit systems has contributed to the awareness of the diversity in the region. However, with the increasing number of mobility within the region, the awareness of students about multi-cultures has not concretely contributed to the question about equity of higher education and the educational services which should be managed to serve the real needs of students. Baldwin (2013) argued about the positive impact of the Bologna Process on the teaching and learning of students especially on the re-design of curriculum and other learning infrastructures such as quality assurance system through the common area of knowledge and research. As regards to the impact of the Bologna Process to the changing role of higher education institutions, Rami (2012) highlighted the importance of the process in motivating HEIs to perform better, aim for outcome-based learning, and promote more experiential learning for students through other areas of the harmonization process.

Turning back to ASEAN, higher education in the region is being operated with different degrees of government's deliberation. As Dhirathiti (2012) put it, higher education in these countries can be divided by the directions on higher education from the governments or top-down management approach like Malaysia or Indonesia. There are also countries like Thailand, the Philippines, Singapore, and Brunei Darussalam where higher education system are more liberal, responding to the market force, and less directed by the governments. There are also distinct characters of higher education systems within the former socialist countries where catch-ups, reconstructions, and reformations of the system are being developed, including countries like Cambodia, Lao PDR, Myanmar, and Vietnam. These system variations aside, different contexts of cultural and ethnic diversity also determine the directions of higher education reform and development in the region.

By examining the areas of system development under the Bologna Process as shown in Figure 1, six key areas which have been discussed in ASEAN were assessed in this study. In other words, this study aims at examining the current progress and mechanisms being

developed throughout the region to establish reference points for collaboration within the region as elaborated in the methodology section. Another layer of this study is to examine the role of the key actors in the region in promoting the harmonization of higher education, ranging from the national governments, higher education institutions, and regional organizations functioning in ASEAN. Although pursuing its own national interests, governments in many countries are believed to be the key player in the harmonization process. However, as evident in the European example, the voluntary participation of higher education institutions along with the force being pushed by regional education networks in various dimensions, from mobility to curriculum development, have also been mentioned in some of the previous works of literature (Sugimura, 2012; Hou, Hill, Chen, Tsai, & Chen, 2017)

Methods

This study employed a qualitative content analysis method where the past studies on the Bologna Process were being examined to extract the key policy implementation indicators as shown in Table 1. These key indicators were being examined one by one in each country through both documentary research, in-depth interviews, and focus groups to extract the progress and development of the policy implementation.

In terms of data collection, this study divided countries in ASEAN into four clusters based on their common higher education characteristics, as described in Table 2 (Dhirathiti, 2012). Cluster 1 suggests a system of a top-down model where the Ministry of Education has played a major role in steering higher education policies and the level of autonomy of higher education institutions is directed by the government. Cluster 2 represents former socialist states, and the structure of the higher education sector is not only under the Ministry of Education but various ministries are responsible for specialized areas. Cluster 3 consisted of countries where higher education institutions are more autonomous in managing their own institutions or have their own university laws. Finally, cluster 4 is countries with advanced westernized systems with mostly English-taught programs.

Table 1
Key Policy Implementation Indicators

Progress Dimensions	Descriptors
1. Curriculum Reform	The development of international education including the adoption of a common platform for academic transfer system.
2. Qualifications Framework	The development of national qualifications framework to be used for comparability purposes.
3. Quality Assurance	The development of quality assurance system both within higher education institutions (IQA) and the establishment of external quality assurance agencies (EQA).
4. Lifelong Education	The initiative of the government or higher education institutions in developing a framework of lifelong learning for the population.
5. Social Dimension of Education	The national and institutional policies in providing learning experience commensurate to the familiarization of multi cultures.
6. Education Area and Collaboration	The development of a deeper academic and research collaboration through mobility, transnational education, and research.

Table 2
Populations and Samples

Clusters	Countries	Key Informants	Coding
Top-Down Higher Education System	*Indonesia, Malaysia	<ul style="list-style-type: none"> Ministry of Education (Indonesia, Cambodia, Vietnam, Thailand, and Singapore) 	Government official (GO-xx)
Former Socialist Countries	*Cambodia, Lao PDR, Myanmar, *Vietnam	<ul style="list-style-type: none"> Higher Education Institutions (2 each from Indonesia, Cambodia, Vietnam, Thailand, and Singapore) 	University Employees/ Staff (UE-xx)
Liberal Higher Education System	Philippines, *Thailand	<ul style="list-style-type: none"> Regional International Organizations (ASEAN Secretariat, ASEAN University Network, UNESCO) 	Representatives from regional organizations (RG-xx)
Advanced Westernized Higher Education System	Singapore, *Brunei Darussalam	<ul style="list-style-type: none"> Student representatives (Indonesia, Cambodia, Thailand, Vietnam, and Singapore) 	Students (ST-xx)

Source: adapted from Dhirathiti (2012)

Among the four clusters, countries in asterisk were selected to represent the groups for in-depth interviews as indicated in Table 2, comprising of Indonesia, Cambodia, Vietnam, Thailand, and Singapore. In each selected country, key informants included

representatives from the Ministry of Education, higher education institutions, regional organizations, and students. Additional data collection was being done with representatives from regional international organizations involved with higher education located

within the region. Documentary research was also undertaken in countries where in-depth interviews were not performed. The data analysis was being conducted through a qualitative method of content analysis. Interviewing codes were assigned to each interview sessions, which were all semi-structured. Each session lasted for 60–90 minutes to cover all the key policy implementation and harmonization dimensions set as a framework for the analysis described in Table 1. Tape recording was done with the consent of all interviewees and kept anonymous. Data analysis was conducted by decoding all transcriptions from key informants. The transcription was reviewed twice to verify accuracy and typologies under the suggested harmonization dimensions.

Results

The results show that each country has eased itself into the process of the harmonization of higher education differently. In this section, results will be demonstrated in six progress dimensions as shown in Table 1, where appropriate in each country, respectively. Some countries appear to have developed almost all dimensions towards the harmonization of higher education; some have only developed a few dimensions.

a. Top-down Higher Education System

Indonesia. Similar to other two advanced countries, Singapore and Brunei Darussalam which will be elaborated more in this paper, the government of Indonesia is working hand in hand with the industrial sector in developing a curriculum that correspond with the needs of the labor market and to ensure the country's education equality. The outcome-based education is focusing on increasing competencies of graduates to be employable not only in the Indonesian labor market but also the regional market as a whole. The role of HEIs in Indonesia is also prevalent especially their functions to improve the programs offered at par with the international standards through the increase of international programs. As pointed out by the Indonesian government official:

Our focuses on national higher education development and the preparation of this sector towards the harmonization process are

sustainable education, work competencies, education for marginalized people, promotion of basic science and education for knowledge creation. From that point on, we believe that the next step is to integrate more into the regional system which would provide a wider platform for the labor market, human resource development, educational paradigm, students' skills and competencies, and the preparation of the national government itself in identifying top HEIs. (GO-02, personal communication, March 3, 2016)

Unlike other countries in ASEAN, the development of a national qualifications framework has just been recently started and put as one of the priorities through the Ministry of Higher Education. Although the national qualifications framework has just begun, the government has been very keen on improving the quality assurance system in HEIs through the external quality assurance agency, that is, the ASEAN University Network Quality Assurance (AUNQA) system. This is partly to assure that the quality of education of HEIs is met with the regional reference standard. However, it has been clear that Indonesia has put priorities to issues such as credit transfer systems because the country is focusing on increasing the number of outbound Indonesian students abroad as a starting point towards the regional harmonization of higher education in the region. As stated by a university lecturer in a leading HEI in Indonesia:

To work on the reference points in every area under the regional harmonization is impossible. We have to choose. Student mobility is the key. A credit transfer system is probably one of the urgent priorities. It is a solid base for the harmonization process within the region to get the student moving. (UE-02, personal communication, March 4, 2016)

Malaysia. Malaysia has been very keen on reforming higher education system by launching the Malaysia Higher Education Blueprint 2015–2025 with the key focus on creating innovation and technology through the improvement of education. The country has been preparing for the harmonization of higher education through two key conduits—the strengthening of the linkage between the government, HEIs, and the

industrial sector as well as the improvement of internal university governance. Through the Ministry of Higher Education, a synergy between several national agencies such as the Malaysian Qualifications Agency (MQA) and HEIs has also led to a well-advanced national qualifications framework system in which the point of reference can be referred to not only among national HEIs but also for other HEIs in the region. Also, under the Malaysia Higher Education Blueprint 2015–2025, lifelong learning was also put as one of the most important agendas. As part of a lifelong learning scheme, Malaysia has developed a framework where work experience recognition and accreditation system which support mobility of both students and workforce to continue their education seamlessly.

b. Former Socialist Countries

Vietnam. In Vietnam, the effort to develop higher education system through curriculum reform has been underway and reinforced by the government and HEIs, despite the limitation in student admission and intake. The government has played a major role in increasing the number of student intake into the higher education sector. Vietnam is also very proactive in connecting the needs of the labor market and assure that the needs are reflected through the courses and curriculum. With the government's determination to reform higher education in the country, other measures conforming with the harmonization process are being implemented as well, along with the policy towards internationalization. Vietnam has started the process of developing a national qualifications framework as well as deploying quality assurance under the AUN-QA. As suggested by a government official:

The harmonization process is important to all segments in Vietnam, not only higher education. It has become our national policy objectives. We believe that this process will lead to regional cooperation and the development of comparability system, a point of reference which is important for us to attract more students. Our endeavor to increase the number of programs certified by the AUNQA is an example of us trying to showcase ourselves as qualified educational providers within the region. With the comparable platform, it is easier for us to communicate to other institutions

and international students that we are moving towards the development of quality in education. (GO-04, personal communication, February 15, 2016)

It was echoed by many university administrators that a regional quality assurance framework is the reference point where HEIs in ASEAN could refer to when working and connecting with each other. Together with the involvement with regional and international organizations responsible for higher education, the government has pursued the policy which accommodates the harmonization process, especially in the areas of a qualifications framework and quality assurance. A representative from Vietnam's leading HEI concurred that:

HEIs are the main actors. We develop models. Some of which can be shared at the national and regional level, like quality assurance of international curriculum development. In harmonizing higher education within the region, platforms at the regional level promoted by either the heads of state or by regional organizations whether it is [the] ASEAN Secretariat or the AUN Secretariat, will help provide us the opportunities to share best practices. (UE-01, personal communication, February 16, 2016)

Lao PDR. Lao PDR has launched its educational reform to take part in the process of regional integration through the curriculum revision and the development of the national qualifications framework. The efforts are being pushed by its Ministry of Education and Sports, HEIs, and other advanced educational institutions to improve the teaching and learning quality. The country has also promoted higher education integration through two policy conduits, including the development of academic programs focusing on science and technology and engineering together with the assistance from donor countries and international organizations. The other concrete policy endeavor the country is working on is the effort towards promoting mobility program and through the regional programs supported by regional organizations like the AUN and other bilateral and multilateral efforts with HEIs. The development of a national qualifications framework has also been developed as a trend towards the point of comparability within the region.

As a latecomer, Lao PDR has also been trying to develop its quality assurance system, both the internal and external ones. The Education Quality Assurance Committee, the Higher Education Bureau, and agencies responsible for internal quality assurance are the main actors. Along with the quality assurance which will be taking a long-term approach in developing a mechanism, lifelong learning has been set about as reskilling the workforce. The government has been invested in lifelong learning communities and a recognition system that credited work experience into further education.

Myanmar. Myanmar has put tremendous efforts in revising academic curriculum to be relevant to the changing global and regional higher education landscape. Myanmar has been trying to reform its educational system to establish a learning society as a platform for the onset of lifelong learning, reliable mechanism of national professional certification, and national qualifications framework. Both professional and qualifications frameworks are being utilized as a tool to assure the industries and the regional community. According to Myanmar's national education law, the national qualifications framework has come into play as a quality assurance mechanism. The development of academic programs has been geared towards science and technology as well as enhancing student mobility to increase international exposure of the country's workforce. The establishment and development of the National Accreditation and Quality Assurance Committee (NAQAC) reaffirmed the country's movement towards quality assurance of higher education.

Cambodia. Similar to other developing countries, Cambodia has started its higher education reform with the expansion of the privatization of education since 1997 under the influence of the UNESCO's Education for All to improve the country's workforce and accommodate the needs of economic development. It has been evident that the country's higher education reform and development has been supported simultaneously by the government as well as the international organizations and donor agencies such as the Japan International Cooperation Agency (JICA), the Australian Agency for International Development (AusAID), the European Union (EU), the Asian Development Bank (ADB), the World Bank, and

UN-related organizations through the fragmented structure of supervision spreading across ministries (Un & Sok, 2017). Although the policy rhetoric of how important the harmonization process is echoed among policymakers in Cambodia, the implementation stage is reflecting the contrary as mentioned by a representative from the Ministry of Education, Youth and Sports (MoEYS) below:

Higher education harmonization has long been talked and discussed among policymakers. We all know that it should be incorporated in the overall educational roadmap. We know we all want the reference points within the region. However, a clear understanding among us both in Cambodia and among other countries is still questionable. What the MoEYS could make sense out of it and we [the government] are trying to push it hard is the development of qualifications frameworks and the quality assurance, along with curriculum development. (GO-07, personal communication, April 13, 2016)

However, in other areas apart from the qualifications framework and quality assurance development where the Accreditation Committee of Cambodia (ACC) has been playing a key role, the development of Cambodia in revising its curriculum to be integrated more between public and private institutions as well as between Cambodian institutes and international partners can also be seen. Under the authority of the Curriculum Development Department of MoEYS, the development of teaching and learning as well as the educational research contributed to the improvement of program quality, and the alignment of future collaboration with HEIs in the region is also highlighted.

The country also focuses on mobility program, especially those schemes through regional networks such as the AUN. However, the mobility program has not yet led to the country's attempt to develop a system of credit transfers due to the higher education structure in which HEIs are working under different ministries across the country. As suggested above, Cambodia has ventured upon the promotion of the harmonization process by using the development of the national qualifications framework since 2010 as a starting point. A member of a leading national university stated that:

Before we can harmonize, let's make sure that we have a solid ground to encourage a better educational quality in the system. The national qualifications framework is the key. It helps us as HEIs to be able to identify a clearer set of learning outcomes and international standardized trainings which will lead to the future credit transfer system and the mobility of manpower. The region needs the integration of the qualifications framework first so that we all can use them as a reference point for other higher education collaboration. Without it, I won't trust you; you won't trust me. (UE-09, personal communication, April 15, 2016)

Quality assurance is another area where Cambodia has emphasized as a pathway towards the harmonization of higher education. The country, through the ACC, has been incorporated with regional networks such as the UNESCO and the AUN in developing the quality assurance flows and mechanisms. Since its establishment in 2003, the internal quality assurance programs to encourage the establishment of structure and standard of internal quality assurance among HEIs have been promoted by the ACC. This also includes the establishment of mechanism and self-evaluation process among HEIs based on defined standard, especially in ASEAN priority programs. Staffs of the MoEYS, ACC, and HEIs have been encouraged to attend national and international workshops, training programs, and study visits on higher education quality assurance as part of the promotion of the country's quality system in higher education.

c. Liberal Higher Education System

The Philippines. Since the 1990s, the Philippines has announced its policy agenda to promote the decade of education for all and started the education reform in 1998. The focuses have been placed on teaching and research as well as institutional governance. The emphasis was also placed on the development of science and technology through the support of the Commission on Higher Education (CHED). The reform of education, especially higher education sector, was focused on producing graduates to be in line with the need of the labor market and relevant for the 21st-century development. The government has initially identified the key areas of knowledge concentration

to be agriculture, language and culture, international business, tourism, and science and technology. Higher education institutions in the Philippines have utilized the multilateral platforms efficiently at the regional level in rolling the out collaborative activities.

The country has also focused on developing national qualifications framework and has been playing a leading role in developing quality assurance both through internal and external quality assurance mechanisms, spanning through the assessment at the program and institutional level. The country has also vouched for lifelong learning policy agenda through the active support of the Council for Lifelong Learning in Philippines, the Bureau of Alternative Learning System (BALS) and the launch of the credit transfer system, professional recognition, as well as other bilateral and multilateral collaboration with partners.

Thailand. Thailand has been well prepared with the overall higher education reform and the application of national qualifications framework across the board—from basic education, vocational education, to higher education. Together with the Office of Higher Education Commission (OHEC Thailand), higher education institutions in Thailand have moved towards developing several higher education frameworks leading to an easier integration of higher education activities within the region, including student exchange, executive development programs for higher education, distant learning, research and innovation development and collaboration, as well as other bilateral and multilateral platforms of the AUN, the ASEAN Quality Assurance Network (AQAN), the SEAMEO Regional Center for Higher Education and Development (SEAMEO RIHED), the Association of Pacific Rim University (APRU), and so on. The prime mover of higher education development and reform in Thailand has been the higher education institutions where academic research and student mobility are taking place. Taking into account the governance structure of the country where there are several types of HEIs—ranging from autonomous universities, public universities, private institutions, Rajabhat universities as well as community colleges—the move towards the promotion of the harmonization process, therefore, depends on the capacity and interests of each HEI, as suggested by an official:

It's somehow a beauty of a liberal country where HEIs have got freedom in deciding what to do. HEIs

in Thailand are affected by the changing paradigm of education that leads them to face with the changing environment. I think they are moving towards more collaborations and we as a government agency. We make sure that frameworks and platforms are in place so that they can perform well under the platforms. Another advantage of having many regional networks and organization headquarters in Bangkok should also be factored in. Somehow we feel like we have to really promote the harmonization process as the key players are all here. (GO-10, personal communication, April 30, 2016).

The country also puts efforts into promoting quality assurance among higher education institutions, both through internal and external assessments. The Office for National Education Standards and Quality Assessment (ONESQA) was the key player promoting external QA assessment, while at the same time the country started to introduce the international QA assessment as well as the internationally credited QA assessment under the platform of the AUN (AUNQA) into the main QA mechanism. With the strong foundation in developing key quality assurance and national qualifications framework mechanisms, higher education institutions are well equipped with all liberties to engage in any international collaboration within and beyond the country. The country has also started to raise awareness of lifelong learning as part of the preparation towards the aging society. Under the long-term education development plan (2007–2022), lifelong learning will be the key agenda of education for the future. Many higher education institutions are also responding to the lifelong learning agenda by re-designing its curriculum and courses to match the need of learners, including the use of credit collections and professional credit recognition system.

d. Advanced Westernized Higher Education System

Brunei Darussalam. Brunei has shown a leap forward towards a long-range higher education curriculum reform through its 2035 Plan. The plan encompasses the new policy movement of the new generation of education or also known as *Sistem Pendidikan Negara Abadke-21* or SPN21 of which the prime movers are the Ministry of Education along with private sector working together to determine the

desired curriculum corresponding to the needs of the labor market.

The move towards the development of higher education area from Brunei Darussalam could be seen through the joint curriculum, quality assurance, and accreditation, especially under the platform of regional networks such as the AUN or SEAMEO RIHED while being supported fully by the Ministry of Education, higher education institutions, the Brunei National Accreditation Council (BNDAC), Brunei National Education Council, as well as other governmental agencies. As suggested by academics in Universiti Brunei Darussalam:

We have done a lot as a university to promote student mobility both for inbound and outbound students. We provide scholarships. We make sure that the architecture of our curriculum accommodates the needs of students...to promote the collaborating area in the region. (UE-01, personal communication, May 17, 2016)

Brunei Darussalam has also developed the Brunei Darussalam Qualifications Framework (DDQF) as part of a pathway to promote seamless lifelong learning in the country while developing a system of quality assurance to ensure the improvement of higher education in the country. The BNDAC has been the main actor in developing the quality assurance framework for the country while the government and the Ministry of Education have been promoting lifelong learning through the SPN21 and Brunei's Education Strategies 2035 (Brunei's 2035) as part of the process towards continuing education in ASEAN. Students also voiced out their reflection in the government's initiative to lifelong education as reflected in this interview:

We don't know what the harmonization is, we know only that while we are studying, we definitely concern with credit transfers. We want to go out, but we also want to graduate with our peers. After graduation, we will want to come back to the university from time to time. We wish the university can provide us what it promised, our lifelong education. (ST-03, personal communication, May 23, 2016)

Singapore. The higher education reform in Singapore leading to the harmonization of higher education in the region has been served not on the process per se but to touch base with the world-class higher education system. The government and the Ministry of Education have played important parts in defining the direction of higher education corresponding to the development of the 21st-century market.

The harmonization of higher education in the region, in view of the Singaporean government, could be done through curriculum development and student mobility. The curriculum development has been overseen through three main principles—generic, specific, and selective qualification frameworks. In other words, student mobility is also seen as another instrument for the promotion of higher education harmonization especially through the use of a common mechanism like a common regional credit transfer system, for example, the AUN-ASEAN Credit Transfer System (AUN-ACTS) or the University Mobility in Asia and the Pacific Credit Transfer System (UMAP-UCTS). One of the most interesting features of higher education reform is that the curriculum development has been completed together by the government, HEIs, as well as agencies involved with Singapore's labor market.

The development of the national qualifications framework is also developed mainly by the Singapore Workforce Development Agency (WDA) which is working closely with the industrial sector to help improve professional qualifications framework or Singapore Workforce Skill Qualification. As part of new statutory boards under the purview of the Ministry of Education, the development is seen partly to help promote competencies of the workforce for the region through outcome and competency-based learning system (WDA, 2019). Along with the professional qualifications framework, Singapore has also laid out a quality assurance system in higher education through the Ministry of Education. The quality assurance will help guarantee the quality of programs offered in HEIs so that the credit transfer and student mobility could be undertaken effortlessly. Lifelong learning in Singapore is also the country's national agenda. The School of Continuing and Lifelong Education (SCALE) is one good example of the government's service to provide an education for the workforce to reskill and continue to empower themselves constantly. Another layer of the development of Singapore higher

education is the reform of the system to focus on social aspects towards citizenship and global citizenship as well as the seamless coordination between basic and higher education in building up the core curriculum reform to address social aspects at both levels (Deng, Gopinathan, & Lee, 2013)

Discussion

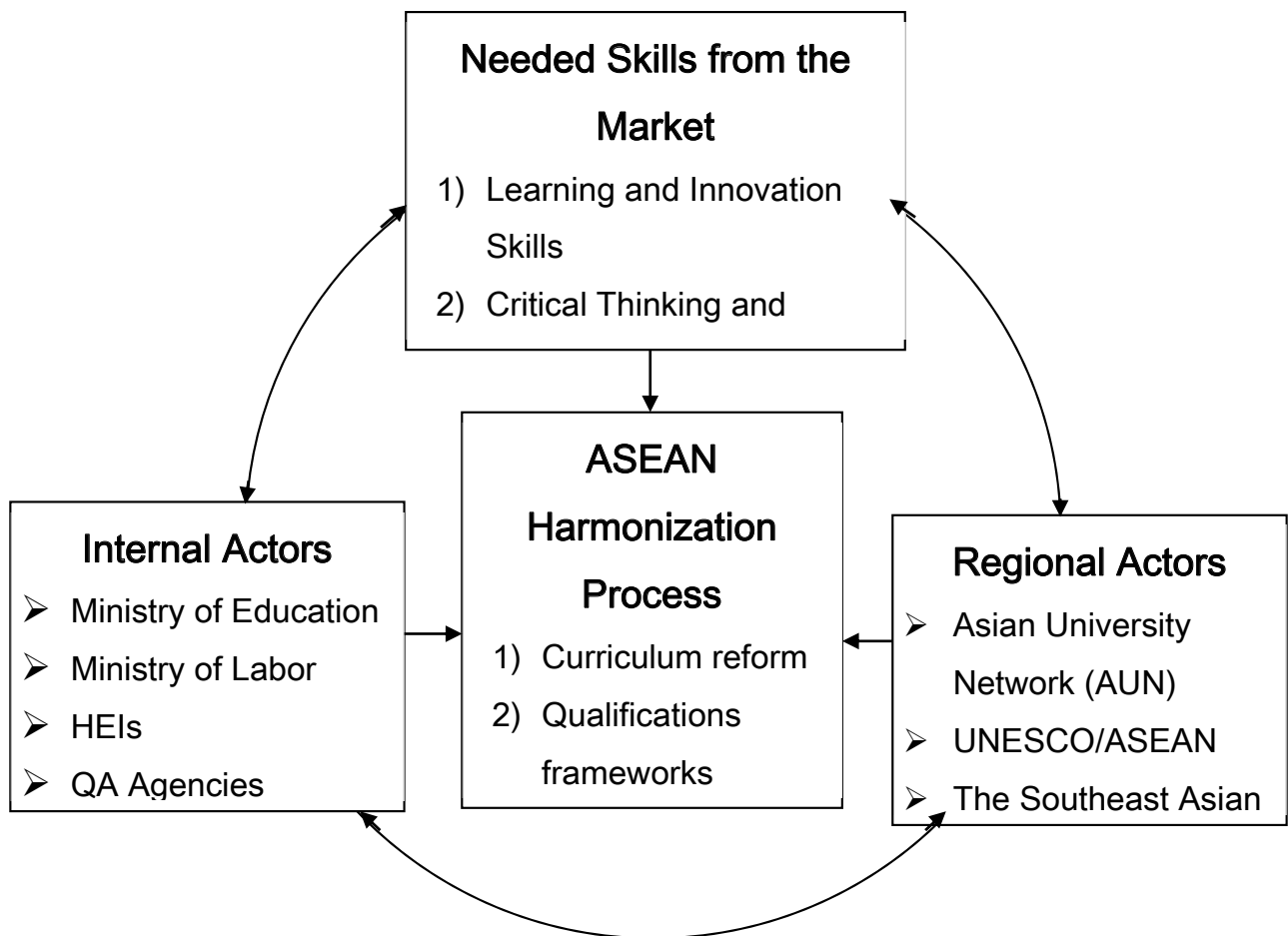
Among the six areas of deeper collaboration in higher education leading to the harmonization process within the region suggested in Table 1, five key areas emerged as prominent in terms of the political will and policy implementation in all countries, both at the national and institutional level, which are curriculum reforms, development of qualifications frameworks, quality assurance, lifelong learning, and credit transfer systems, as indicated in Tables 1 and 2. These areas of system harmonization have been operated under the changing need of the labor market which sets different skillsets required for the new S-curve industries, as seen in many countries such as Thailand and the Philippines (Macaranas, 2007). These skillsets include learning and innovation skills, critical thinking and problem solving, communication, collaboration, and creativity. The process of harmonizing these areas or developing the points of reference and comparability in the region will never have been accomplished if not for the joining supports of both national and regional organizations. Internally, in most countries, Ministry of Education has played a major role as much as higher education institutions in each respective country, as shown in Figure 2 of the triple force that moves forward the harmonization process.

As regards to curriculum development and reform, all the ASEAN countries have pursued the same objectives in trying to upgrade their educational system. With different contexts of the economies, societies and politics, the common route every country is heading towards is to increase access to higher education and ensure that graduates are well equipped with the needs for industrial employability. Human development through education has not been only a means to an end but also an end in itself. Countries like Singapore or Brunei Darussalam have tied their higher education management into producing qualified graduates, whereas other countries are still concerned themselves to use curriculum reforms as a tool to increase access to higher education, especially to provide different

needs of the new segmentation of students who are still in the labor market. The role of the Ministry of Education and HEIs in ASEAN countries has become prominent in revising the curriculum to respond to the needs of the industries and the labor market. As stated by UNESCO (2012), education systems are highly linked with the labor market which should contribute to the translation towards the decision to increase public investment in education, especially in the extent to which how the investment could improve the efficiency of teaching and learning results. The new

imperative in curriculum design and development is to improve the learning process which corresponds to professional practices. Many countries in ASEAN are moving towards the directions of the concept of 21st-century skills, global citizenship, entrepreneurial literacy, and so on (American Association of Colleges of Teacher Education and the Partnership for 21st Century Skills, 2010). The curriculum development and reforms are also increased towards the ones which correspond to the scarce professions as seen in many developing countries.

The development of qualification frameworks in



Source: Authors' Table

Figure 2. The triple force of the harmonization process.

each country is one of the most noticeable attempts of many countries in working towards the degree comparability. Although Europe has been the pivotal region where the regional and national qualification frameworks were being developed, ASEAN has also been moving towards the same direction, especially in the higher education sector. The current move towards developing the professional qualifications framework as well as the subject qualifications framework is also evident in many countries like Vietnam and Thailand. In Thailand, the development of a national qualifications framework has been in place and entirely all-inclusive from basic, vocational, higher, and professional education. In Vietnam, the qualifications framework is focused on the enhancement of lifelong learning and to respond to the industrial sets of skills needed in the labor market. The example is also very prevalent in Singapore where the qualifications framework, the learning outcomes, and the industrial needs are in sync. Although each country has set a different aim in developing a national qualifications framework, the common characteristic is that ASEAN countries are moving towards utilizing national qualifications framework to suit with the changing economic and social development. The professional qualifications framework is another area that will be further developed in the future as each country is more focused on developing a better professional standard. International and regional organizations, such as the UNESCO Bangkok, is also playing an important part in making a bigger impact by developing a regional qualifications framework as a standard point of reference for many countries to turn to.

Quality assurance is the area where the regional development has been put in place through the establishment of external QA agencies within the countries and the development of regional qualification frameworks under the AUN. Many countries have been moving towards developing their external QA agencies to assess the quality of teaching and learning. The movement has been run in parallel with internal QA put forth within higher education institutions. Quality assurance seems to be the system promptly adopted by ASEAN countries to strive for a better improvement of their respective education system. Malaysia, for example, has been moving towards the harmonization process through the national quality assurance actor or the MQA leading to the establishment of the AQAN (Sirat, Azman, & Abu Bakar, 2014). The development

of the regional AUN-QA has also become a major part of the harmonization process within the region. Unlike other areas where the progress has been seen with less coordinated efforts, quality assurance has been driven through the AUN Secretariat and more participants have been recorded in recent years both in terms of the program assessment and training of AUNQA assessors (AUN, 2019).

Lifelong learning, although witnessed as one of the most important policies for the next decade, has not received much attention in ASEAN countries at the policy level. Only higher education institutions in countries like Singapore or Brunei Darussalam have been directed by the government to focus and re-orient their institutional policies to answer to the changing demography and preferences of students as well as their skills needed in the labor market. Most countries, however, do have policy rhetoric about lifelong learning in place reflecting their recognition of the importance of lifelong learning as a tool for the next century to respond the changing labor demography toward aging societies. The importance of HEI's role in providing lifelong education has been pronounced by higher education institutions in Brunei Darussalam and Singapore. Courses are moving towards providing choices and flexibility in education. In Singapore, for example, those who are working in the industries can return to their respective HEIs to register for some courses for free to reskill and upskill themselves. Others are moving towards revision curriculum for more flexibility and increasing other platforms for teaching and learning, including online and e-learning (Bhunja, 2018).

Finally, the area of knowledge or the physical space where students can move around to create experiential learning and multicultural learning experience cannot be done without efficient credit transfer and recognition systems. Many countries in the region started with the promotion of internationalization policy within the country and institutions. Vietnam, for example, has promoted internationalization of higher education through staff and student mobility which later led to the interest in identifying specific areas of mobility, also known as Project 322 (Nguyen, 2009). While Europe has installed the European credit transfer system within the region, ASEAN has developed a few systems which are still not widely used as a central system to promote credit-bearing mobility. Apart from the credit transfer and recognition system, many countries,

Table 3*Summary of Harmonization Indicators in Each Country*

Indicators	Curriculum reform	Qualifications frameworks	Quality assurance	Lifelong Learning	The social dimension	Partnership / Credit Transfer
Countries						
Brunei Darussalam	•	•	•	•		•
Cambodia	•	•	•	•		•
Indonesia	•	•	•	•		•
Lao PDR	•	•	•	•		•
Malaysia	•	•	•	•		•
Myanmar	•	•	•	•		•
Philippines	•	•	•	•		•
Singapore	•	•	•	•	•	•
Thailand	•	•	•	•		•
Vietnam	•	•	•	•		•

Table 4*Actors Involved in the Promotion of the Harmonization of Higher Education in ASEAN*

Actors	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Countries																
Brunei Darussalam	•	•		•	•	•	•	•								•
Cambodia	•	•			•	•		•		•	•	•	•	•		•
Indonesia	•	•	•		•	•	•*	•	•		•					
Lao PDR	•	•			•			•							•	•
Malaysia	•	•			•	•	•	•								•
Myanmar	•	•			•	•	•	•								•
Philippines	•			•	•	•	•	•								•
Singapore	•				•	•	•	•								•
Thailand	•	•		•	•	•	•*									•*
Vietnam	•	•			•		•*									•

Notes: 1 = Ministry of Education, 2 = Ministry of Labor, 3 = Ministry of Technology and Higher Education (generic term), 4 = Higher Education Committee, 5 = higher education institutions, 6 = higher education framework councils or agencies, 7 = ASEAN University Network, 8 = the United Nations Educational, Scientific and Cultural Organization (UNESCO), 9 = the Organization for Economic Co-operation and Development (OECD), 10 = the Asian Development Bank (ADB), 11 = the World Bank, 12 = the European Union, 13 = the Australian Agency International Development (AusAID), 14 = Japan International Cooperation Agency (JICA), 15 = the United Nations, 16 = the Southeast Asian Ministers of Education Organization (SEAMEO)

especially those advanced and liberal countries, are moving towards increasing the number of joint or double degree programs or towards joining more systematically by opening up for foreign university establishment within the country like Singapore and Thailand.

All in all, the process towards the harmonization of higher education in ASEAN will still be ongoing with some mechanism more advanced than others. Quality assurance and national qualifications framework, both at the national and regional level, will be the two leading mechanisms providing reference points and guideline for the improvement of higher education in the region. Curriculum revision will still be the responsibility of higher education institutions without much interference by the national government, especially in liberal countries. On the other hand, the credit transfer system and concrete policies towards lifelong learning will still need more debates and implementation at the regional level. The development of reference points in these areas and mechanisms clearly shows the common determinants of success, that is, the policy direction from the government, the involvement of higher education institutions, and the support from regional organizations.

Acknowledgment

This study was supported by the Office of Higher Education Commission under the National Research University Project between 2016–2018.

References

- American Association of Colleges of Teacher Education and the Partnership for 21st Century Skills. (2010). *21st century skills early learning framework*. Retrieved from <http://www.battelleforkids.org/networks/p21>
- Association of Southeast Asian Nations. (2008). *ASEAN economic community blueprint*. Jakarta: ASEAN Secretariat.
- ASEAN University Network. (2019). *Brief introduction and types of training*. Retrieved from <http://www.aun-qa.org/Training-PublicRun>
- Baldwin, R. (2013). *Changing practice by reform: The recontextualization of the Bologna Process in teacher education* (Unpublished Doctoral dissertation). Universitas Gothenburgensis, Goteborg. Retrieved from <http://hdl.handle.net/2077/32962>
- Bhunias, P. (2018, March 7). Singapore government aims to develop lifelong learners in preparation for dynamic future. *OpenGov Asia*. Retrieved from <https://www.opengovasia.com/singapore-government-aims-to-develop-lifelong-learners-in-preparation-for-dynamic-future/>
- Corbett, A. (2006). *Higher education as a form of European integration: How novel is the Bologna Process?* (Arena Working Paper No. 15). Retrieved from <https://goo.gl/HgRsah>
- Corbett, A. (2011). Ping pong: Competing leadership for reform in EU higher education 1998-2006. *European Journal of Education*, 46(1), 46–53.
- Dang, Q. A. (2015). The Bologna Process goes East? From ‘Third Countries’ to prioritizing inter-regional cooperation between the ASEAN and EU. In A. Curaj, L. Matei, R. Pricopie, J. Salmi, & P. Scott (Eds.), *The European higher education area: Between critical reflections and future policies* (pp. 763–806). New York: Springer.
- Deng, Z., Gopinathan, S., & Lee, C.K. (2013). *Globalization and the Singapore curriculum: From policy to classroom*. Singapore: Springer.
- Dhirathiti, N. (2012). *Administration and governance of higher education in Asia: Patterns and implication*. Manila: Asian Development Bank.
- Elken, M., & Vukasovic, M. (2014). Dynamics of voluntary coordination: Actors and networks in the Bologna Process. In M. Chou & A. Gornitzka (Eds.), *Building the knowledge economy in Europe: New constellations in European research and higher education governance* (pp. 131–159). Cheltenham: Edward Elgar.
- European University Association. (2007). *Trend V: Universities shaping the European higher education area*. Brussels: Author.
- Hou, A. Y., Hill, C., Chen, K. H., Tsai, S., & Chen, V. (2017). A comparative study of student mobility programs in SEAMEO RIHED, UMAP, and Campus Asia: Regulation, challenges, and impacts on higher education and development. *Higher Education Evaluation and Development*, 11(1), 2–24.
- Kuroda, K., Sugimura, M., Kitamura, Y., & Asada, S. (2018). *Internationalization of higher education and student mobility in Japan and Asia* (Background paper prepared for the 2019 Global education monitoring report). Retrieved from https://www.jica.go.jp/jica-ri/publication/other/175nbg00010mg5u-att/Background_Kuroda.pdf
- McMahon, W. W. (2009). *Higher learning, greater good: The private & social benefits of higher education*. Retrieved from [http://1st-iiiep.iiiep-unesco.org/cgi-bin/wwwi32.exe/\[in=epidoc1.in\]/?t2000=027209/\(100](http://1st-iiiep.iiiep-unesco.org/cgi-bin/wwwi32.exe/[in=epidoc1.in]/?t2000=027209/(100)

- Macaranas, F. M. (2007). *Lifelong learning in the Philippines*. Manila: ILO Philippines.
- Nguyen, T. A. (2009). *The internationalization of higher education in Vietnam: National policies and institutional implementation at Vietnam National University, Hanoi*. Retrieved from <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.463.9058&rep=rep1&type=pdf>
- Pasque, P. (2010). *Critical issues and the public good*. New York: Palgrave Macmillan.
- Rami, J. (2012). *The impact of Europe's Bologna Process on the development of learning and assessment in the context of a higher education institution in Ireland*. Dublin: Dublin City University.
- Sirat, M., Azman, N., & Bakar, A. A. (2014). *Towards harmonization of higher education in Southeast Asia: Malaysia's perspective*. Retrieved from <https://globalhighered.wordpress.com/category/regionalism>
- Sugimura, M. (2012). Possibility of East Asian integration through the regional networks and universities' cooperation in higher education. *Asian Education and Development Studies, 1*(1), 85–95.
- Un, L., & Sok, S. (2017). Higher education systems and institutions, Cambodia. In P. Teixeira and J. C. Shin (Eds.), *Encyclopedia of international higher education systems and institutions* (pp. 1–10). Amsterdam: Springer Netherlands. doi: 10.1007/978-94-017-9553-1_500-1
- UNESCO. (2012). *Youth and skills: Putting education to work*. Paris: Author.
- WDA. (2019). *SkillsFuture Singapore and workforce Singapore*. Retrieved from <http://www.ssg-wsg.gov.sg/about.html>
- Yagci, Y. (2010). A different view of the Bologna Process: The case of Turkey. *European Journal of Education, 45*(4), 588–600.