



“ASEAN Economic Community and its impacts: Opportunities, challenges, and implications for higher education”

AUTHORS	Amporn Sa-ngiamwibool Kittipol Wisaeng 
ARTICLE INFO	Amporn Sa-ngiamwibool and Kittipol Wisaeng (2021). ASEAN Economic Community and its impacts: Opportunities, challenges, and implications for higher education. <i>Problems and Perspectives in Management</i> , 19(3), 247-260. doi: 10.21511/ppm.19(3).2021.21
DOI	http://dx.doi.org/10.21511/ppm.19(3).2021.21
RELEASED ON	Thursday, 09 September 2021
RECEIVED ON	Thursday, 13 May 2021
ACCEPTED ON	Wednesday, 11 August 2021
LICENSE	 This work is licensed under a Creative Commons Attribution 4.0 International License
JOURNAL	"Problems and Perspectives in Management"
ISSN PRINT	1727-7051
ISSN ONLINE	1810-5467
PUBLISHER	LLC “Consulting Publishing Company “Business Perspectives”
FOUNDER	LLC “Consulting Publishing Company “Business Perspectives”



NUMBER OF REFERENCES

51



NUMBER OF FIGURES

2



NUMBER OF TABLES

8

© The author(s) 2021. This publication is an open access article.



BUSINESS PERSPECTIVES



LLC "CPC "Business Perspectives"
Hryhorii Skovoroda lane, 10,
Sumy, 40022, Ukraine
www.businessperspectives.org

Received on: 13th of May, 2021

Accepted on: 11th of August, 2021

Published on: 9th of September, 2021

© Amporn Sa-ngiamwibool, Kittipol Wisaeng, 2021

Amporn Sa-ngiamwibool, Ph.D.,
Assistant Professor, Maharakham
Business School, Maharakham
University, Thailand.

Kittipol Wisaeng, Dr., Assistant
Professor, Maharakham Business
School, Maharakham University,
Thailand. (Corresponding author)

Amporn Sa-ngiamwibool (Thailand), Kittipol Wisaeng (Thailand)

ASEAN ECONOMIC COMMUNITY AND ITS IMPACTS: OPPORTUNITIES, CHALLENGES, AND IMPLICATIONS FOR HIGHER EDUCATION

Abstract

The vision of the ASEAN Economic Community (AEC) envisaged as a global ASEAN has impacts on all sectors, including higher education (HE), a key driver to the goal. However, it is still debatable whether HE can achieve it. This study aimed to draw insights into its impacts with a focus on opportunities, challenges, and implications for HE. This study employed qualitative, comparative, interpretive, and in-depth analysis of documents. The findings revealed that the progress of AEC has a great impact on HE in three areas. Prospective opportunities comprise the services sector and internal cooperation and collaboration. The sector accounted for approximately 50% of the real output in 2018. The top three countries were Singapore (68.9%), Thailand (59.9%), and the Philippines (57.8%). However, a crucial challenge is an inequitable access to digital-driven education due to inequitable access to the Internet among member countries. The gaps of subscribers and cellular phones lie between 94.6 and 33.1 and between 180.2 and 51.9 respectively. Singapore, the regions' best education and labor mobility destination, has the highest rates of subscribers (100) and cellular phone usage (88.2). For implications, policymakers should foster interconnectivity and digitalization through innovation-driven education. A feasible roadmap for strategic management is also proposed for AEC engagement.

Keywords interconnectivity, digitalization, capacity-building, ICT in education

JEL Classification I21, I23, I28

INTRODUCTIONS

AEC has had enormous impacts on the economies of the ten member countries, including higher educational services. As AEC has been gearing towards more strengthening cooperation and the global ASEAN in 2025, it is necessary for HE to carefully investigate the impacts of the post-2015 AEC to gain insights into its impacts focusing on key opportunities, challenges, and implications to propose a more strategic roadmap for AEC engagement. As HE is integral to the progress of AEC, HE policymakers of more than 7,000 universities in the region (Peak et al., 2018) should have a clear understanding of its impacts to strategically manage their institutions to success.

1. LITERATURE REVIEW

Te et al. (2018) and Batalova et al. (2017) have shown that ASEAN economic integration has potential impacts on the economy and business of the region and each member country. This study, therefore, focused on the impacts in three areas (namely opportunities, challenges, and implications for HE). The literature review discusses key factors



This is an Open Access article, distributed under the terms of the [Creative Commons Attribution 4.0 International license](https://creativecommons.org/licenses/by/4.0/), which permits unrestricted re-use, distribution, and reproduction in any medium, provided the original work is properly cited.



Conflict of interest statement:

Author(s) reported no conflict of interest

regarding each area and offers insights into the background of this study.

Several scholars agreed that AEC offers opportunities in relation to these key factors. One major factor is its global engagement. Hill and Menon (2014) indicated that the countries (e.g., Malaysia, Singapore, and Thailand) that are always open to the global and regional economy have shown higher progress than other countries (e.g., Indonesia, Myanmar, Vietnam, Laos, and Cambodia) that disengage from the global economy. Similarly, Cripps and Khurasee (2016) found that global trades and financial networks account for the economic inequity in this region. Singapore, Malaysia, and Thailand have demonstrated unlimited participation in global networks so their economies progress impressively while, due to their limited participation, the Philippines and Indonesia have modest economic progress although they have followed the same path. Similarly, the new members like the CMLV group (namely Cambodia, Myanmar, Laos, and Vietnam) are the least economically successful countries.

Another key factor that has enormous impacts on economic integration is its widening and deepening connectivity, especially physical connectivity. Chia (2016) found that an analysis of economic integration often fails to highlight the role of the delivery of physical goods and trade and investment liberalization makes people mobility possible, especially in geographically dispersed regions like ASEAN.

The last major factor is its deepening and strengthening economic cooperation. Aldaba and Aldaba (2013), for example, examined the capacity-building needs as required by Mutual Recognition Agreements (MRAs) in 7 careers (namely accountancy, architecture, dental practice, engineering, land surveying, medical, and nursing). This study revealed that, when compared to trade in goods, its overall progress in service liberalization was modest due to several barriers (namely constitutional restrictions, governance issues, limitations on equity participation, practice of professions, insufficient infrastructure, high costs of running business, and limitations imposed on foreign service providers). This study, therefore, defined a feasible plan for a variety of services sectors to pro-

mote the cooperation and collaboration mechanisms between public agencies and private sectors.

Considering the achievements of the post-2015 AEC, the economy and business of all member countries fully and partially gained opportunities both at the macro and micro levels: worker mobility (Batalova et al., 2017), free flow of skilled labor (Luz, 2014; Huelser & Heal, 2014), the flow of trade, goods, service and investments (Rivera & Lagdameo, 2013), micro, small and medium enterprises (MSMEs) (Rüland, 2016), integration of trade and investment as an important step for the progress of regional economic integration (Das, 2015), impact of trade liberalization with a focus on twelve industry sectors in ASEAN-5 (including Singapore, Malaysia, Indonesia, Thailand, and the Philippines) (Vineles, 2017), business systems (Lim, 2017), marketing business (Verhezen et al. 2016), increase in investment climate (Bhaskaran, 2013), connectivity to a wider economic context (Abonyi, 2012), ASEAN integration and beyond (Das, 2015), and directions that ASEAN is moving towards (Azis, 2018; Chia & Plummer, 2015).

To achieve the goal of AEC, there are remaining challenges. Numerous studies investigated the challenges, including past successes and future challenges of AEC (Hui & Kiesha, 2016), remaining challenges (Menon & Melendez, 2017), challenges within a changing context (Austria, 2013), labor market prospects and challenges (Hoàng, 2013), conflicts of interest (Yean & Das, 2015), the challenge of innovation-micro view (Abonyi, 2012), problems of regional integration (Onyusheva et al., 2018), opportunities, challenges and implications of ASEAN (Rana & Ardichvili, 2014), struggling with Southeast Asia's regional corporatism (Rüland, 2016), and challenges of regional integration for the internationalization (Moussa & Kanwara, 2015).

Major challenges involve capacity-building (Aldaba & Aldaba, 2013) and skill development (Papademetriou et al., 2015). Bangun (2014) noted that human capital had significant impacts on the economic growth and HE enrollment as compared to primary and secondary education has the most positive impacts on the regional economy because AEC demands higher skills for transforming into global ASEAN.

Human development directs toward worker mobility to meet the regional qualifications and professional standards. A major challenge, among many, to worker mobility, is related to policies at different levels. At the macro level, work mobility needs regional and national supports. Te et al. (2018) investigated the effects of health-related MRAs on the mobilization of medical practitioners and found that the mobility of health workers and the implementation of any health-related MRA need to be enhanced. This must be supported by a stronger political commitment and higher-level trade and immigration policies.

Papademetriou et al. (2015) highlighted similar potential challenges faced by professionals (namely, the complexity of the qualification process, national-level barriers, and perceived cultural, language, and socio-economic obstacles). A practical model for establishing a unified standard through professional certification examination by chartered professional associations was therefore proposed to overcome these impediments.

To reduce detrimental challenges and optimize the opportunities offered by AEC, Wallar (2014) proposed effective implementation of ASEAN agreements and more engagement with the private sector, developing regional rules in key areas (e.g., investment, finance, customs, and competition policy for implementation in the private sector).

Effective implementation can reduce challenges to work mobility and other kinds of regional cooperation at the micro-level can be done through the promotion of quality education, especially higher education. As HE is the key driver to human capital development, higher education institutions (HEIs) in this region can help optimize the opportunities and enhance the competitiveness of AEC. Several studies indicate that the regional economic transformation and HE have reciprocal impacts on each other. For example, Pyakurel (2014) emphasized the impacts of ASEAN policy on HE and the job market while Tullao and Cabuay (2015) focused on the role of education in workforce development and innovation development in ASEAN by suggesting improvements in the engineering technical skills; exploring collaborations between engineering institutions and professionals, lessons

from the advanced economy on upskills, reskills, and soft skills development of would-be engineers and innovative perspectives to their country's development. To develop workforces, HE can provide quality education and equity through ICT and digital connectivity (The Head Foundation, 2017; UNESCO, 2015; SEAMEO, 2010; ADB, 2009, 2011).

To enhance effective implementation conducive to the goal of AEC, HE must look at the global and regional trends as they have enormous impacts on HE policies. Among the major trends, globalization and internationalization lie on the top and have strong impacts on HE in this region. For example, with reference to Grapragasem et al. (2014) who explored trends in HE in Malaysia, which is considered as the top international HE and transnational education (TNE) among the ten member countries, and the impacts of AEC on education policy and practice, four main trends that HE in this region should pay attention include pedagogy, governance, internationalization, and knowledge-based society. In addition, this study indicates that four elements that have strong impacts on HE policy and implementation are quality assurance, academic, English language proficiency, and employability.

Although there are many investigations about the impacts of AEC on the regional economy and business, less information about the impacts of AEC on HE service is known. Information about the insightful impacts on HE future direction is even scantier. AEC has progressed impressively to achieve its goal of becoming a global ASEAN, HE needs to pay close attention to this changing ecology to optimize the opportunities that AEC offers and prepare for the future.

2. OBJECTIVES AND RESEARCH QUESTIONS

Thus, this present study purposefully sought to describe, interpret, analyze, synthesize and evaluate this regional economic integration to draw an insightful understanding of how this integration has had impacts on HE business in

this region to pinpoint prospective opportunities, potential challenges, and policy implications, which would provide a strategic management roadmap for proactive HEIs in AEC engagement. The objective of this study was carried out within the framework of the following guiding central research question: What are the impacts of AEC on HE? Following the central question, an issue-oriented sub-question was formulated within the framework of the central question to call for information needed for insightfully illustrating and understanding the central question: What are the opportunities, challenges, and implications of AEC for HEIs?

3. METHODOLOGY

Key terms in the aim of the study, the central research question and the guiding sub-question were defined. The data elicitation followed this procedure: first, analyzing the opportunities that AEC offers and potential challenges that HE services have been facing in AEC engagement; second, synthesizing insights, initiatives, and lessons from the best practices in the region; third, highlighting the key implications for HE services for less developed member countries. In addition, a cross-national comparative analysis of documents was purposefully selected for intertwining contributions. This analysis explored phenomena across the ten member countries intending to identify similarities and differences of selected issues to determine practical strategies. Comparison helped reach a greater scope of in-depth understanding and diverse perspectives regarding the issues under analysis to help improve HE performances with solid

evidence. A management approach was also applied to draw a set of strategic visions for HE management in the areas where policy dialogue is critical for improving HE performance and further discussions on envisaged policy implementation. This analysis was limited to the impacts of AEC from 2015 to 2020. Figure 1 shows the framework of this study.

This study followed the studies by Davidson and Gregorio (2011), and Denzin and Lincoln (2011), as the approach is flexible, inductive, iterative, and fundamentally involving the process of exploring, interpreting, and logically making sense of the data based on comparative perspectives. The data analysis process borrowed the approaches proposed by Remler and Van Ryzin (2010). Drawn upon these studies, the coding system involved identifying and grouping data in the text that explained the same concept. The data analysis process followed these steps as Figure 2 shows.

The reliability and validity checks were purposefully assigned to ensure every step of the process. To construct credibility, this study relied on primary sources and official, authentic, and reliable documents and secondary ones from various sources (if consistent) were supports for a reliability check. Key terms were meaningfully defined for construct internal validity check. A confirmability check was achieved through the consistency of various documents within the same context. The coding process was systematically planned. The results of coding were compared by three experts based on triangulation to sustain construct reliability and validity check.

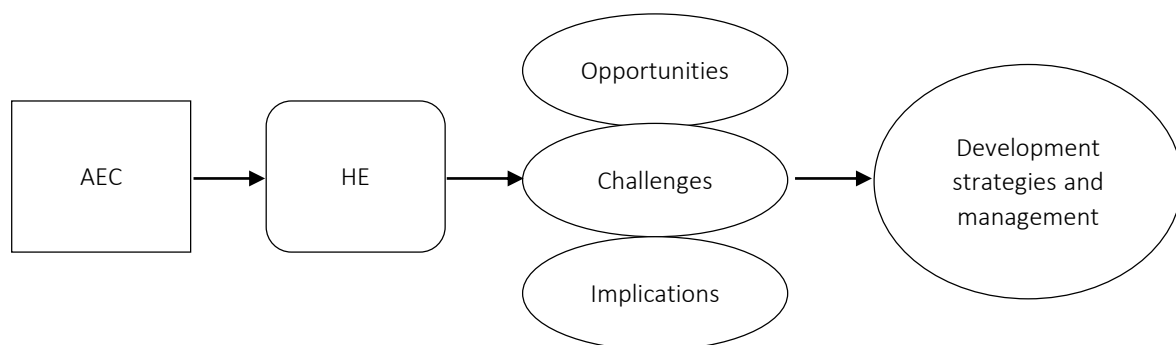


Figure 1. Framework of the study

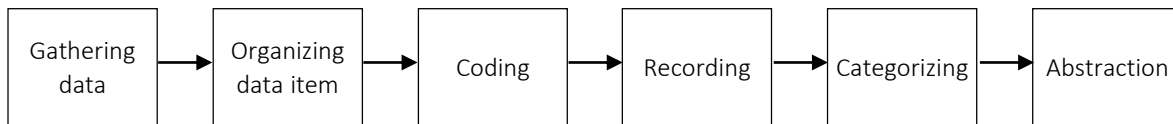


Figure 2. Data collection and analysis process

4. EMPIRICAL RESULTS

To optimize the opportunities that AEC offers, HE needs to focus on the progress and achievements of AEC post-2015, which can be summarized as shown in Table 1.

Drawing upon the progress and achievements of the AEC 2015, connectivity and sectoral cooperation enhancement is thus considered as the key characteristics for the growth of AEC. Among its progress and achievements (namely transport, ICT, e-commerce, energy, FAF, and S&T), the key engine that HE should focus on is the services sec-

tor as it accounts for half of the region's total GDP in 2018, about \$3.0 trillion, which is the largest share of ASEAN's GDP, and this sector will continue to grow and be a key engine in the region.

In addition, HE should pay close attention to this sector because it accounted for nearly half of the real output and provided good employment opportunities as shown in Table 2.

Table 2 shows the output of real GDP and employment ASEAN services sector compared to agricultural and industrial sectors. Compared to the other two sectors, the sum of the real GDP

Table 1. A summary of progress of the post-2015 AEC

Source: ASEAN (2017).

Characteristics of the post-2015 AEC	Progress and achievements
Integrated and Cohesive Economy	Trade-in goods, trade facilitation, customs cooperation, standards and conformance, trade in services
Competitive, Innovative, and Dynamic ASEAN	Well-functioning markets, rules on competition, intellectual property (IP)
Connectivity and Sectoral Cooperation Enhancement	ICT, electronic commerce (e-commerce), energy, tourism, food, agriculture, and forestry (FAF), science and technology (S&T)
A Resilient, Inclusive, People-Oriented, and People-Centered ASEAN	MSMEs, such as the ASEAN Online Academy (ASEAN-OA), ASEAN Business Incubator Network (ASEAN-BIN), and the ASEAN Mentorship for Entrepreneurs (ASEAN-ME)
Enhancing External Economic Relations	Free trade and investment agreements, work plan for AANZFTA, upgrade negotiations, the ASEAN-Japan Comprehensive Economic Partnership (ASEAN-JCEP) by all AMS to incorporate the chapters on services, investment, and Movement of Natural Persons
The Fourth Industrial Revolution	The Fourth Industrial Revolution (4IR)

Table 2. Output of real GDP (2018) and employment in ASEAN sectors: agriculture, industry, and services

Source: Menon et al. (2019).

Country	Output			Employment	
	% of real GDP			% of women employment	
	Agriculture	Industry	Services	Industry	Services
Brunei	0.8	62.9	38.0	9.0	90.5
Cambodia	16.3	32.1	43.1	24.7	44.9
Indonesia	12.5	39.8	43.6	17.0	55.5
Laos	15.4	37.9	42.1	6.5	23.7
Malaysia	7.3	37.5	54.0	19.6	73.8
Myanmar	24.6	32.1	43.2	15.3	39.8
Philippines	8.1	34.1	57.8	9.8	75.9
Singapore	0.0	25.1	68.9	11.8	88.0
Thailand	6.2	35.4	59.9	20.0	50.9
Vietnam	14.3	35.6	38.8	21.7	37.2

Table 3. Services sector in ASEAN and selected indicators

Source: Menon et al. (2019).

Sector	ASEAN service trade				Intra- ASEAN service trade			
	Value, USD billion		Share to total ASEAN, in %		Value, USD billion		Share to intra-ASEAN, in %	
	2010	2018	2010	2018	2010	2018	2010	2018
Manufacturing on physical inputs	5.8	24.3	1.3	3.1	0.8	3.3	1.0	2.7
Maintenance and repair	7.8	9.9	1.8	1.3	1.0	1.1	1.3	0.9
Transport	134.5	190.1	30.6	24.4	16.7	20.8	20.7	17.0
Travel	114.7	217.9	26.1	28.0	39.8	54.4	49.2	44.5
Construction	7.0	8.2	1.6	1.1	1.3	2.1	1.6	1.7
Insurance and pension	12.0	18.5	2.7	2.4	1.8	3.8	2.3	3.1
Finance	17.8	40.0	4.1	5.1	1.7	2.9	2.1	2.4
Charges for the use of intellectual property	25.7	34.8	5.9	4.5	0.9	1.8	1.1	1.4
Telecommunications, computer, information	17.0	48.5	3.9	6.2	3.4	6.8	4.2	5.6
Other business	92.0	179.3	20.9	23.0	12.8	23.9	15.9	19.6
Personal, cultural, and recreations	1.6	3.4	0.4	0.4	0.3	0.8	0.3	0.7
Government goods and services	3.2	3.8	0.7	0.5	0.3	0.4	0.4	0.3
Total	439.2	778.6	100.0	100.0	81.0	122.1	100.0	18.4

shares of services makes up nearly half of the real output. Countries that received higher shares were Singapore (68.9%), Thailand (59.9%), the Philippines (57.8%), and Malaysia (54.0%) respectively. Compared to the industrial sector, the sum of the women employment accounts for more than half of employed workforces in every country, some of which received higher shares such as Brunei (90.5%), Singapore (88.0%), the Philippines (75.9%), and Malaysia (73.8%) respectively.

Thus, in terms of the services sector, HE needs to focus on these prospective opportunities. Above all, HE in the ten countries should pay more attention to the services sector education than agriculture and industry education. The countries with higher shares (namely Singapore, Thailand, the Philippines, and Malaysia) may optimize more opportunities from the services sector. In addition, women workforce in all countries, especially the workforce in countries with higher shares (namely Brunei, Singapore, the Philippines, and Malaysia) have a higher job opportunity in the services sector than the industrial sector. HE in Singapore, Thailand, the Philippines, Malaysia, and Brunei should prepare their students for intraregional skilled labor mobility by providing knowledge and work-related skills as required by the regional standards, revolving around services sector labor mobility provisions, especially MRAs which allow working outside their home country. In detail,

values, and shares of service trade that AEC offer might shed some light on what sub-sectors that HE may have a closer look into as shown in Table 3.

Table 3 shows the value and share of selected indicators of ASEAN services trade and intra-ASEAN service trade, in 2010 and 2018. Overall, the values increased in all sectors. For trade-in service, the sub-sector shares increased in these sectors: manufacturing services; maintenance and repair; travel; finance; telecommunications, computer, and information; and other business. For intra-ASEAN services trade, the sub-sector shares to total ASEAN increased in these sectors: manufacturing on physical inputs; insurance and pension; finance; charges for the use of intellectual property; telecommunications, computer, and information; other business; and personal, cultural, and recreations.

Thus, in engaging with opportunities that AEC offers regarding ASEAN services sector, HE in the ten countries needs to focus on pedagogy and work-related skills these crucial areas: manufacturing on physical inputs; insurance and pension; maintenance and repair; travel; finance; charges for the use of intellectual property; telecommunications, computer, and information; other business; and personal, cultural, and recreations. The focus should involve capacity-building and upskill and reskill training relating to ASEAN-driven professions.

Table 4. Universities in ASEAN University Network (AUN)

Source: ASEAN (2012).

Country	University
Brunei	Universiti Brunei Darussalam (UBD)
Cambodia	Royal University of Phnom Penh (RUPP) and Royal University of Law and Economics (RULE)
Indonesia	Universitas Gadjah Mada (UGM), Universitas Indonesia (UI), Institut Teknologi Bandung (ITB) and Universitas Airlangga (UA)
Laos	National University of Laos (NUOL)
Malaysia	National University of Malaysia (UKM), Prince University of Malaysia, Northern University of Malaysia (UUM), Science University of Malaysia (USM), and University of Malaya (UM)
Myanmar	University of Yangon, Yangon University of Economics (YUECO), and University of Mandalay
Philippines	University of the Philippines (UP), De La Salle University (DLSU) and Ateneo de Manila University (ADMU)
Singapore	National University of Singapore (NUS), Singapore Management University (SMU), and Nanyang Technological University (NTU)
Thailand	Mahidol University (MU), Chulalongkorn University (CU), Chiang Mai University (CMU), Prince of Songkla University (PSU), and Burapha University (BU)
Vietnam	Vietnam National University (VNU) and Ho Chi Minh City (HCMC)

In addition to the services sector professions mentioned above, HE still needs to focus on the mainstream of ASEAN and commits to providing educational services conducive to MRA-covered standards and other areas of interest to ASEAN. MRAs allow for eight services professions i.e., accountancy, architecture, engineering, dental practitioners, medical practitioners, nursing, tourism professionals (and thirty-two tourism-related professions), and surveyors. These include e-commerce, energy, FAF, healthcare, ICT, minerals, MSMEs, tourism, transportation, and S&T.

Thus, to maximize the opportunities offered by AEC, HE must ensure quality education, build the capacity, and promote timely higher work-related upskill, reskill, and on-demand training as required by MRA certifications of qualifications and regional standards conducive to AEC provisions. To do so, HE in slow progress economies may seek cooperation offered by ASEAN such as ASEAN University Network (AUN) as shown in Table 4.

Table 4 shows the network among universities under ASEAN University Network (AUN) as offered to enhance education cooperation which HE in slow progress economies can learn lessons from. Thus, HE in slow progress economies may develop cooperation that widens restricted access for academics to the regional professional assistance due to demographic and other differences among countries. This cooperation will also build up unified standards in the HE system. In detail, HE in slow progress economies may seek collaboration with a specific focus on disciplines as shown in Table 5.

Table 5 shows top ASEAN universities in publication growth rate and in-region collaboration in selected countries (Singapore, Malaysia, and Thailand) in a wide variety of disciplines as shown in the table. Thus, HE can build collaboration for capacity-building and upskill and reskill training for the eight services professions in MRAs (namely accountancy, architecture, engineering, dental practitioners, medical practitioners, nursing, tourism professionals, surveyors) and other related professionals (including ICT, science and technology, energy, minerals, FAF, healthcare, e-commerce, MSMEs, and transportation). HE can also develop a research and innovation center for capacity-building and the services professions for AEC engagement.

To optimize the aforementioned AEC-offered opportunities especially intra-ASEAN cooperation and collaboration, HE needs to overcome the challenges by enhancing digital connectivity. Such digital connectivity will certainly be more critical for economic progress and educational development in the future as the ICT sector is a key driver of digital transformation and innovation in other key sectors (e.g., industry and agriculture). Realizing the challenge, ASEAN, therefore, declared ASEAN Declaration on Industry Transformation to Industry Revolution 4.0 (4IR) to reaffirm the regional commitment to developing a combined strategy on 4IR to drive the region's digital transformation and innovation (during ASEAN Economic Community Council Meeting, October 2019). As a result, access to the ICT education services is one of the key indexes

Table 5. Top ASEAN universities in publication growth rate and in-region collaboration in selected countries

Source: Bhandari and Lefebure (2015).

Discipline	Highest publication growth rate	Highest in-region collaboration
Agricultural and biological sciences	Universiti Malaya (UM) (MAL), Universiti Sains Malaysia (USM) (MAL), Universiti Putra Malaysia (UPM) (MAL) and Universiti Teknologi Malaysia (UiTM) (MAL)	Chiang Mai University (CMU) (THAI), Chulalongkorn University (CU) (THAI), UPM (MAL), Kasetsart University (KU) (THAI), USM (MAL), and UM (MAL)
Biochemistry, genetics, and molecular biology	International Islamic University Malaysia (IIUM) (MAL), UM (MAL), UPM (MAL), USM (MAL), UiTM (MAL)	
Chemistry	UM (MAL), UPM (MAL), UiTM (MAL) and Universiti Kebangsaan Malaysia (UKM) (MAL)	UM (MAL), USM (MAL) and Prince of Songkla University (PSU) (THAI)
Computer sciences	UPM (MAL), UiTM (MAL) and UKM (MAL)	
Earth and planetary sciences	Nanyang Technological University (NTU) (SIN) and UPM (MAL)	
Economics and business science	UM (MAL), UPM (MAL), USM (MAL) and UKM (MAL)	
Engineering	UM (MAL), Universiti Malaysia Pahang (UMP) (MAL), UPM (MAL), UKM (MAL), UiTM (MAL)	
Multidisciplinary	UM (MAL), CMU (THAI), USM (MAL), UPM (MAL), UiTM (MAL), UKM (MAL), UMP (MAL), IIUM (MAL)	UM (MAL), UPM (MAL), UKM (MAL), UiTM (MAL), USM (MAL)
Other life and health sciences	UPM (MAL)	Mahidol University (MU) (THAI), UPM (MAL), CU (THAI)
Physics and astronomy	UM (MAL), UPM (MAL), UiM (MAL), USM (MAL), UKM (MAL)	UM (MAL), USM (MAL)

Notes: MAL, THAI and SIN stands for Malaysia, Thailand, and Singapore respectively.

of intra-ASEAN university capacity-building and upskill and reskill training as it facilitates ICT-related pedagogy and training service efficiently. However, the access in digitalization within ASEAN varies greatly and this reflects as shown in Table 6.

Table 6. Digital connectivity in AESAN countries

Source: ADB (2019).

Country	Connectivity	
	Internet subscribers per 100 persons	Cellular phones per 100 persons
Brunei	94.6	131.9
Cambodia	40.0	119.5
Indonesia	39.8	119.8
Laos	35.4	51.9
Malaysia	81.2	134.5
Myanmar	33.1	113.8
Philippines	73.1	110.4
Singapore	88.2	145.7
Thailand	56.8	180.2
Vietnam	70.4	147.2

Table 6 shows the proportion of two key indexes of digital connectivity in AESAN countries: Internet subscribers per 100 persons and cellular phones per 100 persons. The gap between the country with the highest number of subscrib-

ers (94.6) and the lowest one (33.1) is wide. The majority of subscribers in Brunei, Singapore, and Malaysia could access the Internet three times higher than the minority of subscribers in Indonesia, Laos, and Myanmar. The gap between the country with the highest number of cellular phones (180.2) and the lowest one (51.9) is also wide. The three highest cellular phone usage countries are Thailand, Vietnam, and Singapore while the three lowest ones are Myanmar, the Philippines, and Laos.

Thus, leveraging digital connectivity is vital for the HE mission. It should be noted that Singapore where the numbers of Internet subscribers and cellular phone usage are high lies on top of the best education destination in ASEAN and is considered a world-class university. Malaysia where the number of Internet subscribers is high becomes the best transnational education (TNE) in the region. On the other hand, Laos and Myanmar where the numbers of Internet subscribers and cellular phone usage are low lag behind other countries. These facts strongly support the relationship between access to the ICT education services and quality education. Looking into reality, the gap among the ten countries is even wider as seen in Table 7.

Table 7. Proportion of Internet access in education selected countries

Source: The Head Foundation (2017).

Country	Percent
Cambodia	7
Philippines	12
Indonesia	42
Malaysia	91
Thailand	98
Brunei	100
Singapore	100

Table 7 shows the proportion of Internet access in education in the selected countries. The gap between the highest (100%) and the lowest (7%) access is very wide. This reflects severe inequity and quality of education. All students in Brunei and Singapore could access the Internet. The majority of students in Thailand and Malaysia could use the Internet in their studies. Almost half of the students in Indonesia could gain access to the Internet while students in the Philippines and Cambodia had limited access to the Internet.

These facts may explain why the educational and economic systems of the countries with high proportions of Internet access developed more successfully than those of the countries with lower Internet access. Thus, HE in slow economies needs to leverage Internet access to ensure higher IT, work-related skills, and other needed skills related to ICT-based, skill-based, and simulation-based approaches. HE in the countries thus needs to reengineer education for innovations and digitalization, incorporating the latest ICT and technologies for pedagogy and related deliveries.

ICT-based education will help overcome crucial challenges related to equitable access to quality education faced by newly developed countries. Concerning the quality of education, focusing on capacity-building and upskill and reskill-training, ICT-related pedagogy based on ICT-blended education delivery models is needed as it can improve the challenges in quality of teachers, student achievement, deliveries of public education. In terms of equity, ICT technologies enable equitable access to quality education in slow economies. On efficiency, the application of ICT in education can ensure efficiency and capacity-building on-demand training and labor market needs.

Implications that can be drawn upon the opportunities and challenges to fully maximize the AEC-offered opportunities, HE needs to strategically translate regional-level commitments into institutional-level ones in the realm of institutional policymaking and implementation. Key implications to be addressed are accelerating interconnectivity through ICT-related pedagogy based on ICT-blended education delivery models.

Thus, being part of the ASEAN connectivity agenda, HE needs to accelerate interconnectivity through deepening educational cooperation and networks offered by AUN. Networking through cooperation and collaboration with leading institutions in other countries (e.g., Singapore as the world-class university and the top in Asia, and Malaysia as the model of TNE) is valuable for the local institutions in building their capacity and reviewing their capacity to ensure up-to-date, comprehensive, and high-quality education based on AEC technology and innovation-driven engagement. Opportunities, challenges, and implications can be summarized as shown in Table 8.

Table 8. Opportunities, challenges, implications for HE

Impacts	Keystones
Opportunities	Intra-regional labor mobility in services sector Internal HE cooperation and collaboration
Challenges	Restricted access to digitalization for capacity-building
Implications	Accelerating interconnectivity through ICT-related pedagogy based on ICT-blended education delivery models

Table 8 summarizes keystones of opportunities, challenges, implications for HE in AEC engagement. However, to make the most of AEC-engaged opportunities, a roadmap for strategic management is needed for proactive HEIs. The roadmap comprises 3 crucial stages:

Stage 1. Committing to capacity-building and up-skill and reskill training provision.

Stage 2. Consolidating intra-regional HE cooperation and collaboration.

Stage 3. Leveraging up-to-date digitalization to increase access to the Internet and accelerate interconnectivity.

The proposed strategic roadmap aims to guide what policymakers of HEIs, especially in slow-moving economies, should do for more effective AEC engagement. First, HEIs need to commit to uphold capacity-building towards their engagement and provide as required by MRAs. Second, they need to consolidate intra-regional HE cooperation and collaboration based on AUN or other AEC-offered mechanisms. Lastly, they need to leverage up-to-date digitalization for equitable access to the Internet and accelerate interconnectivity that will increase the competitiveness of their graduates as those in fast-developed economies like Singapore and Malaysia. More importantly, the accelerated interconnectivity will open up the expressway to global networks conducive to the ultimate goal of AEC to become a global ASEAN.

5. DISCUSSION

The results of this analysis highlight these three keystones for HE in ten member countries in an attempt to serve the goal of AEC: prospective opportunities (i.e., intra-regional labor mobility in services sector as well as internal HE cooperation and collaboration), a crucial challenge (i.e., restricted access to digitalization for capacity-building), and a potential and feasible implication (i.e., accelerating interconnectivity through ICT-related pedagogy based on ICT-blended education delivery models). The discussion below involves arguments for and against prior study regarding these three keystones.

In terms of prospective opportunities, this study lends support to prior study on the issue that intra-regional labor mobility is vital for AEC success in these areas: free flow of skilled labor (Luz, 2014; Huelser & Heal, 2014), flow of trade, goods, service and investments (Rivera & Lagdameo, 2013), and worker mobility (Batalova et al., 2017). To expedite the intra-regional labor mobility, this study highlights internal HE cooperation and collaboration as offered by ASEAN as the key to success and, thereby, this study agrees with prior study (e.g. Abonyi, 2012; Chia, 2016) that (inter)connectivity through cooperation and collaboration to a wider economic context. AUN as cited in this study is a notable example for HEIs to broaden their regional cooperation and collaboration and

deepen connectivity. However, this study is inconsistent to Chia's study which focuses on physical connectivity. That because his study was conducted in the early of AEC. This study turns to digital connectivity as a more viable approach to HE cooperation and collaboration in the digital era and economic disruption which is not restricted within the region but can extend to global connectivity.

On the other hand, digital connectivity is a crucial challenge to HE due to restricted access to digitalization in the region. Evidently, there is a wide gap in the Internet access, especially in education between in fast-moving economies (e.g., Singapore and Malaysia) and slow-moving ones (e.g., Laos, and Myanmar). The digital inequity, as suggested in this study as the most crucial challenge for HE, is one of the root causes of economic and educational inequity. Regarding the economic inequity, several studies (e.g., Hill & Menon, 2014; Cripps & Khurasee, 2016) indicate that engagement with global economy is the core problem of the economic inequity in this region. The fast-moving economies (e.g., Singapore and Malaysia) are more economically successful, as they are more engaged with the global economy. At one level, the global engagement as, suggested by Hill and Menon (2014) and Cripps and Khurasee (2016), may be the economic inequity in this region. Nevertheless, at a more profound level, a key insight in this study suggests the relationship between access to digitalization and economic progress, as fast-moving economies demonstrate higher access to digitalization while slow-moving counterparts economically suffer from restricted access. This insight, therefore, leads this present study to an argument against the findings of the prior study and raises a timely and essential argument that the restricted access to digitalization, which is the key enabler to engagement with global economy, truly accounts for the economic inequity. ASEAN needs to leverage this digital resource as a solution to the economic inequity. This study also argues for the restricted access as the cause of the educational inequity. It is clear that the high digital access is the key to the high-quality and digital-driven education of international HE of Singapore and Malaysia. This finding as well as the emergent digital ecology that has become more prevalent has led this study to argue against Chia's for physical connectivity.

Lastly, in response to the goal of AEC to become a global ASEAN, several studies have proposed implications to the challenges. For example, Aldaba (2013) proposed a pedagogical plan for strategic implementation involving a variety of services sectors to promote cooperation and collaboration for capacity-building as required by MRAs. This study argues for Aldaba's proposal that providing capacity-building and upskill

and reskill training of MRAs-related careers is essential. However, when considering the changing context, this study extends to other related careers required by AEC standards, especially in the services sector which has currently been the major contribution to the regional GDP. To achieve HEIs need to leverage digitalization for economic and education equity which is the key-stone to the goal of a global ASEAN.

CONCLUSION

This study aimed to understand the impacts of AEC on HE in the three issue-related areas which would highlight keystones and propose a roadmap for strategic management in AEC engagement. To conclude, a summary of the research findings and final thoughts are two key issues that need to be reiterated for further development.

The findings of this study could be briefly recapitulated in relation to the issue-oriented areas. First, the most tangible opportunity for HE is the services sector as it significantly outperforms the manufacturing and agricultural sectors. The shares of intra-ASEAN service trade have increased significantly in all sectors. This sector thus has the potential to grow and yield considerable benefits in the long run. This growth will also contribute to intra-regional labor mobility and internal cooperation. To maximize the opportunity in the services sector to its full extent, internal HE networking should be promoted through various AEC-offered mechanisms. In addition, to optimize the aforementioned opportunity fully, the most crucial challenge is the inequitable access to digital-driven education. As the access to the Internet is vital for achievement and progress at all levels, the wide gaps of Internet subscribers and cellular phones among the ten member countries become more challenging for slow-moving economies. Notably, as the best education destination and the highest achievement country for capacity-building in the region, Singapore has the highest number of subscribers and cellular phone usage. Lastly, the implications involve suggestions relating to strengthening interconnectivity and innovation-driven education enhancement. The strategic management roadmap for proactive HEIs in this changing economic and educational ecology is also proposed, especially for HEIs in the new member countries in the CMLV group.

In response to the research findings, three conclusions that could be drawn from this study revolve around these key intertwining concepts (namely internal cooperation and interconnectivity, digitalization, and capacity-building), which HEIs need to take into consideration. Above all, HEIs need to seek internal cooperation through AEC-offered mechanisms to consolidate interconnectivity, especially to promote networking for more productive services education ecology. Furthermore, HEIs need to consider digitalization as imperative for providing a quality digital-driven education conducive to AEC-oriented goals to increase the AEC-offered opportunity in the services sector to its full competency, reduce the inequitable access to the Internet and foster imperative digital-driven education which can lead to economic and educational success. Lastly, HEIs need to pay close attention to capacity-building education which focuses on ICT-based or ICT blended pedagogy and upskill and reskill training relating to intraregional work skills as required by ASEAN-driven professions.

AUTHOR CONTRIBUTIONS

Conceptualization: Amporn Sa-ngiamwibool, Kittipol Wisaeng.

Data curation: Amporn Sa-ngiamwibool.

Formal analysis: Kittipol Wisaeng.

Funding acquisition: Amporn Sa-ngiamwibool.

Project administration: Amporn Sa-ngiamwibool, Kittipol Wisaeng.

Software: Amporn Sa-ngiamwibool.

Supervision: Amporn Sa-ngiamwibool.

Writing – original draft: Amporn Sa-ngiamwibool, Kittipol Wisaeng.

Writing – review & editing: Amporn Sa-ngiamwibool, Kittipol Wisaeng.

REFERENCES

1. Abonyi, G. (2012). The Emerging ASEAN Economic Community (AEC 2015) and the Challenge of Innovation-Micro View (Part 2). *Asia Policy Briefs*, 1-10.
2. Aldaba, R. M., & Aldaba, F. T. (2013). *ASEAN economic community 2015: Capacity-building imperatives for services liberalization* (Discussion Paper No. 2013-06). Philippine Institute for Development Studies. Retrieved from <https://www.econstor.eu/bitstream/10419/126913/1/pidsdps1306.pdf>
3. Asian Development Bank (ADB). (2009). *Good Practice in Information and Communication Technology for Education*. Metro Manila, Philippines: Asian Development Bank. Retrieved from <https://www.adb.org/sites/default/files/publication/28625/good-practice-ict-education.pdf>
4. Asian Development Bank (ADB). (2011). *Asia 2050: Realizing the Asian Century*. Metro Manila, Philippines: Asian Development Bank. Retrieved from <https://www.adb.org/publications/asia-2050-re-realizing-asian-century>
5. Asian Development Bank (ADB). (2019). *Asian Economic Integration Report 2019/2020: Demographic Change, Productivity, and the Role of Technology*. <http://dx.doi.org/10.22617/TCS190461-2>
6. Association of Southeast Asian Nations (ASEAN). (2012). *ASEAN University Network*. Retrieved from <http://www.aunsec.org/organization.php>
7. Association of Southeast Asian Nations (ASEAN). (2017). *ASEAN Economic Community*. Retrieved from <https://www.asean.org/wp-content/uploads/images/2015/November/aec-page/ASEAN-Community-Vision-2025.pdf>
8. Austria, M. S. (2013). Challenges Facing the ASEAN Economic Integration. *Asia Pacific Business & Economics Perspectives*, 1(2), 98-119. Retrieved from http://apber-society.org/Asia_Pacific_Business_and_Economics_Research_Society/Journal_files/AustriaW2013.pdf
9. Azis, I. J. (2018). ASEAN Economic Integration: Quo Vadis? *Journal of Southeast Asian Economies (JSEAE)*, 35(1), 2-12. Retrieved from <https://muse.jhu.edu/article/691975/pdf>
10. Bangun, W. (2014). Human Development Index: Enhancing Indonesian Competitiveness in ASEAN Economic Community (AEC). *International Journal of the Computer, the Internet and Management*, 22(1), 42-47. Retrieved from http://www.ijcim.th.org/SpecialEditions/v22nSP1/02_22_9B_Wilson.pdf
11. Batalova, J., Shymonyak, A., & Sugiyarto, G. (2017). *Firing up regional brain networks: The promise of brain circulation in the ASEAN economic community*. Metro Manila, Philippines: Asian Development Bank. Retrieved from <https://www.migrationpolicy.org/sites/default/files/publications/ADB-MPI-Brain-Networks-FINAL.pdf>
12. Bhandari, R., & Lefebure, A. (2015). *Asia: The next higher education superpower?* New York: Institute of International Education.
13. Bhaskaran, M. (2013). The ASEAN economic community: The investment climate. In S. B. Das, J. Menon, R. Severino, & O. L. Shrestha (Eds.), *ASEAN Economic Community* (pp. 141-206). Asian Development Bank. Retrieved from <https://www.adb.org/sites/default/files/publication/31147/aec-work-progress.pdf>
14. Chia, S. Y. (2016). ASEAN economic integration and physical connectivity. *Asian Economic Papers*, 15(2), 198-215. http://dx.doi.org/10.1162/ASEP_a_00438
15. Chia, S. Y., & Plummer, M. G. (2015). *ASEAN economic cooperation and integration: progress, challenges and future directions*. Cambridge University Press. <https://doi.org/10.1017/CBO9781316218587>
16. Cripps, F., & Khurasee, N. (2016). Economic Development with Improved Conditions of Employment and Reduced Inequality: What Choices Does ASEAN Have in the Medium and Long Term? In *ASEAN Economic Community* (pp. 197-216). New York: Palgrave Macmillan.
17. Crocco, O. S., & Bunwirat, N. (2014). English in ASEAN: Key effects. *International Journal of the Computer, the Internet and Management*, 22(2), 22-27. Retrieved from http://www.ijcim.th.org/SpecialEditions/v22nSP1/02_36_Oliver.pdf
18. Das, S. B. (2015). *The ASEAN economic community and beyond: Myths and realities*. ISEAS-Yusof Ishak Institute.
19. Davidson, J., & Di Gregorio, S. (2011). Qualitative research, technology, and global change. In *Qualitative inquiry and global crises* (pp. 79-96). Routledge.
20. Denzin, N. K., & Lincoln, Y. S. (2011). *The Sage handbook of qualitative research*. SAGE Publications, Inc.

21. Grapragasem, S., Krishnan, A., & Mansor, A. N. (2014). Current Trends in Malaysian Higher Education and the Effect on Education Policy and Practice: An Overview. *International Journal of Higher Education*, 3(1), 85-93. Retrieved from <https://files.eric.ed.gov/fulltext/EJ1067468.pdf>
22. Hill, H., & Menon, J. (2014). Southeast Asian commercial policy: Outward-looking regional integration. In *Routledge Handbook of Southeast Asian Economics* (pp. 388-406). Routledge.
23. Hoàng, N. H. (2013). Toward an Integrated ASEAN Labor Market Prospects and Challenges for CLMV (1) Countries. *VNU Journal of Science: Economics and Business*, 29(5E). Retrieved from <https://js.vnu.edu.vn/EAB/article/view/418>
24. Huelser, S., & Heal, A. (2014). Moving freely? Labour mobility in ASEAN. *Policy brief*, 40. Retrieved from <https://artnet.unescap.org/publications/policy-briefs/moving-freely-labour-mobility-asean>
25. Hui, G. T. E., & Kiesha, O. (2016). Structural reforms in ASEAN-5 economies: Past successes and future challenges. *Policy*, 8(10), 85-9.
26. Ishikawa, K. (2012). ASEAN, aiming to create an economic community (AEC). *Asia research report—ASEAN economy and corporate strategies*, 13-28.
27. Kirkpatrick, R., & Bui, T. T. N. (2016). Introduction: The challenges for English education policies in Asia. In *English language education policy in Asia* (pp. 1-23). Cham: Springer.
28. Kubow, P. K., & Fossum, P. R. (2007). *Comparative education: Exploring issues in international context*. Prentice Hall.
29. Lim, L. Y. (2017). The evolution of Southeast Asian business systems. In *Business, Government and Labor: Essays on Economic Development in Singapore and Southeast Asia* (pp. 243-266). World Scientific. Retrieved from <https://unisg.link/hm00660898>
30. Low, E. L., & Ao, R. (2018). The spread of English in ASEAN: Policies and issues. *RELC Journal*, 49(2), 131-148. <https://doi.org/10.1177%2F0033688218782513>
31. Luz, J. M. (2014). *The ASEAN Economic Community and the free flow of skilled labor: A game-changer for higher education institutions*. Asian Institute of Management. Retrieved from https://www.britishcouncil.ph/sites/default/files/juan_miguel_luz.pdf
32. Menon, J., & Melendez, A. C. (2017). Realizing an ASEAN Economic Community: Progress and Remaining Challenge. *The Singapore Economic Review*, 62(03), 681-702. Retrieved from <https://ideas.repec.org/a/wsi/serxxx/v62y2017i-03ns0217590818400052.html>
33. Menon, J., Todd, L., Hashim, A. W., & Alias, A. W. (2019). *ASEAN Integration Report 2019*. Association of Southeast Asian Nations. Retrieved from https://www.ideas.org.my/wp-content/uploads/2021/04/Asean_Integration_2019_V4.pdf
34. Moussa, M., & Kanwara, S. (2015). Challenges for the internationalization of a higher education institution in the AEC (ASEAN economic community): An intrinsic qualitative case study at RMUTL in Northern Thailand. *ABAC Journal*, 35(1), 1-19. Retrieved from <http://www.assumptionjournal.au.edu/index.php/abacjournal/article/view/3047>
35. Onyusheva, I., Thammashote, L., & Kot, S. (2018). ASEAN: Problems of regional integration. *Espacios*, 39(36). Retrieved from <https://www.revistaespacios.com/a18v39n36/a18v39n36p02.pdf>
36. Papademetriou, D. G., Sugiyarto, G., Mendoza, D. R., & Salant, B. (2015). *Achieving skill mobility in the ASEAN economic community: challenges, opportunities, and policy implications*. Asian Development Bank. Retrieved from <https://www.adb.org/sites/default/files/publication/178816/skill-mobility-asean.pdf>
37. Peak, M., Atherton, G., Siti Norbaya Azizan, M. S., & Crosling, G. (2018). *The shape of global higher education: understanding the ASEAN region*. London: British Council. Retrieved from https://www.britishcouncil.org/sites/default/files/h233_the_shape_of_asean_higher_education_report_final_v2_web_1.pdf
38. Pyakurel, S. (2014). *ASEAN Economic Community and its Effects on University Education: A Case Study of Skill Verification by the Means of Professional Certification Examination*. Bangkok University.
39. Rana, S., & Ardichvili, A. (2014). Cambodia and the ASEAN economic community: Opportunities, challenges, and implications for human resource development. *Reconsidering Development*, 3(1). Retrieved from <https://pubs.lib.umn.edu/index.php/reconsidering/article/view/575>
40. Remler, D. K., & Van Ryzin, G. G. I. (2010). *Research methods in practice: Strategies for description and causation*. SAGE Publications, Inc.
41. Rivera, J. P. R., & Lagdameo, B. R. S. (2013). Establishing the ASEAN Economic Community Through Investment Integration. *Asia-Pacific Social Science Review*, 13(1), 30-40. Retrieved from <http://apssr.com/wp-content/uploads/2018/03/3Rivera-091713.pdf>
42. Rüländ, J. (2016). Why (most) Indonesian businesses fear the ASEAN Economic Community: struggling with Southeast Asia's regional corporatism. *Third World Quarterly*, 37(6), 1130-1145. <https://doi.org/10.1080/01436597.2015.1133245>
43. Southeast Asian Ministers of Education Organization (SEAMEO). (2010). *Report: Status of ICT Integration in Education in Southeast Asian Countries*. Bangkok: SEAMEO. Retrieved from https://www.seameo.org/SEAMEOWeb2/images/stories/Publications/Project_Reports/SEAMEO_ICT-Integration-Education2010.pdf

44. Te, V., Griffiths, R., Law, K., Hill, P. S., & Annear, P. L. (2018). The impact of ASEAN economic integration on health worker mobility: a scoping review of the literature. *Health policy and planning*, 33(8), 957-965. <https://doi.org/10.1093/heapol/czy071>
45. The Head Foundation. (2017). *ICT in ASEAN Education: Challenges and New Opportunities*. Retrieved from <https://headfoundation.org/wp-content/uploads/2020/11/THF-Policy-Brief-No-2.pdf>
46. Tullao, T., & Cabuay, C. (2015). *Education and human capital development to Strengthen R&D capacity in ASEAN* (ERIA-DP-2013-36). ERIA. Retrieved from <https://www.eria.org/ERIA-DP-2013-36.pdf>
47. United Nations Educational, Scientific and Cultural Organization (UNESCO). (2015). *A Review of Education and ICT Indicators in Southeast Asia*. Retrieved from <https://en.unesco.org/themes/ict-education>
48. Verhezen, P., Williamson, I., Crosby, M., & Soebagjo, N. (2016). Introduction: Doing Business in ASEAN Markets: What Is So Different? In *Doing business in ASEAN markets* (pp. 1-15). Cham: Palgrave Macmillan.
49. Vineles, P. (2017). *ASEAN Connectivity: Challenge for an Integrated ASEAN Community*. S. Rajaratnam School of International Studies. Retrieved from <https://think-asia.org/handle/11540/11025>
50. Wallar, J. (2014). *Achieving the Promise of the ASEAN Economic Community: Less Than You Imagine, More Than You Know*. The National Bureau of Asian Research: Trade, Energy, and Economic Affairs. Retrieved from <https://www.nbr.org/publication/achieving-the-promise-of-the-asean-economic-community/>
51. Yean, T. S., & Das, S. B. (2015). The ASEAN economic community and conflicting domestic interests: An overview. *Journal of Southeast Asian Economies*, 32(2), 189-201. Retrieved from <https://muse.jhu.edu/article/590695>