A STUDY ON THE VOCATIONAL EDUCATION IN THE ASEAN ECONOMIC COMMUNITY (AEC) COUNTRIES AND ITS IMPLICATIONS TO INDONESIA

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ABSTRACT

ASEAN Economic Community (AEC) is a regional program which started in 2015, was developed by members of ASEAN countries which have agreed on pillars on mutual collaboration to increase the economic and social growth. The AEC has agreed to carry out four major pillars: (1) single market and production base, (2) competitive economic region, (3) equitable economic development and (4) integration into global economy. The four pillars are divided into 17 core elements, and among the core element, there is one particular core element which focuses on human resources which is the free flow of skilled labours. The government of the ASEAN countries have taken actions towards anticipating the ASEAN Economic Community (AEC), especially in regards to the free flow of skilled labour. One of actions is improving the quality of education. Some countries have invested high amount of funds in order to increase the quality of graduates. Indonesia has also started to make improvements in the quality of education. One of the improvement was in the form of constructing Indonesian Qualification Framework (IQF) which were then obliged for all education institution to follow. However, related to the vocational education, more beneficial collaborations with the industry should be carried out. Also, other soft skills which are required in workplace still need to be formally included in the assessment process of the education.

Keywords: ASEAN Economic Community, Vocational Education.

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INTRODUCTION

ASEAN Economic Community (AEC) is a regional program developed by the Association of South East Asian Nations (ASEAN) and has already started since 2015. All country members have agreed on certain points or pillars on mutual collaboration which will benefit all members and will regionally increase the economic and social growth. The agreement includes economical, trade and human resources related points which will be discussed later in the article.

Geographically, Indonesia is located in the Southeast Asian region and is part of the Association of the South East Asian Nations (ASEAN). ASEAN is a regional organization which consists of 10 South East Asian nations (Setnas ASEAN, 2019). In the effort to tighten the relationship between these countries, ASEAN have agreed to develop an ASEAN Economic Community which started in the early 2016. This agreement includes many aspects and one of them is to give easier permit for ASEAN countries human resources from one ASEAN country to work and live in another ASEAN country. This will create a larger competition for job seeker to compete not only with job seeker from their own country but also with human resources from other ASEAN countries..

THEORETICAL BACKGROUND

A. Association of Southeast Asia Nations (ASEAN)

ASEAN was formed on 8th August 1967 in Bangkok, Thailand by five founders: Indonesia, Malaysia, Philippines, Singapore and Thailand through the signing of Bangkok Declaration (Setnas ASEAN, 2019). The signing was carried out by minister of foreign affairs of the Philippines (Narciso Ramos), Indonesia (Adam Malik), Thailand (Thanat Khoman), Malaysia (Tun Abdul Razak, and Singapore (S. Rajaratnam).

After the first formation of ASEAN, there was additional 5 other countries that joined as member of ASEAN, which are Brunei Darussalam (joined on 8th Januray 1984), Vietnam (joined membership on 28 July 1995), Myanmar (joined ASEAN on 23 July 1997) and Cambodia (joined on 30th April 1999). The initial aim to form ASEAN as stated in the Bangkok Declaration is to:

 Accelerate economic growth, social and cultural development in the South East Asian region through mutual friendship to form strong foundation of regional community peace and welfare;

- 2. Increase regional peace and stability through respecting fairness and law between countries;
- 3. Enhance mutual active collaboration by helping each other in issues of mutual interest such as economy, social, engineering, science and administration;
- 4. Supporting one another in a form of training and research in the field of education, profession, engineering and administration;
- Collaborate effectively to utilize agriculture and industries, widen trading and analyze international commodity issues, restructuring transportation and communication and increase community welfare;
- 6. Maintain strong mutual collaboration with diverse international and regional organization with similar objective

Based on the above objectives of the ASEAN formation, it shows that the member countries agreed to move forward together in order to improve regional economic, social and cultural growth and at the same time stabilize the political climate and security of the region.

B. ASEAN Economic Community (AEC)

ASEAN Economic Community formation was agreed by member of ASEAN nations with purpose to accelerate the development of the ASEAN nations. The agreement to form AEC started in 1997 during the ASEAN leaders' summit in Malaysia (ASEAN, 2008). The leaders agreed to develop ASEAN nations to enhance prosperity and become highly competitive nations with emphasize of economic related improvement. This includes market, goods, services, capital and even skilled labor. Member countries discussed and agreed to four pillars in the ASEAN Economic Community Blue print with 17 core elements (as shown in Figure 1). The ASEAN Economic Community blueprint was then signed by leaders of member nations in 2003 during the 40th anniversary of ASEAN in Singapore as proof of agreement (ASEAN, 2008).

Table 1
ASEAN Economic Community pillars blue print (ASEAN 2008)

Pillars	Core Elements	
A. Single Market and Production		
Base	A1. Free flow of goods: 9 strategic approaches	
	A2. Free flow of services: 3 strategic approaches	
	A3. Free flow of investment: 5 strategic approaches	
	A4. Freer flow of capital: 7 strategic approaches	
	A5. Free flow of skilled labor	
	A6. Priority integration sectors	
	A7. Food, agriculture, and forestry	
B. Competitive Economic Region	B1. Competition policy	
	B2. Consumer protection	
	B3. Intellectual property rights	
	B4. Infrastructure development: 10 strategic approaches	
	B5. Taxation	
	B6. E-commerce	
C. Equitable Economic	24 245	
Development	C1. SME development	
	C2. Initiative for ASEAN Integration	
D. Integration into Global Economy	D1. Coherent approach toward external economic relations	
	D2. Enhanced participation in global supply networks	

AEC = ASEAN Economic Community; ASEAN = Association of Southeast Asian Nations; SME = small or medium-sized enterprise

The ASEAN Economic Community has agreed to carry out four major pillars: (1) single market and production base, (2) competitive economic region, (3) equitable economic development and (4) integration into global economy. The four pillars are divided into 17 core elements, and among the core element, there is one particular core element which focuses on human resources which is the free flow of skilled labours (core element A5).

Since the ASEAN Economic Community have already started, countries of the member countries are all aggressively starting to work their way to make the fulfil the AEC agreement and at the same time obtain optimum benefits for the nations' growth. One of the largest challenges will be fulfilling the free flow of skilled labour. In order to fulfil this part of blue print the nation will need to consider not only providing such skills, but will need to reform the whole education system including the curriculum especially the vocational education.

In the case of ASEAN countries, each have their own strategies and one nation may be more advanced than others. This, of course, depends on the government policy and on how they view the importance of this among the other national goals and policies.

METHOD, DATA AND ANALYSIS

This study utilized a literature review approach by compiling information from previous references and official websites from ASEAN and ASEAN member countries. Data obtained include historical information on formation of ASEAN and current information on vocational studies in ASEAN countries. Deep analysis combined these information to give an illustration on the importance of vocational education and the different approaches employed by different ASEAN member countries.

RESULTS AND DISCUSSION

A. Vocational Education in ASEAN countries

1. Vocational education in Indonesia

The Indonesian government have determined to reduced unemployment rates by increasing the number of vocational education graduates from only 30% in 2006, increased to 50% in 2010 and to 70% by 2015 (Newhouse & Suryadarma (2011). In order to achieve this, the government policy was to stop the construction of any new general public schools and converted some general high schools into vocational schools.

Vocational education program in Indonesia is available in both senior high school and higher education. Currently for vocational high schools that are available in Indonesia are technical (information technology and machinery), business management, agriculture, forestry, tourism and hospitality, community welfare, handicraft, art and healthcare (Newhouse & Suryadarma 2011). Among all, the most popular filed is technical and business management.

In vocational higher education, Indonesia is also committed to improve the competence and competitive skills. This was implemented through the development of the 321 curriculum (Wahyuni & Safitri 2018). This curriculum utilise a 321 system, with 3 active semesters in campus, two semester in the industry and one semester in campus or industry. The success of this method is believed will determine the success of the vocational education program in Indonesia. Factors that will support the 321 curriculum

are: involvement of the industry in designing the curriculum itself (two education system: in campus and in industry), the development of vocational education standard, and the availability of competent lecturers and instructors (Wahyuni & Safitri 2018).

2. Vocational education in Malaysia

The Malaysian government has acknowledged the importance of Technical and Vocational Education as one of the key to support Malaysia in becoming a developed nation by 2020 (Minghat & Yasin, 2010). The Ministry of Education has made vocational education subjects as one of the list in the National Key Performance Indicator (NKPI) of Malaysia.

Minghat & Yasin (2010) asserted that based on their research, there are 16 skills that needs to be fulfilled for a technical and vocational education graduates which are creativity, innovation, networks and partnerships, staff development programme, teaching methods, generic skills, industrial relations and internships, counselling, entrepreneurship, ICT skills, interest, recognition, knowledge, competency based training, articulation, and commitment of management.

3. Vocational education in Singapore

The vocational education in Singapore has been acknowledged by Chong (2014) that it has globally known for its excellence. This was proven by the way this industry was recognized by the winning of the inaugural of Harvard-IBM Innovation Award hosted by Harvard University. This has proven how Singapore is ready to provide skilled labours with an international standard.

The Singaporean government have invested a very high amount of funding to improve vocational education. It was reported that expenditure on elementary school, high school, polytechnic and higher education student was S\$5123, S\$7234, S\$12,510 and S\$19,404, respectively. Meanwhile it was reported that expenses on a vocational education student was S\$10,343 (Chew & Chew, 2011).

4. Vocational education in Brunei Darussalam

The Brunei government has included technical vocational education as part of the government human capital approach to human power development of the country (Minnis 2000). Technical vocational education has been thought to be essential to achieving economic diversification of the country as well as a way to attract more Brunei citizens in the development process. However, to date, the investment in the technical and vocational

education in Brunei still yielded low returns (Minnis 2000).

FURTHER EDUCATION / UPGRADING SKI

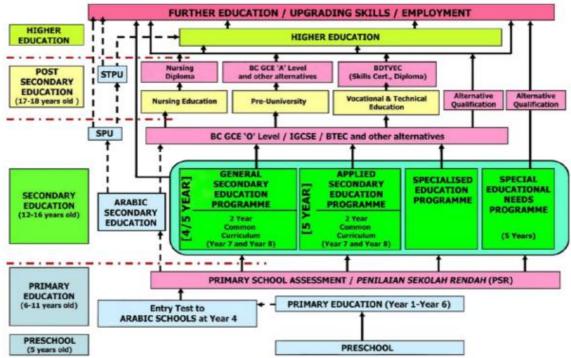


Figure 1.

Education pathway in Brunei Darussalam (SEAMEO, 2017)

Recognizing the important role of vocational education, Brunei Darussalam in 2014 developed a new institute called Institute of Brunei Technical Education (IBTE). Vocational educations are emphasized on training students to become qualified technicians and skilled workers and are awarded National certificates. The priority of the Brunei government for vocational education is to be aligned with the employment demand, on other word, the focus of vocational education development depend on the need of the industry.

5. Vocational education in Thailand

Vocational education in Thailand is provided for senior high school students. For senior secondary education in Thailand, there are two streams available like many other countries, which are general (academic) stream and the vocational stream (Moenjak & Worswick 2003). The available seats for vocational education in Thailand are much lower than those for general academic streams.

Vocational education equips students with special technical skills which

considered vital for workplace such as electricians, mechanics and book keeping. On the other hand, vocational secondary education also prepare students to study in a higher education if they wish to continue studying (Moenjak & Worswick 2003).

Despite the underestimation of the vocational education, the research showed a different fact. Moenjak & Worswick (2003) found that vocational education showed higher returns compared to general education at the same level. Moreover, students from wealthier family are more likely to study in a vocational education.

6. Vocational education in the Philippines

Vocational education in the Philippines is more or less similar to other ASEAN countries. There are the formal systems known as post-secondary technical education, which range from six months up to three years to earn a certificate in a specific field. This program is provided by both public and private vocational education institutions (Abdelkarim 1997). Graduates of this program usually holds a mid -level occupation.

There is also a non-formal short-term vocational training (up to six months), which are provided for special groups of clients. Research carried out by Abdelkarim (1997) has shown that vocational education graduates are satisfied towards their previous education. They feel that the trainings they had are relevant and supporting their work and career.

7. Vocational education in Vietnam

Despite the fact that Vietnam is among new members of ASEAN (not the founders), Vietnam is intensively developing itself into globalization (Kamibeppu 2009). Vietnam is expanding their education and post-basic education (including vocational education).

The Vietnamese trend in economic and social development include the shift of employment from agricultural sector to manufacturing and service sector. Moreover, there is also a shift of jobs from blue-collar to white-collar jobs (Thanh 2006). This shift surely impacted the available labor in Vietnam, where low-skilled labors are no longer qualify in most employment. Therefore, a more advanced and strong vocational education system are urgently needed.

8. Vocational education in Cambodia

Vocational education in Cambodia was explored by Cheng (2010) and found that encouragement of young learners through vocational education can be attained through a cooperative and inclusive environment setting. Furthermore, it will also encourage them to

become financially independent and become managers of social change.

This vocational education system was to provide opportunities for young people in Cambodia to practice power and empowerment through participating and experiencing the whole education practice. This system includes, a "three-tier, context-appropriate approach of vocational education pedagogy" which was proven by Cheng (2010) to be reliable and feasible.

9. Vocational education in Laos

Lao PDR was established in 1975, despite all the challenges it is facing, the government of Lao PDR continue to strive for their development which guarantee rights for its entire citizen while continues to promote its unity (Phetsiriseng 2009). Further was asserted that Lao is one of the nations that were heavily impacted during the Asian monetary crisis in 1997 and need years to recover.

In relation to the workplace and employment opportunities, the labor market in Lao according to Phetsiriseng (2009) was mostly from agriculture, forestry, fisheries, trade and services, and industry and construction sector. In terms of vocational education in Lao, stakeholders agreed that the qualities are still under the required standard of labor market in Lao and for the ASEAN market (Soysouvanh et al (2013). The quality was believed to be the responsibility of the teachers. In order to encounter the problem, the Lao Ministry of Education and Sport have decided to develop standard for vocational teachers which Lao cooperate with experts from Indonesia, Thailand and Vietnam.

10. Vocational education in Myanmar

Vocational education is known to prepare graduates to get into the workforce. Therefore, in order to assure the skill matches the needs and demand in the industry, therefore, involvement of the private sector id crucial (Milio et al 2014). The technological and vocational education and training (TVET) system in Myanmar have been dominated by the supplies from public and private institutions and not yet demand driven from industries.

To date, the involvement of the industries and private sector are not yet eminent in formulating the curricula of the TVET in Myanmar. The research carried out by Milio et al (2014) suggested ways to change TVET from supply to demand driven: (1) understanding the needs of industries, (2) involve industries in designing curricula and (3) develop the curricula content and learning outcomes closer to the needs of the labour market.

B. Quality and relevance of Technological and Vocational Education and Training (TVET) in ASEAN countries

The requirement of workforce is now heavier than ever before. The ASEAN Economic Community agreement have no doubt gave an impact, since skilled labour now have free access to work anywhere in the ASEAN countries. To provide an international standard graduates, the quality of the vocational education system must also improve. Not only the curriculum should be designed together with private sector and is in accordance to the needs and standards of the industry, but also the education/training delivery system and the policies including the wages and incentives should also improve according to the quality of the employee (UNESCO 2014).

The TVET in Vietnam, is carried out using a "multi-entry exit points" and a flexible delivery system. The minister of education and training has taken development system for a national competency-based curriculum which is aligned to the needs of the industry. Some ASEAN countries, in terms of implementation of the vocational education, have reportedly used a Competency based training (CBT) in order to underline the outcome (the attained competencies). Among the ASEAN nations, Indonesia, Lao PDR, Singapore and Vietnam have implemented competency based training standards (UNESCO 2014).

Member nations of ASEAN have also developed quality assurance and qualification framework to standardize the learning outcome. A regional model has been developed in Indonesia, Lao PDR and Thailand as shown in Table 2.

Table 2.

Overview of Standards, Quality Assurance, Qualifications and Recognition (UNESCO 2014)

Country	Qualifications	Quality Assurance	Vocational Certification
	Framework	C ,	
Australia	Australian Qualifications Framework (AQF)	Australian Skills Quality Authority (ASQA) Vocational Education and Training (VET) Framework, Australian Quality Training Framework	VET qualification under AQF
Cambodia	National qualifications framework under development		
China	National qualifications framework under development		National Occupational Qualification Certificate
India	National Vocational Education Qualification Framework (NVEQF)	All India Council for Technical Education, (AICTE), Technical Education Quality Improvement Programme (TEQIP)	

Country	Qualifications Framework	Quality Assurance	Vocational Certification
Indonesia	Competency Standards (SKKNI)	National Agency of Professional Certification (NAPC)	Training/Competence Certificate
Japan			Technical Associate, entitled to university entrance
Lao PDR	National qualifications framework under development	Educational Standards and Quality Assurance Centre (ESQAC)	Vocational Education Certificate up to post- secondary level
Malaysia	Malaysian Qualifications Agency (MQA)	MQA in charge of quality assurance of post- secondary TVET and skills training institutions	From Junior Vocational to 4 types of Diploma Certification
Myanmar	Skills standards under development by National Skills Standards Authority (NSSA)		High School Certification, Higher Education Certification
Philippines	National qualifications framework approved in 2005		TESDA Certification for middle-level manpower, Professional Regulatory Commission (PRC) Certification for professionals
Viet Nam	Occupational skills standards	National skills standards system	National accreditation system for schools, Vocational Certification and Diploma

Source: Information collected by UNESCO Bangkok staff.

The ASEAN nations as well as some other countries have shown to have developed their own standard, quality assurance, qualifications and recognitions as shown in Figure 3. Mostly have all the quality standard which include Indonesia, Lao, Malaysia and Vietnam (UNSECO 2014). Furthermore, some countries have also developed a National Qualification Framework (NQF) for education, some are in progress, and some have not yet developed it (Table 3)

Table 3.

National Qualification Framework (NQF) of ASEAN+ countries

Countries with NQF		
Australia	All sectors, but VET and higher education somewhat separate	
Malaysia	All sectors, based on learning outcomes, but early stage of	
	implementation	
New Zealand	All sectors, but differences for VET and higher education	
Philippines	All sectors included, but sectors managed separately	
Singapore	VET only	
Thailand	Higher education only	
NQF in development		
Brunei Darussalam	Under development	
Cambodia	Under development	
Lao PDR	Under development	

Myanmar	Skills competency framework up to level 4, aiming at developing	
	higher levels	
Republic of Korea	Under development	
No NQF		
China	None	
Indonesia	None, but support for the concept	
Japan	None, but likely	
Viet Nam	None	

Source: UNESCO (2011b), and data for Myanmar was collected by UNESCO Bangkok staff.

Countries that have developed the National Qualification Network, some separate between the general education with the Technical and Vocational Education and Training stream. In the case of Indonesia, the current condition have changed and that a qualification framework have been well established and known as the Indonesian Qualification Framework (IQF) or in Indonesian is well known as KKNI (Kerangka Kualifikasi Nasional Indonesia). The IQF showed both the education framework for both general education, profession and vocational education (Figure 5). All education institutions (from elementary school to higher education) in Indonesia are now obliged to

follow the IQF and required to provide curriculum based of the IQF system.

The Indonesian qualification framework has divided the education into 9 levels, starting for qualification competencies of elementary/junior high school graduates, senior high school graduates, vocational education (DI until DIV), bachelor, master and PhDs. The formal vocational / professional stream also has the opportunity to be in the same level as PhDs of general education. However, the name is different and known as subspecialist.

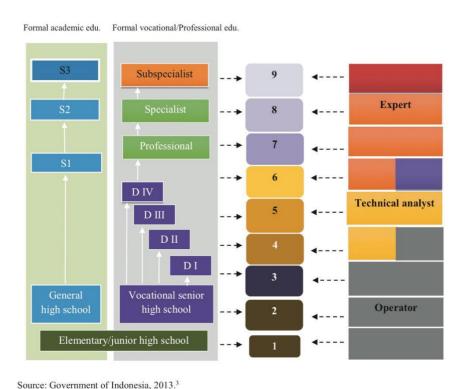


Figure 2.

Indonesian Qualification Framework (IQF)

According to the Indonesian Qualification Framework (Triyono & Moses 2019), vocational education are offered in high school level and in tertiary education. Vocational education in tertiary level are offered in 4 scheme: Diploma I (D-I), Diploma II (D-II), Diploma III (D-III) and Diploma IV (D-IV). Above level D-IV, which are the professional, specialist and sub specialist, usually are offered for continuing education from a Bachelor degree such as medical doctors, psychologist, notary etc. These professionals will be required to undertake further education to be able to obtain practice

permit.

Based on the report from UNESCO (2014) it was found some interesting facts about Technical and Vocational Education and Training in the ASEAN countries:

1. The Technical and Vocational Education has continued to be unpopular

Reports from ASEAN countries have shown that number of students enrolled in a vocational education vary from countries. However, from a 10 years period, in most ASEAN countries the trend showed a decrease, and thus, receives low investment from the government and maintain a low status in most communities.

2. Policy guidance and regulations of TVET should be developed

Improvements on policy guide and regulation of TVET must be developed. Since government acknowledged TVET as part of national economic strategies, therefore, a standardize policies and regulations should be developed.

3. The possibility to develop a more comprehensive and coherent qualification system

The importance of qualification systems to ensure all of the offered degree and vocational qualifications are standardize and consistent. Therefore, it is crucial that government develop this standard to improve quality of graduates and facilitate the integration of national and international labour market.

4. Development of TVET quality assurance system

In order to ensure the quality of TVET, initiatives in developing quality assurance for both the institutions as well as the teaching staffs have increasingly developed in ASEAN countries. This will also benefit during the accreditation purposes for the institutions.

5. A blurred limits between TVET and general education

Currently there is a trend of overlapping between general education and vocational education in some ASEAN countries. Vocational educations are shifted to become more generalised while general education are more vocationalised.

6. Limited workplace trainings

Employers or private companies, especially in less developed nations, have been unable to carryout training for their staff. Limitation in workplace training may influence the development of the national economic growth. Therefore, availability of workplace training is crucial and should be provided in order to strengthen their work skills.

7. Limited research on lack of skills studies

Researches that emphasize on specific skills needed are still limited. For example study on vacancy is still limited and rare. There is still limited awareness on the importance of data collection. Also, the history of data collection of countries I the region is limited, and some are yet still need to conduct surveys to obtain data.

8. Lack of monitoring and evaluation in TVET

Some of the developing countries are unaware on the needs to graduate tracer studies. This made the lack of data and also low commitment in collecting the data.

C. Required Skills for the AEC Era

In this ASEAN Economic Community era where free flow of global skilled workers are widely open, education are no longer only 3R (Reading, wRiting, aRithmatic), but other skills essential for working are crucially required. These skills are but not limited to leadership, digital literacy, communication, emotional intelligency, enterpreunership, global citizenship, problem solving, and teamwork (Setyoko, 2015).

1. Leadership

The leadership skill required for graduates include self-leadership, leading the team (team leadership) and also influencing people in the organization (organizational leadership) to commit and work in order to achieve vision and mission of organization (Alemina 2017).

2. Digital Literacy

Digital literacy in a skill which include this three following aspects: ability to use digital technology, communication tools or network, evaluate using and creating information, the ability to understand and use information in various format in computer and the ability to actively work in a digital environment settings (Alemina 2017).

3. Communication

Communication correlates with skills to communicate important information easily and effectively so that it can be used to make decisions on how to increase organization work (Alemina 2017; Setyoko 2015). Communication is important in workplace or in any other settings where more than one person are working together in the same place. Through communication, one person wish can be delivered to others and vice versa which hopefully can ease and increase output.

4. Emotional Intelligence (EI)

Emotional intelligence is also considered as one of the important skill that needs to be possessed by vocational education graduates. Emotional intelligence is defined as skills to identify, understand and manage emotions positively to reduce stress, communicate effectively with other people, have empathy over other people, reduce challenges and decrease conflicts (Setyoko 2015).

5. Entrepreneurship

Entrepreneurship is also considered to be in the list of important skills needed for vocation education graduates. Entrepreneurship was defined by Alemina (2017) and Setyoko (2015) as the skills to develop and manage a creative business with calculated risks in order to create innovative benefits from the business.

What may be targeted in entrepreneurial skills is maybe how an entrepreneurial people tend to be more innovative, yet active and resilient towards an unpredictable situation.

6. Global Citizenship

Global citizenship is another important and crucial skill but not many people are aware of this. Global citizenship is the ability to put their identity align with the global community, therefore, more advance than feeling that they belong to certain ethnics or country (Setyoko 2015; Alemina 2018). This skill will equip graduates to be ready to work in international environment settings. If they do not acquire such skill, they may have difficulty in adapting and working with others.

7. Problem Solving

Problem solving one of the most required skill asked by companies. Problem solving is a mental process with include, find and analyse a way out to encounter an emerging problem (Setyoko 2015). The main goal of problem solving is to find the best solution possible to solve a problem.

8. Teamwork

Teamwork is a process of working together with other people in order to achieve similar goals (Setyoko 2015). Teamwork is an important aspect for organizational success since it will require work colleagues to work together well. It is therefore, important to have employees with teamwork ability skill. The more an organization recruit employee with teamwork skills, the easier an organization will achieve its goals since employee will work together and focus on organizational goals instead of his/her own goal.

CONCLUSIONS

The government of the ASEAN countries have taken actions towards anticipating the ASEAN Economic Community (AEC), especially in regards to the free flow of skilled labour. One of actions is improving the quality of education. Some countries have invested high amount of funds in order to increase the quality of graduates. Indonesia has also started to make improvements in the quality of education. One of the improvement was in the form of constructing Indonesian Qualification Framework (IQF) which were then obliged for all education institution to follow. However, related to the vocational education, more beneficial collaborations with the industry should be carried out. Also, other soft skills which are required in workplace still need to be formally included in the assessment process of the education

IMPLICATIONS

The impact of AEC since December 2015 has made trade flows become limitless among the Southeast Asian nations. In order to support the free flow of goods, trades as well as skilled labour have made vocational and technological education become more important than ever before. Vocational education are demanded to produce internationally qualified graduates equipped with professional skills, language skills and inter-culture skills (Setyoko 2015). Vocational education in Indonesia are also demanded to produce graduates with such skills. This way, it is expected that ASEAN Economic Community era will not be a threat but on the contrary will provide opportunity for a better Indonesia.

Based on reviews regarding vocational education in other ASEAN countries, it is clear that all of the ASEAN member countries have made actions towards improving the quality of vocational education graduates. In the case of Indonesia, government have also prepared a pathway to increase the quality of education. One of them is the development of the Indonesian Qualification Framework (IQF), where currently all education institution in Indonesia are required to follow. Related to the quality of vocational education graduates, despite the government enforcement on improvement of education, nevertheless, quality of education still require stronger collaboration with the private sector since the industry are users of the graduates. Moreover, the competitive quality of

graduates must also be improved in terms of language ability and other soft skills which are not directly assessed in formal education

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