

# Analysis of vocational education curriculum in ASEAN Economic Community: a literature review

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## Abstract

**Purpose:** In 2015, ASEAN economic community was formed to turn the area into a single market and a competitive superior production base to make the region prosperous and stable. The how to do that is through education and applying the appropriate curriculum for industry's needs. This study analyzed and elaborated the curriculum used in vocational schools, especially in countries around ASEAN Economic Community or AEC.

**Research methodology:** This descriptive content analysis study method was done by implementing a literature review. This literature review was to review and analyze the curriculum used in vocational education around AEC in order to fulfill the standards of AEC industry's needs.

**Results:** This study finds that curriculum for vocational schools around ASEAN Economic Community set priority in standard skills and soft skills.

**Limitations:** This study is limited to vocational schools, especially around ASEAN Economic Community.

**Contribution:** This study could be useful for vocational schools around South East Asia and researchers researching curriculum, especially in Asia.

**Keywords:** AEC, Curriculum, Vocational education

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## 1. Introduction

As the world progresses, demand in the industry is growing, and thus, the human resources need to be more skillful. People involved in the industry need to learn more skills to be accepted by the industry's standards. With the international market, the competition has grown rapidly where people worldwide can meet and compete directly almost for literally all positions in the industry. However, not all countries share the same level of human resources and skills. Some countries are progressing amazingly, some others are not even moving at all. This makes a significant difference among countries all over the world. In meeting the industry's needs, all nations need to develop their humans throughout education with best quality. Every nation's standards could be different, depending on how its government sees the industry's needs. However, every government starts their human capital development from the curriculum of its nation. As said by [Stroupe and Kimura \(2015\)](#) "in the last few decades, economic growth, political change, and educational challenges have rapidly changed the Asian region dynamically. Educational challenges include the growth of education and the curriculum used in a country that has a significant impact" (p. 2).

Whereas, [Ambiyar, Yulastri, Yupelmi, and Paryono \(2018\)](#) define "every education needs school curriculum. Vocational high schools must use a curriculum following the needs of the business world and the industrial world, because of the quality of the graduates influenced by the curriculum in the world of education." (p. 125). Accordingly, as quality human resources with competitiveness and curriculum development, it must be directed to prepare students who can face free-market competition. This is a challenge for the world of education. The aim of establishing the Association of Southeast Asian Nations (ASEAN) was to promote economic growth, social progress and cooperation, peaceful relations and stability between Southeast Asia countries. The ASEAN economic integration that began in 1967 encouraged the success and further development of the ASEAN Economic Community (AEC), with economic level engagement between policies, programs, and practices related to vocational education. Despite ASEAN member countries' diversity, programs aimed at building English language capacity are challenges for some government officials, teacher trainers, teachers, students, and business professionals. [Gani, Gitaharie, Husodo, and Kuncoro \(2018\)](#) stated, "there is a gap between the perspectives of graduates from the SU (State Universities) graduates and those of users. SU (State Universities) graduates have the readiness to compete in the regional labor market, with good skills in their fields. Their main obstacle is the ability to communicate in English. Moreover, graduates must have general abilities, in addition to their specific skills. So that graduates can meet employment competencies." (p. 276). What other skills need to be mastered in order to face and compete in AEC? Entrepreneurship is one of the skills. Since this skill will play an important role in business and will be a huge consideration for the employer before recruiting someone.

Not only do the headmasters but also, of course, the students as the main users of education services need to master entrepreneurship. According to [Rakib \(2016\)](#), entrepreneurship education is expected to produce graduates who are competent in their fields, with a disciplined attitude, commitment, honesty in acting, dare to take risks, have high creativity and innovation, and attitudes that lead to independence to create jobs in the era of the ASEAN Economic Community. There are three main components in the development of economic education: increasing the competence of educators in entrepreneurship, developing entrepreneurship education materials, and developing entrepreneurship education curricula. In order to face those challenges successfully, some countries like Indonesia, for instance, build schools designed to develop well-prepared humans to work in industries while others at the same age still need to improve through further studies like colleges and other higher levels of education. Such schools are well known as vocational high schools where almost 90% of the curriculum content is about practice and not heavily burdened to theories like most schools nowadays. [Hamid, Nurtanto, and Fawaid \(2018\)](#) asserted "the role of vocational education to train education directly correlates with human resource development. Competitive human resources must be able to excel in facing globalization. Having applied competence by providing provisions for the development of superior human resources to face economic challenges, social and cultural changes that affect community life." (p. 17). Unlike general schools, vocational high schools prepare their students to be ready for getting job within only three years of education. While other high schools needs another 4-5 years of studies after graduation. [Yahiji, Mahfud, and Mu'ammam \(2019\)](#) said that "facing the era of the ASEAN Economic Community (AEC), vocational education is an interesting topic to be studied and discussed more seriously in order to understand the future of ASEAN in the world which has been started since 2015." (p. 169). However, some other problems are happening primarily in Indonesia, where English is not the second language applied in the country. English is placed as a foreign language instead of a second language.

Talking about the curriculum, like some Asian countries facing difficulty adjusting their educational systems to improve vocational education, some African countries, Nigeria for example, experienced the same problem. Vocational curricula generally cover both school-based and work-based learning. [Okoye and Arimonu \(2016\)](#) explain that "the need for overhauling the education system in Nigeria is to develop vocational and technical education, as well as skills training which should receive full attention. A developing country with a poor workforce and no skills will find it difficult to compete in the global market. Nigerian lawmakers and international stakeholders in education need to learn from

international experience in building a technical vocational education (TVE) system that is more concerned with developing their technology." (117).

There will be much work to be done to be ready for AEC 2015 integration. However, most importantly, the ASEAN community is moving towards a friendly, harmonious and equal community where people will be able to use one common language to interact with each other effectively and appropriately, namely society without language barriers, communication disorders, and culture shock, conflicts and clashes between ASEAN countries. Therefore, ICC's development (English language competence & IC) for English language users in the ASEAN region is an essential responsibility for English language education. However, [Tran and Duong \(2015\)](#) explain that "preparing human resources with appropriate skills is very important for every country in the ASEAN Economic Community (AEC) by carrying out cooperation between English language education and social organizations, in order to survive in a competitive and dynamic community" (p. 21). Of course, this brings a big problem for Indonesians who are also involved in AEC. [Silalahi \(2017\)](#) explain that "the Indonesian state is considered not ready because many Indonesian graduates do not yet have adequate English competency since the ASEAN Economic Community (AEC) began in 2015." (p. 71). This means that poor English language skills of students university graduated. Not only do English skills, but other aspects need to be improved as well. Otherwise, with the technologies progressing rapidly, human resources will no longer be involved in the industry and will be replaced with technologies instead ([Hall & Pesenti, 2017](#)).

However, Indonesia is not the only country encountering this problem. Other countries, for example, Thailand, at the same time, face the same problem. [Thanosawan \(2017\)](#) found that "HEI (Higher Education Institutions) in ASEAN countries have experienced changes resulting from the initiation of the AEC (ASEAN Economic Community). Including HEI Thailand which experienced changes in economic convergence of ASEAN countries which introduced a single market worth USD 2.6 trillion in 2014 (ASEAN Secretariat, 2015a). As many as 622 million people who make ASEAN a developing country in Asia with a large market. Thailand's higher education system which is influenced by demographic, energy and environmental changes, future jobs and the development of local alternatives that will be a trend in the higher education system." (p. 11). But on the other side, [Pomsuwan and Soontayatron \(2017\)](#) found that "Thailand has recognized the mistakes by arranging some points as their educational issues like the teacher recruitment should not only focus on education, but also experience, but the policy is not practically applied" (p. 110).

There is a study taking conclusion about vocational high schools in Indonesia and it shows the results of the schools' alumni quality to face AEC. [Lawitta, Sihaloho, and Arianti \(2017\)](#) explain that "vocational education graduates have not been able to compete in (AEC) ASEAN Economy Community. in order to compete there are many things that human resources must prepare properly. if programs can be integrated with government regulations, policies, planning and budgeting, then vocational education can play a role in economic development." (p. 956). This is probably because the government does not involve the industry in the proper proportion when developing curriculum for vocational education. [Widiaty and Ana \(2015\)](#) argue that "producing human resources in accordance with the needs of stakeholders, especially industry is the goal of vocational education. Therefore, at the planning, implementation, and evaluation stages, 98 industry practitioners are actively involved as a process of developing an ideal vocational education curriculum." (p. 98-99). On the other hand, [Retnawati, Hadi, and Nugraha \(2016\)](#) said "the 2013 curriculum is a new curriculum applied by the Indonesian government in the education process in the elementary school, the junior high school, and the senior high school. The purpose is to improve the quality of human resources and the nation's competitiveness, together with the development of science, technology and arts." (p. 34). However, the curriculum itself considered not suitable for vocational education because of equal opportunities for students' social, academic, professional and territorial mobility in the higher education system, which will provide the possibility of developing individual education and vocational courses under current conditions. [Sakhieva et al. \(2015\)](#) explain that "based on the competency approach of vocational education organizations, the most appropriate in this context is to become a modular structure" (p. 246). This literature review is trying to analyze how the curriculum in AEC, especially

in vocational education. Thus, the main research question for this research is "How does curriculum in AEC work to support vocational education?"

## 2. Literature review

### 2.1. Curriculum

The totality of student experiences in the educational process is referred to as the curriculum in education. [Clark \(2015\)](#) said, "The curriculum is a collection of experiences designed for young learners through their education, wherever they are educated. It is a set of subjects as well as educational programs provided by educational providers whose content is interdisciplinary learning and opportunities to achieve personal and learning goals. Effective curricula are those that suit twenty-first century learners in numeracy and literacy, promote health and well-being, and support the social and technical skills necessary for study, life and work (lifelong learning)." (p. 91). While, [Refnaldi and Arianto \(2017\)](#) found that "it is also defined as the series of objects including study program, approach, contents, materials, activities, and experiences which are delivered to the subjects" (p. 139). A curriculum is needed in the educational system to achieve particular goals. In this case, the goal is to meet the requirement of AEC standards. In Indonesia especially, the current curriculum used in the nation is called Curriculum 2013.

The term curriculum refers more to subjects and educational programs taught in schools or in certain courses or programs. Specifically the curriculum refers to the knowledge and skills that will be learned by students, which includes learning standards or learning objectives that they are expected to meet; teacher-taught units and lessons; assignments and projects assigned to students; books, materials, videos, presentations, and readings used in the course; and other methods used to evaluate student learning. Example of curriculum is individual teacher curricula, to organize and teach certain subjects require specific learning standards, lessons, assignments, and materials used.

### 2.2. ASEAN Economic Community

According to [Minh \(2015\)](#), "The ASEAN Economic Community or what is abbreviated as MEA is an organization in ASIA which consists of ten countries in Southeast Asia. Turning the area into a single market and production base with a high competitive advantage so that it becomes a stable and prosperous area starting in 2015 is the goal of forming AEC. Brunei, Cambodia, Indonesia, Laos, Malaysia, Myanmar, the Philippines, Singapore, Thailand and Vietnam are the ten of ASEAN members." (p. 135).

Not only that, [Silalahi \(2017\)](#) stated, "AEC stands for the ASEAN Economic Community. ASEAN is an era of free trade for the integration of regional economies in the Southeast Asian region" (p. 72). Not all countries in ASEAN regions are ready to face AEC due to lack of human resources skills. The lack of skills varies on the land. Some countries lack technical skills; some others lack linguistic skills like mastering English as the main language of AEC. This can be solved through reforming curriculum which adjustable due to each nation's needs to face AEC.

### 2.3. Vocational education

The critical role of vocational education is to educate and train young people to face globalization's challenges with changes that will be experienced, such as technological, economic, social and cultural changes that affect people's lives. Educating and training vocational graduates to become productive workers who must be able to compete in the international market is the responsibility of vocational education in Indonesia. Vocational high schools are schools that focus on practice more than other schools. In Indonesia, most schools focus on theories and some essential practices. Vocational high schools offer courses in the adjustment with the demand from industries. Thus, the graduates from vocational high schools are mostly ready to work in industries. [Hamid et al. \(2018\)](#) explain that "The important role that vocational education has to play includes educating and training its graduates to face the challenges of globalization and economy, technological and socio-cultural changes that affect people's lives" (p. 17).

[Yoto \(2016\)](#) said, "Vocational education is a special program to provide intermediate-level skilled graduates within carrying out industrial, commercial and other vocational development, both at the

national, regional and international levels. Therefore, the business/industry world must be involved in the vocational education curriculum. Cooperating with industry, both in planning, implementing, and evaluating education to improve vocational education quality. The implementation of vocational education can be developed through two alternatives, namely, non-formal education with vocational education programs and vocational training, as well as formal education through vocational education in secondary schools, and through higher education in universities, institutes and polytechnics." (p. 2).

### 3. Research methodology

The method used in this research is a descriptive content analysis study, which is an analysis that aims to describe the main content based on the collection of information obtained ([Herliandry, Nurhasanah, Suban, & Kuswanto, 2020](#)). The information in question comes from various scientific articles related to the secondary school curriculum in ASEAN Economic Community. The scientific papers are obtained from several sources, such as national journals and international journals. The data and information obtained are then collected and analyzed and concluded so as to get a recommendation as a literature study.

This literature review focuses on the relationship between the curriculums used in AEC schools, especially in vocational education. Thus, this literature review is built by gathering and filtering literature under the following conditions and search keys:

- a. Curriculum for vocational education: 48.400 results
- b. ASEAN curriculum: 14.400 results
- c. ASEAN Economic community curriculum: 11:300 results
- d. Vocational education and training "curriculum relevance": 836 results
- e. Range of research year between 2015-2020

Thus, there are 22 articles analyzed in this paper. These 22 articles are mainly about curriculum and how the curriculum affects the output and how effective the curriculum to develop human capital before working in industries. Most importantly, the articles' subjects are mainly either teachers or students around ASEAN Economic Community member states which are the main subject of this paper. The reviews are written below.

Table 1. Curriculum in ASEAN Economic Community in vocational education

Author and Year	Title	Country	Method	Sample	Results
<a href="#">Stroupe and Kimura (2015)</a>	Opportunities and challenges across ASEAN: looking to the ASEAN Economic Community	Japan	Descriptive Qualitative	ASEAN Members States	In the long term, AEC is very likely to realize its goal of becoming an economic community that has stability and affects global economic growth, because cooperation between ASEAN member countries can test and strengthen international relations in the Southeast Asian region.
<a href="#">Hamid, Nurtanto, and Fawaid</a>	Analysis of vocational subject	Indonesia	Quantitative	23 Vocational teachers	The vocational teachers at SMKN 1 Cilegon in



<a href="#">(2018)</a>	learning implementation plans based on the 2013 Curriculum				preparation of LIP overall have outstanding criteria. SMK N 1 Cilegon as a pilot project in LIP preparation has reached the criteria very well.
<a href="#">Silalahi (2017)</a>	English competencies of university of Indonesia graduates to face the ASEAN Economic Community (AEC)	Indonesia	Qualitative	The university's curriculum and the graduates' TOEFL ITP scores	The curriculum of all study programs at Indonesian universities is carefully and critically designed to suit students' needs and the economic market. Students have varied English competency scores (TOEFL ITP), and only a few can score 550 or more.
<a href="#">Clark (2015)</a>	Formative assessment: translating high-level curriculum principles into classroom practice	Japan	Qualitative	Curriculum principles	Here it has been suggested that the "formative curriculum" creates a more equitable and more robust approach to assessment, from the framework and principles of the curriculum at a high level into classroom practice.
<a href="#">Hall and Pesenti (2017)</a>	Developing artificial intelligence industry in UK	United Kingdom	Qualitative	11 Articles about Artificial Intelligence	There is a massive opportunity for AI (Artificial Intelligence) to do more for the British population and economy; the actions recommended in this report are only the first step towards realizing that potential. Ongoing collaboration between Government, academia and industry will be needed to implement

					these recommendations now and to continue to present the enormous potential of AI in the future.
<a href="#">Refnaldi and Arianto (2017)</a>	The voices of alumni in curriculum development: a step to meet the standards of the ASEAN University Network Quality Assurance (AUN-QA)	Indonesia	Qualitative	Alumni of English Department UNP who work on non-education fields and those who work on education fields.	In this study, it can be concluded that some improvement in the formulation of the learning outcomes is needed based on Alumni's needs as one of the stakeholders. Those are related to the reformulation and elaboration the existing learning outcomes of each course
<a href="#">Ambiyar, Yulastri, Yupelmi, and Paryono (2018)</a>	The relevance of hair beauty productive courses in vocational high schools to industry needs	Indonesia	Qualitative	Six beauty salons where their graduates of SMK N 6 and SMK N 7 Padang	All of the graduates who enter the workplaces have basic skills to work at a beauty salon, although it still cannot be considered as a professional
<a href="#">Minh (2015)</a>	Competition and Integration of academic education and vocational training in ASEAN Economic Community	Vietnam	Qualitative	ASEAN Member States	When the ASEAN Economic Community's participation is implemented, Vietnam should proactively integrate to acquire selected international experiences in vocational education and maintain the principle of independence, autonomy, equality, and mutually beneficial cooperation with the member countries.
<a href="#">Lawitta, Sihaloho, and Arianti (2017)</a>	SMK in Indonesia facing ASEAN Economic Community (AEC)	Indonesia	Descriptive Quantitative	Secondary time series data library published by Global Entrepreneur	As a secondary level vocational education, (SMK) vocational high school has an important role in planning and creating

				ship Monitor (GEM), BPS, Ministry of Manpower, and various related publications	a professional and productive young generation to prepare them for the workforce.
<a href="#">Yahiji, Mahfud, and Mu'ammara (2019)</a>	Vocational education in Indonesia and ASEAN Economic Community	Indonesia	Qualitative	Vocational Education in Indonesia in general scale	Vocational education is essential for Indonesian and ASEAN economic communities. All stakeholders must confront them in collaboration. Creativity, innovation, and synergy are the keys to contributing to a better nation and world because vocational education in Indonesia is visible to the government and all stakeholders.
<a href="#">Widiatya and Anaa (2015)</a>	Vocational pedagogy in perspective vocational high school curriculum	Indonesia	Qualitative	20 stakeholders from various vocational high schools	Development of vocational pedagogy principles that characterize the learning process in vocational education. The method of operating sustainably must be carried out to develop a vocational education curriculum relevant to the needs of the industry.
<a href="#">Khairullin, Lyutziya, Valeyeva, Alfiya and Zakirova (2015)</a>	Designing a modular competency-based curriculum structure and technology for its implementation in higher vocational institutions	Russia	Qualitative	Responding teachers	Thus, the development and implementation of a modular competency-based curriculum education process for higher education are one of the most effective ways to build professional competencies.
<a href="#">Heri, Samsul,</a>	Difficulties of vocational	Indonesia	Qualitative	22 subject matter	The initial capital for the success of



<a href="#">and Chandra (2016)</a>	high school teachers in carrying out assessment in the 2013 curriculum in Yogyakarta province, Indonesia			teachers	curriculum implementation is training and curriculum socialization. Properly organized training and outreach will provide teachers with a good understanding of the curriculum.
<a href="#">Tobari, Kristiawan, and Asvio (2018)</a>	Principals' strategies in improving the quality of education in the era of the ASEAN Economic Community (AEC)	Indonesia	Qualitative	3 vocational high schools	SMK Negeri 1 Bukittinggi is trying to improve the competence and qualifications of teachers. The headmaster of SMK PGRI Tanjung Raja is training the students maximally. SMK Negeri 1 Pangkalan Kuras equip the needs of infrastructure.
<a href="#">Haigh (2010)</a>	Curriculum internationalization: Designing inclusive education for a small world	Indonesia	Qualitative	Internationalization of a curriculum	Creating equal opportunities for learning and advancement for all students the university accepts is an internationalization of the curriculum. It is about creating a fair playing field for those who are subject to the competitive aspects of education and assessment.
<a href="#">Yoto (2016)</a>	Vocational education development strategy to improve quality of human resources in dealing with ASEAN Economic Community	Indonesia	Qualitative	Curriculum Development	The preparation of the vocational education curriculum must pay attention to: Curriculum design refers to several things, among others, curriculum refers to the discipline of science, community, students, and technology.
<a href="#">Okoye and</a>	Technical and	Nigeria	Qualitative	Curriculum	There is an urgent

<a href="#">Arimonu (2016)</a>	vocational education in Nigeria: issues, challenges and a way forward			in Nigeria	need to change the education system in Nigeria. The investments in Vocational and technical education and skills training should be given priority attention.
<a href="#">Tran and Duong (2015)</a>	Intercultural communicative competence: an important skill in the context of the ASEAN Economic Community	Vietnam	Qualitative	Intercultural communicative competence	English language education is primarily responsible for helping develop ICC (English language competence & IC) among English language users in the ASEAN economic community.
<a href="#">Thanosawan (2017)</a>	ASEAN Economic Community: an analysis of trends and challenges for Thai higher education institutions	Thailand	Qualitative	Thai higher education institutions	The Institutions need to be aware that the recreated model's results can change from the original. This is especially true for Thai higher education as it seeks to borrow innovation and knowledge from abroad and eclectically select what fits their context best.
<a href="#">Rakib (2016)</a>	Entrepreneurship education development in dealing ASEAN Economic Community	Indonesia	Qualitative	Entrepreneurship subject	In this modern era, entrepreneurship education is expected to be able to prepare graduates to have high discipline, commitment, honesty in acting and being, creative and innovative, risk-taking, proactive, and having an independent way and creating jobs in the ASEAN economic community.
<a href="#">Gitaharie and Soelistianingsih (2018)</a>	Indonesia's academic readiness in facing a freer flow of skilled	Indonesia	Qualitative	5 state universities: —UI in Depok, Institut	This research concludes that there is a gap between graduates from five SU (State

	labor in the implementation of the 2015 ASEAN Economic Community (AEC)			Pertanian Bogor (IPB) in Bogor, ITB and Universitas Padjadjaran (UNPAD) in Bandung, and UGM in Jogjakarta	Universities) graduates and the user perspective. State University graduates have exemplary academic achievements, strong knowledge in their respective fields, and are ready to compete in the regional labor market.
<a href="#">Pomsuwan (2017)</a>	Policy Suggestions in Preparation for labor flow in the tourism industry and the development of teaching and learning potential of students at vocational colleges offering hotel and tourism major through curriculum improvement and preparation for the ASEAN Economic Community in 2015	Thailand	Quantitative	100 Thais who know and understand the flow of labor in the tourism industry in preparation for the 2015 AEC+ teachers of vocational colleges' tourism and hotel curriculum program under the Office of Higher Education Commission	<ol style="list-style-type: none"> <li>1. There should be some guidelines to support the flow of Thai labor to ASEAN countries.</li> <li>2. There should be some guidelines to develop Thai labor's potential to reach the national and international standards.</li> <li>3. According to the vocational college curriculum, there must be guidelines to solve service work quality that does not achieve the goal.</li> </ol>

#### 4. Results and discussions

This section reports the result and discussion of the reviewed articles. The analyses indicate that most articles focus on how curriculum can impact vocational schools' progress in facing or joining the competition in AEC regions. As can be seen from the reviewed articles, most schools are using national curriculum as the standard. Some schools find this effective but some others do not. To make it effective and improving, schools have taken the initiative to develop curriculum based on the industry's demands and needs. The needs of the industries, in this case, are not only about vocational skills but soft skills are important as well. This is the standard we can find in most curriculums in ASEAN countries. Entrepreneurship skills and knowledge are also applied in ASEAN countries' curriculum. Those necessary skills above are taken from the curriculum problems in Vietnam and Thailand as example. International experience is also a considerable aspect of building and designing curriculum.

Taking the example from the curriculum applied in a school from Bukittinggi, Indonesia, in facing the AEC is the national curriculum as a compulsory curriculum (Interview Results, 27 April 2017 with the Principal of Schools. However, to improve the quality of education, vocational high school (SMK)

in Bukittinggi also develops the industry's curriculum. The principal said that during a visit to Korea, the Korean side offered schools to make Samsung products, meaning that in developing the curriculum and the national curriculum, vocational high schools are trying to adapt to the current industry needs ([Tobari & Asvio, 2018](#)).

It would probably be good to review and evaluate the curriculum applied in each country around AEC regions. Due to the example above, there should be an improvement in the curriculum to fulfill the industry's needs. However, every country's economic growth is different, which also indicates the standard of industry needs could be different in every country. Thus, this cause a new issue where schools, headmasters and teachers are challenged to develop a curriculum that can match the international industry's needs in common. Suppose a nation insists to use the outcome of their own curriculum standard. In that case, there will be a big possibility that the user of their human capital will be disappointed due to the worker's unexpected results. Meanwhile, [Haigh \(2002\)](#) explain that "has created feedback from some disappointed 'customers', because instructions that had designed and delivered. This pressure began to affect teachers in subjects that were perceived as international subjects" (p. 49). This makes western universities suggest to the internationalization of the curriculum. A major project affecting all aspects of the university's provision, including its priorities for staff development and career rewards is the internationalization of a curriculum.

From a wider window and point of view, the broad conclusion of this review is that every curriculum needs to have a standard of each country which also becomes the nation's characteristics. By using the national curriculum, vocational education also needs to apply an industrial curriculum that sets the standards to meet its demands and needs. Like any other studies, this review has limitations like the focus is on AEC regions; mostly discussed studies in Indonesia, particularly Indonesian Curriculum 2013.

## **5. Conclusion**

Based on the review and discussion results, it can be concluded that AEC markets and industry share the same needs from AEC countries. The requirements are about vocational or technical skills, but many criteria should be fulfilled in a particular standard. Soft skills like good attitude and habit are included as a need in AEC markets. International experiences are preferred to be included in the curriculum. This international experience includes English mastery as the main language used in AEC. Countries in ASEAN struggle with these aspects as the industry's needs grow bigger and set higher standards. However, due to different resources among countries and depends on how advanced a country is, the curriculum implementation results could be different. Thus, although the standards are similar, the results cannot be expected to be the same as well. Setting up same standards for all countries in South East Asia regions is out of the question. But sharing the content of methods and subjects delivered in each countries could be a starting point where all countries can adjust their ability to achieve the same targets.

## **Limitation and study forward**

This study used a descriptive content analysis study, the information in question comes from various scientific articles related to the secondary school curriculum in ASEAN Economic Community. As does all research, this study has limitations. This research is limited to vocational high schools in South East Asia regions. Future researchers could use this research to make related research with some various content. Researches about curriculum in secondary schools in different areas are expected. It is probably on a broader scale, generally in Asia or on a smaller scale in the national scale of a country.

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## References

- Ambiyar, A., Yulastri, A., Yupelmi, M., & Paryono, P. (2018). Relevance of the productive course of hair beauty in vocational high schools to industry needs. *Jurnal Pendidikan Teknologi dan Kejuruan*, 24(1), 125-131. doi:10.21831/jptk.v24i1.18388
- Clark, I. (2015). Formative assessment: translating high-level curriculum principles into classroom practice. *Curriculum Journal*, 26(1), 91-114. doi:10.1080/09585176.2014.990911
- Gani, L., Gitaharie, B. Y., Husodo, Z. A., & Kuncoro, A. (2018). *Competition and cooperation in economics and business*. London: Routledge, Taylor & Francis Group.
- Haigh, M. J. (2002). Internationalisation of the curriculum: designing inclusive education for a small world. *Journal of Geography in Higher Education*, 26(1), 49-66. doi:10.1080/03098260120110368
- Hall, W., & Pesenti, J. (2017). *Growing the artificial intelligence industry in The UK*. Department for Digital, Culture, Media & Sport and Department for Business, Energy & Industrial Strategy. Part of the Industrial Strategy UK and the Commonwealth.
- Hamid, M., Nurtanto, M., & Fawaid, M. (2018). The analysis of learning implementation plan in vocational subjects based on 2013 Curriculum. *Innovation of Vocational Technology Education*, 14(1), 17-21. doi:10.17509/invotec.v14i1.11042
- Herliandry, L. D., Nurhasanah, N., Suban, M. E., & Kuswanto, H. (2020). Pembelajaran pada masa pandemi Covid-19. *JTP-Jurnal Teknologi Pendidikan*, 22(1), 65-70.
- Lawitta, R., Sihalohe, L., & Arianti, J. (2017). *Vocational high school in Indonesia facing ASEAN Economic Community (AEC)*. Paper presented at the International Conference on Teacher Training and Education 2017 (ICTTE 2017).
- Minh, Đ. T. (2015). A competition and integration of academic education and vocational training in ASEAN Economic Community. *Journal Of Science*, 1 (1), 130-145.
- Okoye, R., & Arimonu, M. O. (2016). Technical and vocational education in Nigeria: Issues, Challenges and a Way Forward. *Journal of Education and Practice*, 7(3), 113-118. Retrieved from www.iiste.org
- Pomsuwan, S., & Soontayatron, S. (2017). Policy suggestions in preparation for labor flow in the tourism industry and the development of teaching and learning potential of students at vocational colleges offering hotel and tourism major through curriculum improvement and preparation for the ASEAN Economic Community in 2015. *Review of Integrative Business and Economics Research*, 6(2), 105. Retrieved from <http://buscompress.com/journal-home.html>
- Rakib, M. (2016). *Entrepreneurship education development in dealing ASEAN Economic Community*. Paper presented at the Proceeding International Conference on Mathematic, Science, Technology, Education and their Applications.
- Refnaldi, R., & Arianto, M. A. (2017). The voices of alumni in curriculum development: a step to meet the standards of the ASEAN University Network Quality Assurance (AUN-QA). *Lingua Didaktika: Jurnal Bahasa dan Pembelajaran Bahasa*, 11(2), 138-145. doi:10.24036/ld.v11i2.8092
- Retnawati, H., Hadi, S., & Nugraha, A. C. (2016). Vocational high school teachers' difficulties in implementing the assessment in Curriculum 2013 in Yogyakarta Province of Indonesia. *International Journal of Instruction*, 9(1), 33-48. Retrieved from <https://eric.ed.gov/?id=EJ1086958>
- Sakhieva, R. G., Khairullina, E. R., Khisamiyeva, L. G., Valeyeva, N. S., Masalimova, A. R., & Zakirova, V. G. (2015). Designing a structure of the modular competence-based curriculum and technologies for its implementation into higher vocational institutions. *Asian Social Science*, 11(2), 246. doi:10.5539/ass.v11n2p246
- Silalahi, R. M. (2017). Indonesian university graduates' English competence for facing the ASEAN Economic Community (AEC). *IJEE (Indonesian Journal of English Education)*, 4(1), 71-83. doi:10.15408/ijee.v4i1.3457
- Stroupe, R., & Kimura, K. (2015). ASEAN integration and the role of English language teaching. *Phnom Penh: Language Education in Asia*. doi:10.5746/LEiA/ASEAN\_Integ\_ELT

- Thanosawan, P. (2017). *ASEAN Economic Community: an analysis of trends and challenges for Thai Higher Education Institutions*. Paper presented at the The European Conference on Education 2017 Official Conference Proceedings.
- Tobari, M. K., & Asvio, N. (2018). The Strategy of Headmaster On Upgrading Educational Quality In ASEAN Economic Community (AEC) Era. *International Journal of Scientific & Technology Research*, 7(4), 72-79. Retrieved from <https://www.researchgate.net/publication/326147258>
- Tran, T. Q., & Duong, T. M. (2015). Intercultural communicative competence: a vital skill in the context of ASEAN Economic Community. *Global Journal of Foreign Language Teaching*, 5(1), 15-22. Retrieved from [www.awer-center.org/gjflt/](http://www.awer-center.org/gjflt/)
- Widiaty, I., & Ana, A. (2015). *Vocational pedagogy in perspective vocational high school curriculum*. Paper presented at the 3rd UPI International Conference on Technical and Vocational Education and Training.
- Yahiji, K., Mahfud, C., & Mu'ammara, M. A. (2019). Vocational education in Indonesia facing ASEAN Economic Community. *IRJE (Indonesian Research Journal in Education)*, 3(1), 168-176. doi:10.22437/irje.v3i1.6954
- Yoto. (2016). *Vocational education development strategy to improve quality of human resources in dealing with ASEAN Economic Community*. Paper presented at the AIP Conference Proceedings.