

Higher education factors and issues in ASEAN countries: a review

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Abstract: This paper concerns the higher education issue and its related matters in Association of Southeast Asian Nations (ASEAN). A number of factors that play important roles in enhancing the higher education developments in ASEAN have been considered. Selected papers from literature have been reviewed in order to give readers more highlights on influencing factors that positively contribute to higher education developments in ASEAN. Cited papers have reported several initiatives implemented by many regional and international players “organizations” to enhance Higher Education Institutes (HEIs) in ASEAN. In this paper, certain papers have been collected and reviewed based on significant criteria. Papers whose keywords focus on “higher education” in “ASEAN” have been the main keyword-retrieved papers. There have been further criteria applied to selection procedure of cited papers and have been discussed thru this paper.

Keywords: ASEAN, higher education, BRI, internationalization, student mobility.

1. Introduction

Higher education is a very important issue for such a nation or a country in many life's aspects. Higher education can produce many advantages and features to its country e.g., it contributes much to the country's economy growth rate. Another feature can be considered is that higher education enhances the opportunities of a country's domestic competitiveness and also it builds prestige internationalization. Much more advantageous gain can be received but there are many difficulties and challenges in this way will be faced by country's higher education organizations. The gradually continued demand for higher education needs and the capacity of limits that might be faced by the country's higher education organizations would affect the economy situation and therefore cause to the economy restructure, are considered examples of struggles towards internationalization of a country's higher education development (Welch, 2011; Yaoshun & Kang).

Higher education towards the internationalization is not an easy step. To achieve such a level, different factors need to be well addressed. One of the factors that plays an important role is student mobility. Other factor is the openness of countries' governments and incentives to

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consider different types of activities related to higher education e.g., research, international academic collaboration, academic programs. Mobility and openness in Association of Southeast Asian Nations (ASEAN) have been found the most powerful evidence of achievement towards internationalization level compared to European programs. It has been reported (Graeme Atherton, 2019) that those countries of ASEAN focusing on higher education students' mobility have moved faster than others to reach internationalization in terms of higher education.

Not far away from the above discussed issue, international research collaboration and academic mobility is another key prominent factor that affects other strategic plans to higher education internationalization. As for example, publishing in international journals rather than domestic ones is just one of examples in this matter. Such a step needs to be considered by governments' policies in education strategies and therefore higher education institutes have to be given several incentives by related ASEAN ministries of higher education.

International organizations and higher education considerations are associated and need to be paid attention due to that the integration either on a regional or international level can be dramatically and gradually achieved (de Prado Yepes, 2006). By considering such things, developments of ASEAN, specifically those countries that need to enhance and increase the level integration of higher education, can be gained.

There have been several initiatives and programs implemented by many ASEAN countries individually and/ or wholly in order to continuously develop higher education systems aiming to achieve internationalization. Different examples have been reported and certain examples have been reviewed in this paper. ASEAN in terms of higher education systems developments have implemented many programs and projects with international players. One of these examples is the EU-funded European Union Support to Higher Education in the ASEAN Region (SHARE) project (Niedermeier & Pohlenz, 2016). SHARE gives ASEAN with support that contributes to integration with international higher education. Another example is reported in (Liu & Sukumaran, 2017). China's vision to export education to its neighboring countries, e.g., ASEAN, has been translated on the reality's earth and that has been crowned with a university's establishment in Malaysia. This is another example of ASEAN projects towards building strong higher education systems by developing programs with ASEAN's neighbors e.g., Northeast Asia specifically China. China's initiatives are several and have been extended to many ASEAN countries, Malaysia is a case in the above-mentioned example (Liu & Sukumaran, 2017). Other China's initiatives can be considered the big project of The Belt and Road Initiative (BRI).

BRI, that was announced in 2013, has many features and can add significant benefits to many adjacent countries. One of these countries is ASEAN. Additionally, one of the features that can be gained is the education connection.

This paper has reviewed a number of articles in order to discuss a number of related factors affecting the higher education developments in ASEAN countries.

This paper is organized as follows: Method for papers' collection procedure is provided in Section 2. In Section 3, Literature Review is discussed. In Section 4, Conclusion is drawn.

2. Method

2.1. Research problem definition

Higher education in ASEAN can be affected by a number of factors. Additionally, it can contribute to many related sectors and fields and can produce a lot of benefits to the selected country. This paper has attempted to collect a number of papers that discuss such issues. In this paper factors have been defined in order to give readers directions on initiatives and developments that have been implemented by several ASEAN countries regionally as well as internationally by their neighboring countries e.g., Northeast Asia, specifically China, and Europe.

The research problem in this paper is briefly defined. There are three main elements, which are as follows: factors, main players, benefits. Meaning, there will be a “factor” that wants to achieve a “benefit” with the help of a “main player”. A graphical definition is however illustrated in Figure 1 to give a more clarification.

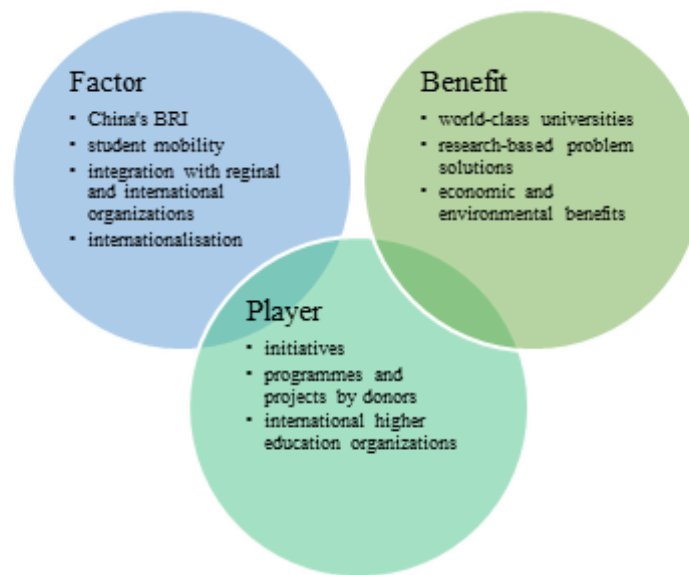


Figure 1. A graphical representation of research problem definition

In this figure, it is noticeable that the main player element contributes to enhance a factor towards such benefits. In some cases, a player has a direct relationship with factor e.g., programs provided by international organizations could significantly enhance student mobility activities to perform research-based solutions. In some other cases, initiatives as a player could lead to support the factor “integration with regional and international organizations” to enhance higher education systems and lead to the benefit of “world-class” research universities, as per BRI case.

2.2. Keyword’s extraction procedure

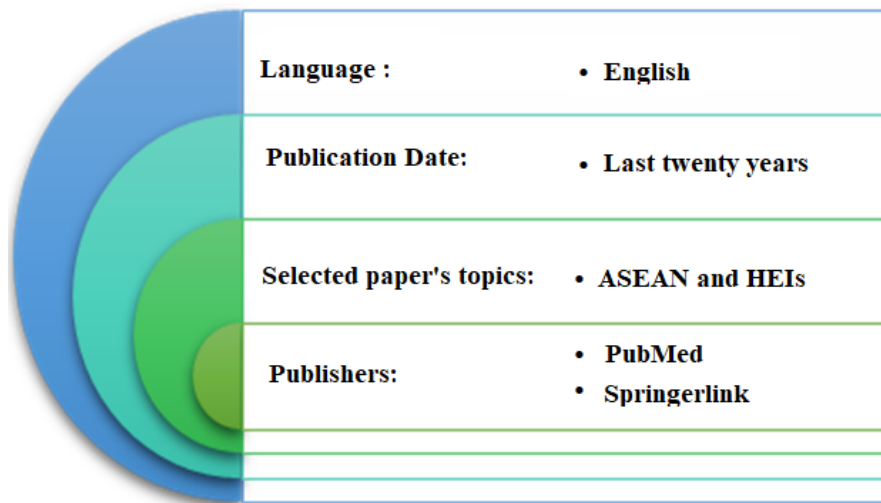
The way the keywords are extracted is derived from the problem statement. Extracted keywords can be extended and distributed to many sub-keywords based on the issues and factors that play important roles and impacts on the research problem being solved. Simplify, main and sub-keywords that have been used to find out papers from digital libraries are summarized in Table 1.

Table 1. Keyword's extraction procedure

Item	Description
Main keywords	• Higher education • ASEAN • ASEAN developments • ASEAN higher education institutions
Sub-keywords	• The China Belt and Road Initiative (BRI) • Student mobility • Internationalization • ASEAN integration with regional and international organizations
Other related keywords	• Higher education advantages in ASEAN • Higher education challenges • Higher education related initiatives • Higher education organizations

2.3. Papers' selection conditions and criteria

There are several conditions have been applied in order to select the paper that is reviewed and cited in this paper. The date the paper is published has been set to be between 2000 and 2019. Further criteria and conditions can be found in Figure 2

**Figure 2.** Papers' selection conditions and criteria

3. Literature Review

3.1. A. BRI

There are different types of collaboration(s) that can be achieved with the help of the BRI. In this review, a number of such benefits can be reviewed here. In addition, attempts done by China's vision will be reviewed.

According to (Liu & Sukumaran, 2017) and (Liu et al., 2016), the number of China's World-class universities is continuously increasing. Therefore, such an activity would contribute noticeably to China's neighboring countries e.g., ASEAN. As a result, the existence of BRI would enhances ASEAN higher education developments. It is said that BRI's aims are also to support 64

universities located on the BRI route to support them reach world-class level amongst other international universities and Higher Education Institutes (HEIs). In this settings, China's BRI aims to support middle-income countries to develop their current levels and to raise quality of higher education systems to high-quality research universities by providing cumulative experience of China in the higher education fields to those countries encompassed by BRI, it is also addressed in (LUO & KAN, 2017).

The paper entitled: "Reflections on China - ASEAN Higher Education Cooperation in the Context of the "Belt & Road Initiative"" has mentioned that China has put an initiative of the BRI to the world. This initiative provides a historic opportunity for China and more than seventy related countries and regions to comprehensively deepen their economic, social, educational and cultural cooperation. It is reported that the research exhibits that China-ASEAN cooperation in higher education is the most active when comparing between china and other regional cooperation due to the Belt and Road routes in terms of the intergovernmental cooperation platform and mechanism, Student mobility and cooperative run schools. Studies have also found that the China-ASEAN higher education cooperation is vital for both of China and ASEAN to demonstrate its intention (Wang & Yang, 2017). Another paper entitled: "Current Situation, Trends and Countermeasures for Overseas Education of Universities and Colleges in Yunnan Province in the Context of the Belt and Road Initiative", has addressed some advantages contributing to enhance the higher education between Yunnan Province and ASEAN by utilizing the BRI (Zeng et al., 2018). Additionally, another paper published in 2019 entitled: "Construction of International

Cooperation Community Model of Higher Education Between Yunnan Province and ASEAN" has addressed that the presence of BRI has contributed to enhance higher education towards the internationalisation. By the improvement of the ASEAN Community, ASEAN's institutional activities for international education cooperation in education shall help the integration of higher education within ASEAN. With more interesting ASEAN students and closer educational cooperation and exchanges with ASEAN countries, in the foreseeable future, in the construction of China and ASEAN's higher education international mechanism, the main body of cooperation in higher education will be more diversified, the content of cooperation will be more practical, the scope of cooperation will be more comprehensive, and the cooperation effect will be more international. In the end, the highest level of international mechanisms will be established: the China-ASEAN Higher Education Community. Yunnan should actively participate in the initiative of "One Belt and Road" and actively participate in the construction of China ASEAN higher education international cooperation mechanism to create more favourable conditions for the improvement of Yunnan higher education development level (Yun & Long, 2019).

Another article recently published in 2019 entitled: "Science support for Belt and Road" has mentioned that in addition to economic and environmental conditions improvements, the education sector is being considered and can be extensively supported for further developments for ASEAN and other countries, for about 126 cooperating countries. It is reported in (Horvat & Gong, 2019) that the National Natural Science Foundation of China is developing the B&R funding framework with BRI and other countries. One of the biggest research studies and problems that has been considered is environmental related research studies. BRI has involved

other International cooperative education organizations e.g., the World Wildlife Fund. Such an organization might add a research value to related higher education institutes and provide further analytical informative outcomes. Hence, International higher education organizations can contribute to BRI relevant issues (Cheng et al., 2017).

It is discussed that historical chances to the educational cooperation between ASEAN countries and China due to advancement of the BRI and the deep integration of the “Diamond Decade” of China-ASEAN. It has been proposed to expand the propaganda of the BRI, strengthen the exchanges between some Chinese universities and ASEAN countries, strengthen the cooperation of science and engineering majors, enhance the quality of education services for international students, and optimize the teachers' strengths and cultivate their key disciplines. Efforts could be made to improve the quality of international student education services and attract a lot of international mobility students (Yan et al., 2019).

- **International trade and relations amongst the BRI**

The trade change in relations between countries and regions located around and/ or near the BRI will get influenced due to different factors and parameters. Integration and strength of link(s) between countries and a relation to China can directly and indirectly, in some cases, will have an effect either to produce new trading links or leadership change.

BRI has many features and positive impacts to many sectors. One of these sectors is the trade. BRI can obviously contribute to many countries from the international and regional trade's point of view. A recent research study (Liu et al., 2018) has discussed the BRI impact and contribution that lead to enhance the relationships amongst countries located near the BRI. This study has mentioned that bilateral relations of trading between countries will get enhanced and evolved with a relation to the BRI network. On an international level, bilateral trading relations can enhance the leadership change between Russia and China. Or also, there are some communities, for example, Thailand and Kuwait, might have an emergence or disappearance of leadership, some other communities like Poland might have re-emergence as a result of trade's role on the change. However, this change caused by trade only takes a place depending on the integration between countries and relations. There are some regions and countries have the possibility of being selected by China with a highly unchanging category could be very close of partnership with China. Some countries in this category might be like Singapore, Turkey, Romania and some others. For those regions and countries which have not strong relationships with China from the perspective of trade will be selected to have high priority utilizing the country's location.

- **Economic- regional integration**

As a research study presented recently (Khan et al., 2018), has argued that BRI is considered a very promising opportunity that several countries and regions can get benefit from. Thus, this also can enhance the relations between countries and lead to an economic collaboration and integration between many regions. This integration should have enhanced the economy for many regions and countries around the BRI. The BRI does not only evolve economy for many countries, but furthermore, it establishes for sustainable economic links and relations between a country and its regional countries. Such an evolution, trade between China and several countries for can

then last long. In this setting, enhanced and evolved relations between countries in term of socio-economic integration depend on the success of being BRI continuing.

To this point and a result, the smooth transition of enhancement of economic integration amongst more than a country around the BRI will open a portion of investments and lead to establish a peaceful base for many kinds of infrastructure and huge projects led by the related governments. Thus, this is how the BRI can sustainably lead to an economic development thru regional integration for many countries. In addition, shared projects between communities will take places by then.

As BRI is being a useful tool for sustainability development, there have been many opportunities to which the BRI can contribute. An example is discussed in a published report (Gong et al., 2019) that has discussed the BRI influence of investment in digital information technologies to fulfil sustainable development goals. Futuristic development(s) achieved by an effective usage of related activities and projects established by the help of BRI is being gradually and continuously current. Specifically, the report has mentioned that huge project and investment go to transportation and energy sectors however the information and communication technology related investment(s) also are considerable. The reason is that the information and communication technology related projects contain many features in which private and public areas as well as donors pay a lot of attention to exploit such features. This is why investors from countries located near the BRI have continuously being involved. Being these activities and projects continuously moving has mainly and directly contributed to the sustainable development goal achievement on the last-long periods not only on the neighboring countries to the BRI but as well as to other countries and regions that could get benefits from. As a result, those countries have got their economies obviously growing up for small and medium sized enterprises (SMEs). This has enhanced a number of issues associated with digital communication and information fields and created chances for many factories to reduce the shortage of the digital development that those factories face. Hence, the BRI has potential contribution to trade, economy integration, and digital information system growth; that will lead to sustainably enhance development of countries on the level of both individuals as well as communities. The BRI however still needs further consideration so that development and growth can be extensively and sustainable achieved.

3.2. Student mobility

A report released by the British Council has mentioned that ASEAN higher education systems have been more open to include international engagement (British Council, 2018). It is noticeable that certain ASEAN countries e.g., Malaysia has provided support for international higher education. The article (British Council, 2018) has mentioned that there have been many ASEAN countries started to develop significant levels of transitional education aiming to achieve an acceptable student mobility rate and of course to enhance their own higher education programs. This can also build a strong relationship and partnership with international parts to enhance higher education in terms of internationalization and integration of regional collaborators.

These transitions could contribute much to ASEAN higher education as reported in (Soejatminah, 2018). The factors which make the higher education move toward the internationalization are

many. Student mobility and regional collaboration are examples of these factors that have noticeably helped the higher education in ASEAN to become at levels of internationalization. Being ASEAN countries the main area which has many student mobility transitions in higher education could be contributing to evaluate the higher education and put properly roles to make it in well internationalization.

The article presented in (Chan, 2012) has discussed the exporting student mobility issue from ASEAN to other countries. The ASEAN countries depend on some strategies roles to attract their student mobility amongst these member countries. However, the western has recently problems to import student mobility from those countries due to the growing competition between domestic and foreign higher education institutions.

In (Sugimura, 2008), the aim of reported study to clarify how to make the higher education Asia in globalization process. The authors have mentioned that the student mobility plays centric roles to development of higher education. This report has also discussed that the enhancement of the countries' economies and politics should be through the student mobility and Asia higher education. It is noted that the people's request for student mobility has been recently increased. However, the student mobility could help to do improvements in many areas such as incorporate the different cultures, economy enhancement, industrial development, create new positions and finally well improve process of education developments in ASEAN.

Another research study written by Yu sing Ong, in 2016 has discussed the factors of international mobility students of some ASEAN countries such Malaysia. The paper has reported that the BRI is an important innovative between Malaysia and China as the two countries being closer in economic, political and educational fields. The student mobility has the power because it contributes and enhances the globalization of higher education in ASEAN countries especially between Malaysia as one of ASEAN country and China. Several factors have contributed to improved student mobility such as reducing price of air-travel, wider educational opportunities for foreign students, and better competition to fascinate highest students. Students studying overseas can gain some benefits such as; the experience of a different culture, study environment and academic values which may give them an edge over their peers in the job market. Changes in the job market also mean that new skills are in demand. Constant learning, training and development need to take a place as a country competes in the international arena. Governments and private sectors are increasing their investments to build institutions of learning to attract both local and overseas students. Learning could be in both traditional face-to-face mode or through distance and e-learning reported by (Ong, 2016).

3.3. Internationalization

In order for ASEAN to reach internationalization and world-class universities, there should be a lot of programs and initiatives implemented and applied to their HEIs. This step needs further donors and international organizations. One of these initiatives are implemented by Northeast Asia and Europe. Here, some papers are reviewed in order to highlight issues that lead to enhance higher education developments in ASEAN.

For example, in (Ratanawijitrasin, 2015), the research study has aimed to discover the educational evolution happening in Association of South-East Asia Nations (ASEAN). It has searched for

reasons and factors that contribute to rapid change in educational move in ASEAN. It has reviewed a number of research studies that mentioned many factors by which education has been enhanced in ASEAN. It has concluded that there are three reasons that can make number of students to go to Higher Education Institutions (HEIs) increases which are summarized in three forms as follows: larger number of student population, higher interest in cross-border knowledge and experience, the need for more variety of academic programs.

Another example has been reviewed in (Welch, 2012a, 2014) and it has focused on Education-dependent relations amongst ASEAN. The China-ASEAN Relations in education issue has been considered in this paper. This paper mentioned that China has overshadowed other perspectives on ASEAN in terms of china economic rise. It attempts to find out factors and possibilities of being educational development achieved and enhanced with the existence of collaboration between China and other selected countries from ASEAN. It has mentioned that the relation between China and ASEAN in terms of higher education is still strong. Case studies that have been considered in this paper was Singapore, Malaysia, and Vietnam. The paper has mentioned that a significant potential exists by which further additional collaboration between China and ASEAN is gradually growing in terms of higher educational aspects for both nations, i.e., China and ASEAN countries. This paper has pointed out that there are numerous HIEs in many ASEAN regions lack the level of standardization and characterization of, for example, European institutions.

Even though the above reviewed researches have focused on internationalization supportive initiatives provided by international organizations, the study in (Graeme Atherton, 2019) has concerned student mobility and it has mentioned that such a step contribute to internationalization of ASEAN higher education. It is mentioned that building a standardization of higher education internationalization is not an easy movable growth due to many factors. Some of these factors might be regionalism consideration. A recent study has tried to come up with a number of key factors that help contribute to the growth of higher education internationalization of ASEAN compared to European institutions. The article has compared ASEAN HEIs to corresponding European ones according to experiences of European programs. It has mentioned that a study implemented in 2012 by a British Council focusing on higher education internationalization amongst ASEAN where this study has included statistics of activities that support the claim of the internationalization of higher education can be achieved by several factors e.g., students' mobility. This paper has mentioned that student mobility needs to be considered and paid a full attention by ASEAN. Another example in student mobility has been reviewed in (Bennell & Pearce, 2003). It has evaluated the countries developments through an increment of international students and foreigners studying in their own countries for qualifications offered by HEIs. The internationalization of higher education becomes much active to be globalization marking. The internationalization trade value in higher education, skills and training will gradually continue to growth and development if the governments barriers have eliminated and become under international monitoring. The investments of foreign trade in higher education and skills also will be increased because of investors are interested to establish and create their own especial business in oversea. So, the governments especially the translational economies will keen to create good facilities for those investors. However, all of these services

and facilities regarding the higher education, skills and training offered from providers (investors) in overseas should be evaluated and monitored by global systems to be well effective. However, a research reviewed in (Elita Yunanda, 2019) has discussed that the culture-based collaboration factor can contribute to improve higher education. In this research study, there is a need to, at the same time, maintain international collaboration between two nations in order to enhance one of them. Collaboration between the UK and Indonesia is just an example for such a case. The EU has provided the higher education sector in ASEAN much concern and has extended its collaboration with ASEAN in terms of higher education. The article mentioned in (Elita Yunanda, 2019), has reported that such an initiative would significantly contribute to ASEAN's Socio-Cultural Community Blueprint 2025 and other relative plans and programs of ASEAN e.g., Kuala Lumpur Declaration on Higher Education, and the ASEAN Work Plan on Education 2016-2020. This shared program would contribute to ASEAN's higher education and specifically enhancement of creating new opportunities for higher education related issues e.g., contribute to solve the problem of higher education space in ASEAN.

The article in (Rui, 2012) has discussed how regionalization and soft power factors can contribute and enhance to higher education in poor ASEAN provinces toward the internationalization. The paper in (Rui, 2012) discussed some factors such as regionalization, awareness and alliances and their impact on higher education. The authors have confirmed if these factors have been combined properly, they could enhance and develop the higher education. Furthermore, this study has mentioned that the resurgent regionalism overcomes many challenges and opened new alliances and made many agreements in institutions which had well contributed in enhancing the higher educations.

- **Integration with regional and international organizations**

A book entitled "Emerging International Dimensions in East Asian Higher Education" (Yonezawa et al., 2014) has discussed the roles and functions of higher education that recently appeared and their impacts as consideration that they are public benefits in the contents of the internationalization and regionalization. Without putting standard roles and functions for the internationalization of higher education, it will appear some challenges for the nation politics as the mentioned in this book. Some of these challenges are much mobility students, researchers and academic and private institutions will affect in the nation economy in case could not control all of these mentioned.

Some researchers have reported that integration with regional and international organizations and countries much contribute to internationalization and enhance higher education systems in ASEAN. One of these studies is reviewed in (Feuer & Hornidge, 2015). This study (Feuer & Hornidge, 2015) highlights a number of supportive factors that might affect the performance of improving higher education in general. It mentions that the cultural integration with other factors e.g., economic growth and political ties might help enhance the standardization of higher education and academic experience among nations. The paper has done a comparative negotiation between international and ASEAN HEIs in terms of integration of factors to find out

if there exists contribution achieved by those factors to higher education domains. This research article has performed an analysis and comparison between ASEAN and other competitive international higher education institutions. The analysis implemented by this paper mentions that economic factors may be of importance to higher education development. Some ASEAN countries with weak economically power may struggle with the international and regional integration in enhancing higher education and HEIs as well.

In (de Prado Yepes, 2006), it is pointed out that ASEAN comes after Europe and America and before other developing countries in the world in terms of higher education. This paper has mentioned that ASEAN for decades are developing their levels in higher education and they have been exploring collaboration with their Northeast Asia (i.e., Japan, as a donor country, China, and South Korea) and that has come up with a new organization in learning, specifically higher education, that probably increase the gain of success in developing HEIs as a result.

The article in (Welch, 2011) has revealed that there are several challenges and struggles that might be faced by a country's higher education to achieve integration with regional and international organizations. The dramatically occurred demand for higher education can cause a country's economy restructure. Thus, higher education should go thoroughly gradually and well-planned strategies in order to achieve a strong rate and achieve good performance of integration with regionally and internationally collaborated manner. This research article points out that relations between ASEAN in terms of collaboration and competition have to be implemented. A number of examples has been listed in order to highlight different types of collaboration between ASEAN and other neighboring countries e.g., China (Yan et al., 2019). There are, for example, many cases of student mobility between ASEAN. There is another type of collaboration amongst ASEAN such as consultants training, languages courses, management program between, as for example, NTU and China. Further challenges have been reported in (Welch, 2012b), Indonesia as a case study in this article. The aim of this study is to determine the main challenges that lead to reach an effective level of world-class for Indonesia in terms of higher education including drawing its map in the regionalism engagement in higher education. Due to that Indonesia position in the ASEAN member as a leading stakeholder, Indonesia could be expected to play an important role in such regional networks as ASEAN Universities Network (AUN). Meaning, there are some factors could help Indonesia to increase the quality of higher education such the good relation between Indonesia and China, as well as increasing the private institutions (Fajarwati & Suyanto, 2019).

4. Conclusion

This paper has reviewed a number of research papers, articles, and reports that relate to higher education in ASEAN. Also, articles that concern other related issues to higher education in ASEAN have been cited. For example, initiatives provided and implemented to enhance higher education in ASEAN have been reviewed thru this paper. Another example, programs and

projects aiming to help and contribute to ASEAN attempting to reach world-class universities in research and academic programs have been considered. In this setting, strong China-ASEAN relations have enhanced different sectors and created many developments e.g., in economy and environment researches for several ASEAN countries. One of the big projects implemented by China in ASEAN region has been the BRI. Papers reported that BRI much contributes to higher education systems for ASEAN. Some papers have mentioned that student mobility can enhance higher education systems and institutions for ASEAN countries. It is however stated that, in some cases, student mobility leads to reach internationalization if integration with regional and international organizations has been taken into account. Hence, higher education systems for ASEAN can be enhanced and can lead to “world-class” universities.

This review paper has discussed factors that play essential roles in enhancing higher education in ASEAN. As for example, BRI, student mobility, integration with regional and international organizations can directly enhance the higher education systems of ASEAN and help lead research universities reach “world-class” levels with high-ranking amongst international universities and HEIs. Additionally, those factors usually affect performance(s) of higher education systems in ASEAN in different areas and sectors e.g., in environmental and economic researches’ fields.

This paper has applied a number of criteria for the selection procedure of cited papers. For example, the paper with English language and published during the last twenty years has been considered in order to review latest applied initiative and projects implemented by ASEAN and their neighboring region and even their international donors.

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Conflicts of Interest

The authors declare that they have no competing interests.

References

- Bennell, P., & Pearce, T. (2003). The internationalisation of higher education: exporting education to developing and transitional economies. *International Journal of Educational Development*, 23(2), 215-232. [https://doi.org/https://doi.org/10.1016/S0738-0593\(02\)00024-X](https://doi.org/https://doi.org/10.1016/S0738-0593(02)00024-X)
- British Council, M. (2018). ASEAN higher education systems are becoming more open for international engagement <https://www.britishcouncil.org/contact/press/asean-higher-education-systems-are-becoming-more-open-international-engagement>.
- Chan, S.-J. (2012). Shifting patterns of student mobility in Asia. *Higher Education Policy*, 25(2), 207-224.
- Cheng, Y., Song, L., & Huang, L. (2017). *The Belt & Road Initiative in the global arena: Chinese and European perspectives*. Springer.
- de Prado Yepes, C. (2006). World regionalization of higher education: Policy proposals for international organizations. *Higher Education Policy*, 19(1), 111-128.

- Elita Yunanda, B. C. I. (2019). EU extends support to ASEAN higher education. <https://asean.org/eu-extends-support-asean-higher-education/>.
- Fajarwati, I., & Suyanto, A. (2019). STUDENT MOBILITY: FACTORS FOR CHOOSING INDONESIA AS A STUDY ABROAD DESTINATION. *PEOPLE: International Journal of Social Sciences*, 5(3).
- Feuer, H. N., & Hornidge, A.-K. (2015). Higher education cooperation in ASEAN: building towards integration or manufacturing consent? *Comparative Education*, 51(3), 327-352.
- Gong, S., Gu, J., & Teng, F. (2019). The Impact of the Belt and Road Initiative Investment in Digital Connectivity and Information and Communication Technologies on Achieving the SDGs.
- Graeme Atherton, G. C., Munir Shuib and Siti Norbaya Azizan. (2019). ASEAN countries move forward on internationalisation. <https://www.universityworldnews.com/post.php?story=2019042915353256>.
- Horvat, M., & Gong, P. (2019). Science support for Belt and Road. In: American Association for the Advancement of Science.
- Khan, M. K., Sandano, I. A., Pratt, C. B., & Farid, T. (2018). China's Belt and Road Initiative: A Global Model for an Evolving Approach to Sustainable Regional Development. *Sustainability*, 10(11), 4234. <https://www.mdpi.com/2071-1050/10/11/4234>
- Liu, C., & Sukumaran, T. (2017). Belt and Road: How China Is Exporting Education and Influence to Malaysia and Other Asean Countries. *South China Morning Post*, 30.
- Liu, Z., Liu, L., & Hu, S. (2016). On the process of mass higher education of 73 countries along the 'Belt and Road' initiative regions. *International and Comparative Education*, 38(4), 1-8.
- Liu, Z., Wang, T., Sonn, J. W., & Chen, W. (2018). The structure and evolution of trade relations between countries along the Belt and Road. *Journal of Geographical Sciences*, 28(9), 1233-1248. <https://doi.org/10.1007/s11442-018-1522-9>
- LUO, X., & KAN, Y. (2017). Review and Prospective of Higher Education Cooperation Policy between China and ASEAN. *Chongqing Higher Education Research*(1), 11.
- Niedermeier, F., & Pohlenz, P. (2016). State of affairs and development needs—Higher education quality assurance in the ASEAN region. *Indonesia: DAAD*.
- Ong, Y. S. (2016). ONE BELT, ONE ROAD: ENHANCING MALAYSIAN STUDENTS' MOBILITY. *European Journal of Education Studies*.
- Ratanawijitrasin, S. (2015). The evolving landscape of South-East Asian higher education and the challenges of governance. In *The European Higher Education Area* (pp. 221-238). Springer, Cham.
- Rui, Y. (2012). Internationalization, regionalization, and soft power: China's relations with ASEAN member countries in higher education. *Frontiers of Education in China*, 7(4), 486-507.
- Soejatminah, S. (2018). ASEAN University Network in Enhancing Student Mobility. *Journal of Interdisciplinary Studies in Education*, 7(1), 19-33.
- Sugimura, M. (2008). International student mobility and Asian higher education framework for global network. World Conference on Higher Education,
- Wang, J., & Yang, W. (2017). Reflections on China-ASEAN Higher Education Cooperation in the Context of the "Belt & Road Initiative". 2nd International Symposium on Business Corporation and Development in South-East and South Asia under B&R Initiative (ISBCD 2017),
- Welch, A. (2011). The dragon, the tiger cubs and higher education: Competitive and cooperative China-ASEAN relations in the GATS era. In *ASEAN industries and the challenge from China* (pp. 39-122). Springer.
- Welch, A. (2012a). China-ASEAN relations in higher education: An analytical framework. *Frontiers of Education in China*, 7(4), 465-485.
- Welch, A. (2012b). The limits of regionalism in Indonesian higher education. *Asian Education and Development Studies*, 1(1), 24-42.
- Welch, A. (2014). China-ASEAN Relations in Higher Education: An Analytical Framework. In *Emerging International Dimensions in East Asian Higher Education* (pp. 103-120). Springer.
- Yan, Y., Tan, H., Li, W., Huang, Q., & Yi, Z. (2019). Research on the Education of International Students from ASEAN to China under the Perspective of "Belt and Road".

- Yaoshun, Z., & Kang, S. THE CURRENT SITUATION, PROBLEMS AND COUNTERMEASURES OF THE COOPERATION ON HIGHER EDUCATION BETWEEN CHINA AND ASEAN.
- Yonezawa, A., Kitamura, Y., Meerman, A., & Kuroda, K. (2014). *Emerging international dimensions in East Asian higher education*. Springer.
- Yun, J., & Long, W. (2019). Construction of International Cooperation Community Model of Higher Education Between Yunnan Province and ASEAN. 3rd International Conference on Culture, Education and Economic Development of Modern Society (ICCESE 2019),
- Zeng, Q., Wang, J., & Jin, Y. (2018). Current Situation, Trends and Countermeasures for Overseas Education of Universities and Colleges in Yunnan Province in the Context of the "Belt and Road Initiative". 3rd International Symposium on Asian B&R Conference on International Business Cooperation (ISBCD 2018),