

Tourism Vocational Education Versus Tourism Industry

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Abstract: The tourism vocational education has provided qualified human resources to meet the tourism industry requirements. However, there is a big gap exist between the graduates, curriculum design and the demands from tourism industry because of the dynamic nature and shifted trends in it. The paper's objective is to present a review of current tourism vocational education in Indonesia, examined the curriculum of tourism vocational education and compare to tourism industry requirements. The method of this study used qualitative methodology through comprehensive literature review on curriculum, supporting documents and regulations. Interviews were conducted with educators from tourism vocational education and relevant stakeholders in tourism industry which involved 15 respondents. The data were analysed by using thematic content analysis through NVivo software analysis and manual system. The results of this research indicated that the tourism vocational institutions should collaborate with stakeholders to recognize the industry's requirements to develop relevant curriculum. In relation to provinces in Indonesia which has unique culture and abundant natural resources, the graduates need some specific skills to cater the relevant demands in tourism industry. The vocational institutions should be proactive to develop their curriculum, improve graduates' quality and added specific skills required.

1 INTRODUCTION

Education is a crucial thing for nation's development and act as a strong pillar to build the nation welfare. Therefore, it is a need to elevate education quality and keep it up to date with the global trends. The quality improvement of education may give an impact to many sectors related. It is evident that education have an important role to human capital. Education is a fundamental aspect of a human, and act as a central point to reveal human capabilities. Education is a powerful tool which can boost human capital, productivity, incomes, employability, and economic growth. Human capital and education are accepted as significant factors in economic growth (Romer, 1986, Lanzi, 2007).

Thus, it is noticeable that education builds human capital which lead to economic growth. Human capital may lift the economic growth, first, in improving the capability to absorb and adapt new technology and second involvement in rapid grow of advanced technology (Romer 1986). Burgess (2016) also confirms that there are several reasons why education quality is critical, first, because education

may become a nation's stock of skills which so potential to economic growth to lead the highly competitive international environment. Second, human capital is the factor to determine income inequality, moreover the high payment of expertise in certain skills. Third, the relation between human capital and their background is a vital determinant of social mobility and endurance of difficulty.

Human capital is a main factor which differentiate countries and as important aspect to compete both in regional or global arena (Sipilova, 2013). As a member of ASEAN Economic Community which begin in 2015, Indonesia is racing to compete with other ASEAN countries in a free market, generally in the context of capital, goods and services and labour. In the World Economic Forum (WEF) ranking, Indonesia experienced a big leap from 50 to 38. This was a huge leap for Indonesia and only surpassed by Ecuador and Lesotho. However, Indonesia's ranking still under the ratings of other ASEAN countries, especially Singapore, Malaysia, Thailand and Brunei Darussalam. This situation put a big question for public whether Indonesia could compete among

ASEAN countries. Currently the Human Development Index (HDI) Indonesia was ranked 121st out of 187 countries. Based on the report of the World Economic Forum (WEF, 2016), Indonesia's competitiveness is ranked 37 and still lower compared to some neighborhood countries such as Singapore (ranked 2nd), Malaysia (ranked 18th) and Thailand (ranked 32nd). In refer to the global talent competitiveness index 2015–16 Indonesia is ranked 90 for low middle-income countries. In fact, the structure of the Indonesian workforce pointed at a total of 55.3 million (46.8%) only graduated from elementary school (Taty, Possumah, Razak, 2017).

The tourism industry in Indonesia is developing rapidly and presents a great contribution to Indonesia's national revenue. In recent time The Indonesian Ministry of Tourism has been awarded as the best National Tourism Organisation in TTG (Travel Trade Gazette) Travel Awards 2018 in Bangkok. Moreover in 2018, Indonesia ranked in second position in Global Moslem Travel Index as the nation has raised 14,000 foreign tourists in 2017 (Kurniawan, 2018).

The ASEAN Economic Community (AEC) Integration in 2015 has the movement of employment for skilled tourism labor. The main purpose is to recognise of skills and qualifications required for working tourism professionals in ASEAN countries. The 2002 ASEAN Tourism Agreement (ATA) also guaranteed to upgrade tourism education, curricula and skills through the setting up competency standards and certification procedures, which lead to a mutual recognition of skills and qualifications in the ASEAN region (Batra, 2016).

There are a lot of opportunities in the tourism industry and needs to be maintained very well so that we can keep or upgrading the achievement. In terms of tourism vocational education, the graduates should be ready and qualified for this rapid changing in tourism industry. This urge Indonesia to provide tourism education in order to have the qualified graduates from tourism education and modify the curriculum to enhance the competitiveness in ASEAN countries and in global arena.

This paper attempts to describe the gap between the tourism school graduates and industry, examine the current tourism curriculum by taking the key perspectives from tourism schools or tourism higher education in Indonesia and compare to the tourism industry requirements.

2 ROLE OF TOURISM VOCATIONAL EDUCATION

Technology and Higher Education Ministry reported that there are 1,238 state and private polytechnic education institutions in 2017. It is noticeable that vocational higher education has progressed with the establishment of more state polytechnics in the past two decades. Recently, the target for vocational education is to equip graduates to have competence and professionals so they can compete at a regional and global level.

Polytechnic education and vocational school play an important role in human resource development of a country by creating professional and skilled manpower, enhancing industrial productivity and improving the quality of life. Indonesia has tourism vocational training schools and academies in most provinces and some tourism polytechnic under the authority of Tourism Ministry in several provinces. Tourism vocational education has significant contribution to tourism industry in Indonesia.

The Indonesian Qualification Framework is regulated by the Directorate General of Higher Education, Ministry of Education and Culture, Republic of Indonesia, and based on Presidential Decree No. 8/2012. The framework comprises nine levels of qualifications, starts from Level 1 to Level 9. The nine qualifications are clustered into three components: operator (Levels 1–3), technician or analyst (Levels 4–6), and expert (Levels 7–9). The vocational and the academic bachelor programs are both categorized as Level 6. The lower level emphasise the development of practical skills, whereas the upper level on knowledge and science (Oktadiana & Chon, 2014; Silitonga, 2013).

The vocational bachelor, as ruled by the Directorate General of Indonesian Higher Education, is equivalent to the traditional academic bachelor in terms of the levels approach. The bachelor's degree requires a total number of credit units between 144 and 160 to be completed within 4 years of study (DIKTI, 2011). There were approximately 25 hospitality and tourism institutions offering vocational and/or academic bachelor programs. However, the development of the institutions grows slowly because of several issues, such as a lack of strategic initiatives; regulations changes; a lack of integration among tourism and hospitality educators; academic regulations, accreditation system, nomenclature, and inadequate research activities (Oktadiana & Chon, 2014; Sofia, 2013).

The vocational education in Indonesia has been modified several times to fit the political and other

environment changes (Galam, 1997). Indonesian government conducted programs to enhance tourism instructors' knowledge, skill, and professionalism in massive education trainings (Park, 2005).

Despite the slow progression of tourism institutions in Indonesia, it is noticeable that the purpose of tourism vocational education is to provide the professional graduates to work in tourism and hospitality industry.

2.1 Gap between Graduates, Curriculum and Industry

Although tourism curriculum has been established decades ago and evolved for improvement, a gap still occurs between the graduates, curriculum and tourism industry.

Many Indonesian polytechnic graduates remain unemployed. There is also a mismatch of skills between what vocational graduates offer and what employers need. Furthermore, there is still the problem of making vocational higher education attractive to Indonesians. (Ayuningtyas, 2017).

To some extent, the tourism curriculum is insufficient to fit in the industry's demands because of some differences between the results provided by hospitality and tourism institutions and the requirements from industry (Ernawati, 2003). In addition, this area of study is still considered as less academic and prestigious compare to other traditional subject areas. Students opted hospitality and tourism study because they assume it as a course with many practical activities and requires nonmathematical skills (Oktadiana, 2011).

The skilful graduates and curriculum are the essential things that need to be addressed in the changing employment market and technology advances. The gap between graduates, curriculum and industry still occurs because of several issues identified such as: the existing tourism curricula do not adjust with the changes of the tourism industry; courses in tourism institutions are too broad or lack focus; insufficient practical experience for students; ineffectiveness English/foreign language training; inability to apply theory courses to the actual tourism industry work-place environment; instructors are more focused on teaching material that cover their main interests, teaching material not updated regularly; textbooks are very expensive especially from international publishers or written by international instructors who focus on issues and environments which different from tourism perspectives in their own areas (Batra, 2016).

2.2 Review of Tourism Vocational Education Curriculum

Tourism curriculum development, as showing in Figure 1 can be divided into three main period; first, before 1990, second, between 1990 and 2000, and third from 2000 to the present. The development timeline of tourism studies embodies the dynamic views of the educational tourism community during these periods (Wattanacharoensil, 2014).

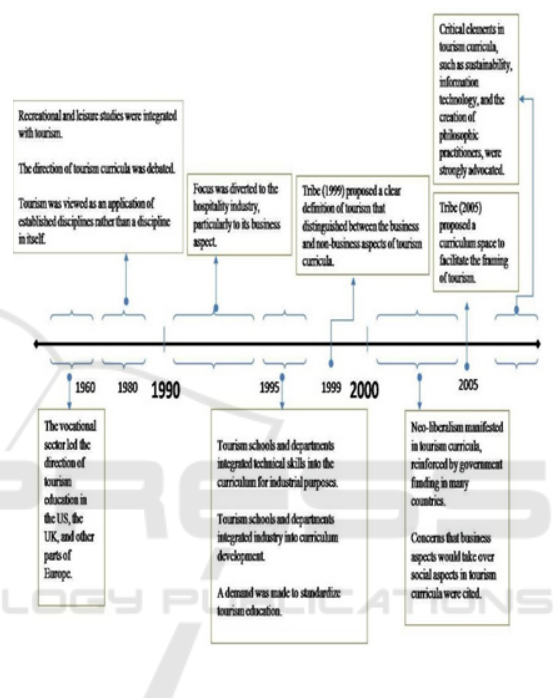


Figure 1: Key events of tourism curriculum development in each period (Adapted from Wattanacharoensil, 2014).

The arguments about curriculum content and the balance of courses in hospitality and tourism education have been continuing. The Tribe's perception suggested that the tourism and hospitality curriculum should consist of "vocational, professional, social science and humanities knowledge and skills that promote a balance between satisfying the business demands and those required to operate within the wider tourism world" (Dredge et al, 2012; p. 20).

The hospitality curriculum should emphasise not only on technical skills but also on the general management skills which are significant for the graduates' long-term careers. The conceptual skill is needed to cope with the complexity of hospitality operations. The balance of liberal arts and specialized education is required is required (Lin,

2002). Both of generic skills and vocational skills are fundamental for tourism and hospitality education curriculum. Generic skills may consist of communication, numbers application, problem solving, teamwork, information technology, personal values, and attitudes in example: leadership, motivation, initiative, and discipline) (Rimington, 1999).

The study of Oktadiana and Chon, 2017 summarised the combined subject that can be thought in tourism and hospitality curriculum for Bachelor degree which is shown in Figure 2.

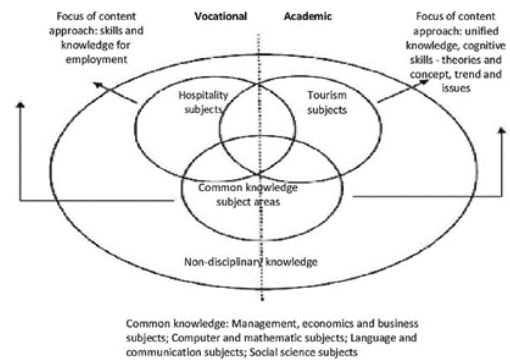
Group/Subjects	Vocational Based Subjects	Academic Based Subjects	Academic Based Subjects
Management	Business	Process Production Management Human Resource Management Operational Behavior Accounting	Finance Management Strategy Management Business Law
Marketing	Customer Behavior Marketing Plan Marketing Mix Marketing Research	Production Management Production Management Logistics Management and Distribution	Marketing Management Business Law Consumer Behavior Marketing Research
Tourism	Business Services Tourism Management Business Services Management	Production Management Tourism Management	Business Law Tourism Management Business Services Management
Computer and Information Systems		Production Management Management Information System Marketing Research Business Services Business Information System Human Resource Management	Business Law Business Information System
Language and Communication	English for Specific Purposes	Business Communication Business	Business Law Business Information System
History		Production Management Marketing and Tourism History Production Management Marketing Communication Business Law Business Services	Business Law Business Information System
Commerce and Business Studies		Production Management Business Services	Business Law Business Information System Business Services
Law, Economics and Finance		Business Services Business Law	Business Law Business Information System Business Services

Figure 2: Course content of vocational and academic bachelor programs (Adapted from Oktadiana & Chon, 2017).

The content-specific focus of the vocational bachelor program is on the hospitality subjects whereas the academic bachelor highlights the tourism subjects. A proposed course contents can be seen at Figure 3.

Figure 3: A proposed model of vocational and academic bachelor course content (Adapted from Oktadiana and Chon, 2017).

In summary, the focus courses for the vocational mode is on skills and knowledge for employment, whereas for the academic mode it is on integrated



knowledge and cognitive skills that emphasis on theories, concept, trends and issues in tourism (Oktadiana & Chon, 2017).

3 RESEARCH METHODOLOGY

This research used exploratory qualitative research method. The data obtained from the in-depth interview result, literature about curriculum in tourism education, collecting the relevant documents and observation.

3.1 Data Collection Technique

Data collection techniques are through interviews, documents and research notes from observations (field notes) (Zhang, 2008a, Zhang 2008b).

1. Interview

Interviews generate direct quotes from respondents about the experiences, opinions, feelings and knowledge of respondents (Patton, 2005). The interview was conducted in the form of in-depth interviews. This technique is a qualitative research that include intensive individual interviews with a small number of respondents to explore their perspectives on a specific idea, program or situation (Boyce & Neale, 2006). The interview conducted in the form of semi-structured interviews. The semi-structured interview considered to be the most appropriate for this study because it can explore the perceptions and opinions of the respondents and to obtain further information or clarification of the questions. In addition, semi-structured interview form can be implemented on the respondents who are professional and educated as well as the appropriate standard interview schedule (Barriball & While, 1994)

2. Documentation
The relevant documentation related curriculum, tourism curriculum, rules and regulations concerning the curriculum in Indonesia.
3. Observation
Researchers did observations by noting the important and relevant data to the purpose of research.

3.2 Data Analysis Technique

In this study, interview results were analysed using thematic content analysis. Thematic content analysis is an analytical method to describe phenomena commonly used in qualitative business, psychological and health research (Downe-Wambolt, 1992; Elo & Kyngas, 2008; Hsieh & Shannon, 2005). The data generated from this research is the result of semi-structured interviews in the form of audio-tape recordings, documents and field notes. Documentation and observation results (field notes) analysed and selected based on relevance to the interview results. Interview transcripts are coded and partially processed using NVivo software and some were done manually. NVivo data analysis software can assist researchers in transcribing interviews, coding and organizing data from interviews to generate concepts of research results (O'Donoghue, 2007). The researcher recorded each interview process, issues related to interview answers and other additional information. The transcript was read, and the narrative meanings were identified with the codes. The codes were reviewed again and developed in the form of "themes". The codes are then developed with NVivo. Some notes were written manually, and transcript interviews were made in hardcopy. This study has the possibility of inaccurate data collection and interpretation. In addition, researchers have limitations in the presentation of research results in a comprehensive and precise. Recognising these possibilities, researchers applied triangulation protocols, which include triangulation of data sources, research and theories, and methodologies, so the validity and reliability of the research can be maintained.

3.3 Respondents and Selection Criteria

Interviews were conducted to the tourism educators and other tourism stakeholders, who have experience and involved in tourism teaching activities and tourism industry. Respondents were selected randomly. The number of respondents in this study

were 15 respondents with the duration of the interview for 45 minutes - 1 hour.

Interview conducted with guidance of research instrument containing questions. After the interview, respondents had the opportunity to read the transcript of the interview and respond if necessary before the researcher concludes the interview.

4 RESULTS

There should be a system to build the connection between tourism curriculum and tourism industry. This can be conducted when all the tourism stakeholders can communicate and engage all the aspect to minimise the gap between curriculum, the graduates and industry. The interview result from 80% of respondents also show the agreement to involve all stakeholders in designing and reviewing the tourism curriculum.

This result is aligned with the study conducted by Batra, 2016 who asserts that the discrepancy between tourism education and tourism industry can be encountered through these following approaches:

1. The studies of tourism industry requirement should be conducted to create platform for educational institutions with employers.
2. The program provided by tourism institutions should meet industry requirements and expectations.
3. The revitalization of tourism curriculum should be conducted regularly to match the graduates' skill with the industry demands.
4. Tourism industry representative should be invited in advisory meeting board in supporting the academics with the specific knowledge and skills needed for their managerial and administrative responsibilities. Moreover, to assist in developing curriculum with recommendation, revision, design, and the inclusion of industry case studies.
5. To connect beginners, students and graduates' students for workforce entry, the tourism industry should be invited in panel discussion and career fair.
6. Universities which provided tourism courses should have on the job training programs to provide students with the application of theory to actual work.
7. To enhance the opportunity for employment the education institutions should integrate their curriculum with the skills required by the local, regional and global market.

8. Expansion of the institutions to have memorandum of understanding with national/international tourism organisations.
9. Courses in curriculum should consider in including studies on arts and culture as well as foreign languages.

The result of the study also shows that there are some specific skills needed to adjust with the regional tourism industry requirement. The tourism fascinate in Indonesia is mostly because of the richness of natural resources and Indonesian culture, therefore some tourism types are focused on maritime tourism, eco-tourism, recreational/sport tourism and historical tourism.

Institutional education should provide related course to have the professional graduates who can fill these areas. In maritime tourism, courses that can be added such as: diving skill, marine environment; in eco-tourism: environmental awareness, guide for trekking; in recreational/sport tourism; surfing course, paragliding course; in historical tourism; arts, history, and local cultural knowledge.

The study of Yusuf, Samsura, Yuwono (2018) also confirmed that another important issue that appears in proposing curriculum is the consideration of distinctive features of the Indonesian tourism curriculum based on local culture, characteristics, needs, and aspirations.

The most important thing in tourism curriculum is to add the subject foreign language. Through the open access of transportation and internet, traveling become a trend and can be easily accessed. The number tourists from Asian countries for example China and Korea are increasing every year. The respondents also confirmed that tourism nowadays is in needed of foreign languages other than English, for example Mandarin and Korean language. As one of the respondents stated:

“Our city is swarmed by the tourists from China and Korea every year yet is so difficult to find a local guide who can speak Mandarin and Korean” (Respondent 10/travel agent owner).

Therefore, adding foreign languages other than English in curriculum is an urgent need for institutions to deal with with the industry requirements.

5 CONCLUSIONS

This research indicated that the tourism vocational institutions should collaborate with stakeholders to recognize the industry’s requirements to develop relevant curriculum. In relation to the provinces in Indonesia which has unique culture and abundant

natural resources, the graduates need some specific skills to cater the relevant demands in tourism industry. The vocational institutions should be proactive to develop their curriculum, improve graduates’ quality and added specific skills required. To cope with the gap of tourism vocational education and tourism industry, the institution should thoroughly understand the concept of Penta helix elements for stakeholders in tourism. The stakeholder’s elements consist of Academics, Business, Community, Government and Media. All elements should synergise together in connecting the tourism vocational education and tourism industry.

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REFERENCES

- An, M., Chen, Y. & Baker, C. J., 2011. “A Fuzzy Reasoning and Fuzzy-Analytical Hierarchy Process Based Approach to the Process of Railway Risk Information: A Railway Risk Management System”, *Information Sciences*, Vol. 181, pp. 3946-3966.
- Attaway, S., 2009. *MATLAB: A Practical Introduction to Programming and Problem Solving*, Oxford - UK: Bitterworth – Heinemann - Elsevier Inc.
- Andric, J. M. & Lu, D. G., “Risk Assessment of Bridges Under Multiple Hazards in Operation Period”, *Journal of Safety Science*, Vol. 83, pp. 80-92.
- Carbonari, S., Morici, M., Dezi, F., Gara, F. & Leoni, G., 2017. “Soil-Structure Interaction Effect in Single Bridge Piers Founded on Inclined Pile Groups”, *Soil Dynamics and Earthquake Engineering*, Vol. 92, pp. 52-67.
- Cook, W., Barr, P. J. & Halling, M. W., 2015. “Bridge Failure Rate”, *Journal of Performance of Constructed Facility*, Vol. 29, pp. 1-8.
- Corotis, R. B., 2015. “An Overview of Uncertainty Concepts Related to Mechanical and Civil Engineering”, *Journal of Risk and Uncertainty in Engineering System*, Vol. 1, pp. 1-12.
- Craig, R. F., 2004. *Soil Mechanics*, 7th edition, New York – USA: Spon Press.
- Duncan, J. M. & Stephen, G. W., 2005. *Soil Strength and Slope Stability*, New Jersey – USA: John Wiley & Sons Inc.

- Fagundes, D. F., Almeida, M. S. S., Thorel, L. & Blanc, M., 2017. "Load Transfer Mechanism and Deformation of Reinforced Piled Embankment", *Geotextiles and Geomembranes*, Vol. 45, pp. 1-10.
- Kusumadewi, S., Hartati, S., Harjoko, A. & Wardoyo, R., 2006, *Fuzzy Multi-Attribute Decision Making (Fuzzy MADM)*, Yogyakarta – Indonesia: Penerbit Graha Ilmu.
- Kusumadewi, S., 2002. *Analisis & Desain Sistem Fuzzy Menggunakan Toolbox Matlab*, Yogyakarta – Indonesia: Penerbit Graha Ilmu.
- Kusumadewi, S. & Purnomo, H., 2010., *Aplikasi Logika Fuzzy Untuk Pendukung Keputusan*, 2nd edition, Yogyakarta – Indonesia: Penerbit Graha Ilmu.
- Lee, S., 2015. "Determination of Priority Weight Under Multi-Attribute Decision-Making Situation: AHP versus Fuzzy AHP", *Journal of Construction Engineering and Management*, Vol. 141, pp. 1-9.
- Marwoto, S., 2014. "Pemodelan Sistem Pendukung Keputusan Untuk Pemeliharaan Jembatan Beton", *Jurnal Teknik Sipil*, Vol. 2, No. 1, pp. 1-5.
- Maula, B. H. & Zhang, L., 2011. "Assessment of Embankment Factor of Safety Using Two Commercially Available Programs in Slope Stability Analysis", *Procedia Engineering*, Vol. 14, pp. 559-566.
- Nezarat, H., Sereshki, F. & Ataei, M., 2015. "Ranking of Geological Risks in Mechanized Tunneling by Using Fuzzy Analytical Hierarchy Process (FAHP)", *Tunneling and Underground Space Technology*, Vol. 50, pp. 358-364.
- Ossama Y & Barakat, W., 2013. "Application of Fuzzy Logic for Risk Assessment using Risk Matrix", *International Journal of Emerging Technology and Advanced Engineering*, Vol. 3, pp. 49-54.
- Patel, D. A., Kikani, K. D. & Jha, K. N., 2016. "Hazard Assessment Using Consistent Fuzzy Preference Relation Approach", *Journal of Construction Engineering and Management*, Vol. 142, pp. 1-10.
- Senouci, A., El-Abbasy, M. S. & Zayed, T., 2014. "Fuzzy-Based Model for Predicting Failure of Oil Pipelines", *Journal of Infrastructure System*, Vol. 20, pp. 1-11.
- Zadeh, L. A., 2008. "Is There a Need for Fuzzy Logic", *Journal of Information Sciences*, Vol. 178, pp. 2751-2779.
- Zatar, W. A., Harik, I. E., Sutterer, K.G. & Dodds, A. 2008. "Bridge Embankment. I: Seismic Risk Assessment and Rating", *Journal of Performance of Constructed Facility*, Vol. 22, pp. 171-180.