The Indonesia National Qualification Framework Based-curriculum and the Graduate Competence Standard: A Case Study in Travel and Tourism Business Study Program

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Abstract: The Travel and Tourism Study Program of Tourism Department of Bali State Polytechnic has implemented KKNI-based curriculum since the academic year of 2016/2017, one academic year up to when this study is performed. KKNI-based curriculum system demands that each of the graduates obtain qualifications in accordance with their educational level criteria based on KKNI. This study is aimed at investigating the effectiveness of the implementation of KKNI based-curriculum in the Travel and Tourism Study Program of Tourism Department of Bali State Polytechnic. This study applies descriptive qualitative research method. The data were collected through literature study of the KKNI-based curriculum document (the Regulation of The Ministry Research, Technology, and Higher Education Number 44, Year 2015 on Higher Education International Standard), as well as in-depth interview with the stakeholders, teachers, students, graduates, curriculum developer, and curriculum experts. The study found, so far, the implementation of KKNI in Travel and Tourism Study Program of Tourism Department of Bali State Polytechnic has been effective. It has been able to facilitate the students to obtain the required competencies; firstly, in accordance with KKNI, and secondly in accordance their prospective workplace (travel and tourism) requirement.

1 INTRODUCTION

In line with the needs and demands of society that is exposed with the development of science and technology, the curriculum should be regularly reviewed in order to attain development and innovation against these demands (Anderson, 2001, Jiang et al, 2018). The policy of developing curriculum is not separated from the huge attention towards the quality assurance of an education in order to welcome the global era which is in accordance to the information and communication technology (ICT) (Garrison, 2017). The advance of ICT has raised such terms as a digital era, 21st century or technological disruption 4.0. According to Ali and Abdallaabdalgaanaem (2014) integration of technology in education has increasingly become an important concern in education not only in developed countries, but in developing countries as well. Integrating technology to classroom instruction is inline with the research done by Ginaya et al (2018) entitles the effects of blended learning to students’ speaking ability: a study of utilizing technology to strengthen conventional face-to-face instruction.

Delors (1966) in Marhaeni (2017) reported their results of the investigation to the United Nations through the article entitles “Learning the Treasure Within”. This report then published in a book which becomes a reference for developing education in a country. Learning the Treasure within emphasizes that learning is a treasure in oneself, which means that something that exists in every human fellow being along with his/her life (Marhaeni, 2017). Marhaeni further states that the learning concept also requires something to be embeded to everyone that for the human progress, then long life education should be an ownership, which is alive and unite in the attitude, aptitude, knowledge, and skills. Therefore, it has been set up four pillars of education which becomes the foundation for the development of education at all levels. The four pillars of the...
education are learning to know, learning to do, learning to be, and learning to live together.

The 21st-century era nowadays is known as the age of knowledge as the main foundation for various aspects of life. The learning paradigm of the 21st-century emphasizes that education is in the knowledge age by accelerating the enriching knowledge enhancement (Gates, Myhrvold, and Rinearson, 1996 in Marhaeni 2017). This paradigm emphasizes students’ ability to communicate and collaborate (Frietas and Yapp, 2005 in Marhaeni, 2017). As it is stated further by Marhaeni that such kind of ability can be achieved through the implementation of the appropriate teaching-learning method from the side of mastery materials and skills.

In this 21st century, the education is getting more and more important in order to assure the learner participants possess a learning skill and to innovate, the competency in using technology and information media and are able to work and survive by utilizing the competencies (life skills) (Marhaeni, 2017). She further states that the 21 century’s competencies are including (1) life and career skills, (2) learning and innovation skills, and (3) information media and technology skills. The three skills are summarized into a scheme which is called the 21st-century knowledge-skills rainbow (Trilling and Fadel, 2009 in Marhaeni, in 2017).

The American Association of Colleges for Teacher Education (AACTE) advisory group and the strategic council of the Partnership for 21st Century Skills (Greenhill, 2010) have approved the following core principles, representing a shared vision for integrating 21st-century skills into educator preparation. In order to meet the challenges and demands of the profession, AACTE is leading reform efforts some of them can be stated the two utmost crucial that: Engage prospective teachers in creating instruction aligned with their state’s curriculum standards, effectively interpreting assessment results, responding to students’ learning needs, and cultivating a passion for learning that will support students for a lifetime, and meet the demands of the global economy by exemplifying, and embedding in instruction, the mastery of 21st century skills such as critical thinking, problem-solving, communication, collaboration and creativity and innovation. This includes the application of technology to support more robust instructional methods and understanding the relationship between content, pedagogy, and technology through the dissemination of Technological Pedagogical Content Knowledge (TPCK) theory and research (American Association of Colleges of Teacher Education 2008, US Department of Education 2010).

P21’s or Framework for 21st Century Learning (“Framework for 21st Century” n.d., para 3) was

Figure 1). It has been used by thousands of educators and hundreds of schools in the U.S. and abroad to put 21st-century skills at the center of learning. The P21 Framework represents both 21st-century student outcomes (as represented by the arches of the rainbow) and support systems (as represented by the pools at the bottom).

Figure 1: P21 Framework for 21st Century Learning
Source: www.p21.org

In line with the paradigm of the 21st-century education above, in Indonesia, it has been set up the Indonesia National qualification framework (KKNI) through Perpres RI no. 8 the year 2012. KKNI is the competency-qualification level which can be pairing, equalizing, integrating among a field of education and field of job training as well as work experience on behalf of giving recognition of work competence according to the structure of work in various sectors (Direktorat Akademik, 2000). KKNI demanding a certain work of certain competencies for a career path or specific work. From the above provisions, then the establishment of work world competence is the core of any process that is experienced by the learning participants in all levels of education that followed. In other words, the formation of competence must be through education. Marhaeni (2017) explained that in reference with the competency concept, then the four pillars of education are the core of the competencies where for the sake of fulfilling the demands of job vacancies, learning to do in the form of able to do in every personnel is the top of the peak as it is a result of the
formation of the four pillars. Consequently, the competencies that is established through the process of education will be showed from the capability of the personnel to solve problems faced holistically.

A necessity when the curriculum continues to present with patterns of change as a result of the development of the industry as the user of the graduates. For example, the role of teachers is very crucial as curriculum enactors, creators, and activists (Jiang, Zhang, & May, 2016; Le Fevre, Timperley, & Ell, 2015).

Furthermore on the crucial role of teachers in curriculum development, teachers are not only enacting curriculum change in relation to classroom teaching practices, they are also actively engaged in creating and managing curriculum change (Priestley, Edwards, Priestley, & Miller, 2012; Wallace & Priestley, 2017). Research has shown that teachers’ beliefs and understandings of an intended curriculum and the contextual realities, approaches to curriculum, learning and training experience, as well as the availability of professional support and guidance, are among the factors frequently mentioned as impacting the implementation of curriculum innovation (Hardman & A-Rahman, 2014; Priestley, Biesta, & Robinson, 2013; Zhang & Ben Said, 2014; Zheng & Borg, 2014). This suggests that in order for a curriculum initiative to be well implemented and developed in practice, teachers’ perceptions, based in turn on their experiences, deserve due attention.

Response to curriculum changes can be seen from the many rules that are considered as an umbrella of the application of new curriculum (O’Neill, 2014), for example, the issue of the Constitutional Decree No. 14 2005 on Teachers and Lecturers, policy on implementation of curriculum 2013, the issue of the Constitutional Decree no. 12 of 2012 on Higher Education, Presidential Regulation no. 8 2012 on the Indonesian National Qualification Framework (read: KKNI), Minister of Education and Culture Regulation no. 49 of 2014 on National Standards of Higher Education. Implications. The policy indirectly affects the curriculum change pattern of each course and even the adjustment of the content that will be presented to the students.

KKNI itself is the minimum frame of reference that becomes the size, the recognition of the education gap. KKNI is also referred to as a competency qualification skill framework that can link, match, and integrate the field of education, vocational training and work experience in the framework of providing job competence recognition in accordance with the structure of work in various sectors. KKNI is a manifestation of the quality and identity of the Indonesian Nation in connection with the national education and training system owned by Indonesia. (Presidential Regulation No. 8 of 2012).

In the perspective of KKNI, each study program is required to clarify the expected “graduate profile” through tracer study, feasibility study, and needs analysis in the community. The graduate profile as it is also stated by O’Neil (2015) reflects the minimum ability that the student must master after graduation which refers to the four aspects of needs (1) attitude, (2) the field of workability, (3) knowledge, and (4) managerial and responsibility. The four priorities must then be translated into a learning outcome in each course in the study program. So that later, all instructional plans or semester instructional plan (RPS) should be based on learning outcomes (LO) in accordance with the needs of the graduate profile.

Nowadays, Curriculum Design and Development have become more consciously and elaborately embedded in the way the educational stakeholders run the learning and teaching in conservatoires (Heywood, 2005; O’Brien 2009, and O’Neil 2015). Because of this focus, the policy of developing curriculum is deliberately concerned with links between curriculum design and development and three of the key elements that have been much talked about in Indonesian Higher Education in recent years – Graduate Profiles, Learning-Competency Outcomes, and Quality Assurance. All three of these have been given additional impetus in the sense that the curriculum design must truly refer to stakeholders need as it is stated in the Ministry regulation of Permendikbud No. 67 year 2013. By considering this national policy of curriculum development, the curriculum development teams in the Faculty or Department of the higher education institution have such a motivation of encouragement working on implementing changes in their respective institutions that relate to the KKNI-based curriculum which can be applied for classroom teaching-learning process.

As a matter of fact, curriculum becomes an aspect that influences the success of national education and a component that has a strategic role in the education system. Consequently, the study of curriculum management is now getting a lot of attention from scientists and experts who pursue curriculum, education administration, and educational technology. As a result, the curriculum occupies the most important part of an educational institution. This fact is fairly reasonable since the world is experiencing the era of globalization and many changes in various aspects of life can affect...
the field of education. Developments related to science and technology nowadays are challenges to be considered in the curriculum. Therefore, the central government and local governments, in this case, KEMENRISTEK DIKTI / Ministry of National Research and Technology should be able to quickly respond these challenges to be realized in educational programs in its working area. Many aspects of renewal in curriculum-bearing education, such as learning acceleration programs, local content curricula, decentralization, remedial and enrichment implementation, school-based management (SBM), educational unit curriculum (KTSP), Curriculum 2013 and more recently KKNI-based curriculum (KEMDIKBUD-Republik Indonesia, 2013).

The background of KKNI Based on the Indonesian qualification framework in the President Regulation or Presidential Regulation or Perpres no 8 Tahun 2012 is underlined by two main issues of external and internal reasons. For the external one, it is based on the fact that there are challenges and global competition as well as ratification Indonesian various convention. While, the internal reason concerns with quality assurance gap the graduate relevance, diversity of qualification and education. Based on the background then it arises KKNI in terms of the statement and quality level (1 – 9) of Indonesian human resources (SDM). The output of the qualification level is the assessment of equality and recognition of qualifications of Indonesian and foreign SDM. The concept of KKNI itself is the achievement of qualification level in various ways, such as formal education, strengthening professionalism and job carrier as well as self-employed working.

Figure 2 below illustrates KKNI, showing the connections among formal education, workplace career development, experience or independent learning, and professional development.

Table 1: KKNI Qualification Levels

<table>
<thead>
<tr>
<th>Level</th>
<th>Predicate</th>
</tr>
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<tbody>
<tr>
<td>1 - 3</td>
<td>Operator</td>
</tr>
<tr>
<td>4 - 6</td>
<td>Technician and analysis</td>
</tr>
<tr>
<td>7 - 9</td>
<td>Expert</td>
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2 METHODS

Based on the description of the curriculum in the above study background then the research method applied in this study is a descriptive qualitative research. The data used are secondary data and primary data. Secondary data is data obtained from the curriculum library, such as the Presidential Regulation or Perpres Number 8 Year 2012 and the Ministry of Technology, Research, and Higher Education Regulation Number 44 Year 2015 about KKNI, Borang Accreditation and Self Evaluation, and the Curriculum of Travel and Tourism Study Program (Tim Kurikulum Diploma 3 Program Study Usaha Perjalanan Wisata, 2016a&b). While the primary data is data obtained directly based on the results from in-depth interviews with some stakeholders of the policymakers in institution level and Department, curriculum experts, and the practitioners from the industry as the users of the graduates through workshops of curriculum development.
Furthermore, data were analyzed by a qualitative-descriptive method based on an inductive methodological paradigm that is, a paradigm that departs from specific to the general principles (Glaser, 2014). By applying a descriptive analysis method, the data that have been collected in the form of description about KKNi is described in detail so that finally will be drawn a conclusion about the implementation of KKNi in Travel and Tourism Business Study Program. The results are presented by formal and informal methods. Sudaryanto as cited by Ginaya et al (2018), the method of informal presentation is to present the results of the analysis with a description or regular words, while the method of formal presentation is the formulation with signs and symbols. According to Muhammad (2011), the symbols or signs are used to present or formulate the results of the analysis so that the meanings of rules and concepts, inter-rule and concept relations, and the rules and concepts of peculiarities can be identified and understood.

3 RESULTS AND DISCUSSION

3.1 Travel and Tourism Study Program Curriculum Insight

Good curriculum design can help an institution to get the most from the resources it has available; it can also lead to a curriculum which is easier to modify and update subsequently, helping the ongoing process of curriculum development (O’neil, 2015). He further states that in general terms, an effectively designed curriculum will tend to have the following features:

- Well-balanced: the various components are each given their different weight, as appropriate, but no element is given more than its fair share.
- Full, but not overloaded: deliverable within the resources available-an over-full curriculum will, in any case, lead to students choosing which elements they will attend and which they will miss since they can’t attend everything. The waste in such a situation is obvious.
- Flexible: adaptable to the different needs of different students; responsive to changing priorities and alert to likely future requirements of the profession.
- Progressive: encouraging students to grow and develop as they pass through the programme, often by starting with a structured and largely compulsory pattern of studies and moving to one in which choice plays a greater part.
- Student-centred: recognizing that, for each student, the curriculum is more than simply the pattern of lessons and classes that the institution offers – it is the sum total of everything the student is learning and absorbing during his or her time at the Conservatoire.
- Focussed on learning: selecting teaching methods and methods of assessment on the basis of how well they encourage learning and then demonstrate that it has been achieved.

With regards to the KKNi which its background is based on the Indonesian qualification framework (PP no 8 Tahun 2012), it arises KKNi in terms of the statement and quality level (1 – 9) of Indonesian human resources (SDM). The output of the qualification level is the assessment of equality and recognition of qualifications of Indonesian and foreign SDM. Therefore, KKNi is one’s benchmark ability no matter whether he or she young or old, short or tall, light or weight but this person is capable in which field and how capable he or she is. Such the measure ability than be described as learning outcomes. Figure 3 below shows the KKNi benchmark ability which is divided into 4 spheres, namely mastering knowledge, attitude values, working ability, job description, and responsibilities.

![Figure 3: Benchmark Ability in KKNi](image)

Based on those curriculum insights, the evaluation and composing the document of the Travel and Tourism Study Program were done through several stages of activities which stated by doing SWOT analysis and tracer study under the umbrella of vision and mission the study program as well as the excellence and the strategical potential of State Polytechnic of Bali in the field of tourism. The curriculum evaluation and development have been focused on the change of educational paradigm, as it is supported by Le Fevre, Timperley, and Ell (2015), to the model of student center learning or SCL which emphasizes on the graduates’ profile as well
as harmonizing learning objectives with the KKNI description and attempting to obtain equality to the learning objectives of the ASEAN Tourism curriculum. The teachers’ role as it is suggested by Jiang, Zhang, May and Qin (2018) and learning materials which are highlighted by Richards and Rodgers (2014), Polio (2014), Castillo (2017), are also being prioritized on the excellence of local content by broadening the instrumental study to support the strengthening of human capital capability and national science and technology in the tourism sector.

As one of the higher-vocational education, the curriculum, in State Polytechnic of Bali, is developed its curriculum is on the basis of National Standard of Higher Education (SNPT) as it is referred to the regulation of the Ministry of Research or Technology or Permenristekdikti No. 44 year 2015. In carrying out the specified academic program for the Travel and Tourism Study Program (UPW), it has been done an adjustment towards the curriculum which gave the overwhelmed students’ learning by fulfilling the minimum standard as it is applied in the SNPT and through the Learning Objective (LO) which is in accordance to SKKNI. The curriculum of travel and tourism program study has been decided with the load of 47 subject courses which consisted of 21 categorized into subject course theory and 26 practices (Tim Kurikulum Diploma 3 Program Study Usaha Perjalanan Wisata, 2016a&b). The ratio for theory and practice in the semester study system (credit or SKS) namely 42% - 58% with a total credit of 114 and the total hour-meeting per week is 180. In reference to vision of the study program that is to be the vocational study program of travel and tourism business which is professional internationally competitiveness year 2025, it has the mission such as carrying out vocational education in travel and tourism business operation, producing the output of graduates in the travel and tourism business operation who are competent, independent, innovative, adaptive, and be able to compete locally, nationally, and globally as well as reliable and equipped with code of conduct in professional etiquette and has the spirit of entrepreneurship.

In order to respond to the development of the higher education institution, as well as the demands of stakeholders, the Travel and Tourism Business Study Program (UPW), State Polytechnic of Bali (PNB) integrated in Tourism Department of the Bali State Polytechnic (PNB) with other two study program, Hotel and Tourism Business Management has attentively responded to these demands. One way to respond to the aforementioned demand is through curriculum content rearrangement, in accordance with the development of market needs and the regulations set by the government. Related to that, as a step forward to determine the policy decision of the curriculum, the Travel and Tourism Business Study Program has conducted a workshop on curriculum development based on National Qualification Framework of Indonesia (KKNI) in accordance with Dirjen DIKTI (Cont Dec No.12 / 2012 on KKNI) as well as an activity as to follow up the previous workshop activity results by conducting curriculum validation along with the other the three study programs under Tourism Department. The curriculum validation is also attended by some stakeholders of the related industry as users of the graduates, such as ASITA (Association of Indonesian Tours and Travel Agencies) representing travel agency services, PHRI (Perhimpunan Hotel dan Restoran Indonesia – Indonesian Hotel and Restaurant Association) representing hospitality services, Bali Provincial Tourism Office representing the government, and representatives from two tourism related companies: Melati MICE (Meeting Incentive Conference and Exhibition), and Conrad Hotel Bali.

3.2 Profile, Learning Objective, and Output

Further analysis of the evaluation and composing of the curriculum is to determine the graduate profile related to the job target or the graduates’ profession. The graduate profile is considered of job competence required by the market in the level of local, national, and regional. In reference to the graduate profile of the travel and tourism study program, KKNI, SNPT it is formulated the learning objective of the study program, the course subject, and the targeted holistic capabilities. Therefore, the graduate profile of the travel and tourism study program includes the profession of travel supervisor, product designer, tour leader, tour guide, sale and marketing supervisor, ticketing supervisor, reservation supervisor, travel consultant, mice and event organizer, flight division supervisor.

Those graduate profile is regarded as the tourism associate expert in the field of travel and tourism business operation in the company of tour operation, travel agent, destination management company for organizing mice including cruise ship, airlines, ground handling on the basis of ASEAN standard and the general principles which is relevant to the travel business through using international language communication. In order to support this professional
occupation, it is then determined by the subject courses based on the formulated field and study materials. The whole subject courses were then composed and integrated in order to determine the subject courses’ network and the structure of the curriculum which is then composed RPS or the semester learning plan, SAP or lesson plan, and learning contract.

The implementation of the KKN1 curriculum is expected to make the graduates to be qualified with their profession in the travel and tourism business industry. Some graduates have shown their capability to successful professionals in the business industry including to be entrepreneurs who establish and manage a company or travel agent. In addition, the average waiting time of the first job in the study program is 1 month 15 days. In this academic year of the 6th semester when the students are holding on job training some of them have been employed in companies, such as travel agent, ground handling, and MICE. This means the waiting time for the graduate to get the first job is shorter, which can be a pride for both the graduates and the study program.

4 CONCLUSION

To ensure its quality of education and competitiveness, the curriculum of higher education institution in the Tourism sector must be able to reach at least the standard of education in ASEAN or even international. The development of the higher education curriculum, such as Diploma 3 program is based on three pillars, namely political security, socio-cultural, and economic pillar. By taking account of the three pillars, it is expected that the application of the curriculum in Diploma 3 will be able to result in workforces who are competitive in the level of ASEAN or even international.

In addition, the Travel and Tourism Study Program (UPW) have been assessed by the Board of National Accreditation of Higher Education (BNPT). The accreditation results in the study Program gaining “A”, which is the highest score that a study program can obtain.

As a result of the knowledge and skills imparted and trained during their studies in Travel and Tourism Study Program, so far, graduates from the Travel and Tourism Study Program are well absorbed into the Travel and Tourism Industry. Not only that, there are also many of the graduates who started their own business, some of them can even be considered as gaining success in their business. By considering the knowledge and skills structured in the curriculum of the Travel and Tourism Study Program, this study suggests that the program be upgraded to Diploma 4 program. Additionally, by upgrading the program to Diploma 4, graduates will have more confidence going into the Travel and Tourism industry, competing with other Diploma and Undergraduate degree graduates. Not to mention that Diploma 4-degree program may be able to attract more prospective students into joining the study program in the first place. Prospective students may envision themselves to be able to have more comprehensive skills and confidence going into the industry with Diploma 4 degree that they are going to obtain if they join and complete Diploma 4 Travel and Tourism Study.

To maintain and enhance its competitiveness, the Travel and Tourism Business Study Program (UPW), State Polytechnic of Bali (PNB) along with the other two study programs in the same department (Diploma 3 Hospitality and Diploma 4 Tourism Business Management), had performed curriculum content rearrangement, which consist of pre-activities studies (SWOT analysis and tracer study), which was then followed by workshop on curriculum development and curriculum validation. The Travel and Tourism Business Study Program has conducted a workshop on curriculum development based on National Qualification Framework of Indonesia (KKNI) in accordance with Dirjen DIKTI (Cont Dec No.12 / 2012 on KKNI). While, the curriculum validation is also attended by some stakeholders from related industry as users of the graduates, such as ASITA representing travel agency services sector, PHRI representing accommodation hospitality sector, Bali Provincial Tourism Office representing the government, and representatives from Melali MICE (Meeting Incentive Conference and Exhibition), and Conrad Hotel Bali.

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