Development of Vocationalization Model of Basic Education Based on Local Wisdom in Era of ASEAN Economic Community

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Abstract—The International Labor Organization report shows that more than 63 percent of Indonesia's workforce are basic education. The purpose of this research is to develop life skill education model for students at basic education level oriented to the development of discourse and work attitude to provide basic skill to the students. The findings are targeted in three stages of research. In the first year, developing instruments, and interviewing guidelines for studying and mapping out local wisdom skills in a number of areas, and the need for early knowledge, attitudes and skills for learners at the elementary level of education to prepare for entry into the world work. The second year, developing a model of vocationalization based on local wisdom at the level of basic education to find solutions in an effort to equip and prepare basic education graduates who do not continue their education to become a productive and competitive workforce to face global competition, especially in facing the ASEAN Economic Community. The third year, implement the vocationalization model of skill-based education of local wisdom that has been developed at the level of basic education and conduct in-depth study of obstacles and supporting factors in its implementation. The results of the first year's research, in the form of interview instruments and guidelines that have been reviewed by experts consist of 1) local potential, 2) basic selection of skill types in schools, 3) availability of equipment and materials for skills practice, 4) resources at school, 5) support the parties to the implementation of skills learning, and 6) the process of learning skills. In addition, the instrument also comes with questions to explore stakeholder perceptions of the Workshop subjects as a skill at school. The aspects that are explored include 1) self-awareness, 2) rational thinking skills, 3) interpersonal skills, 4) cooperation, 5) scientific thinking skills, and 6) vocational skills.

Keywords—basic education; local wisdom; vocationalization model

I. INTRODUCTION

In facing the era of the ASEAN Economic Community (AEC) as a form of implementation of the ASEAN Free Trade Area agreement (AFTA), the Indonesian nation must have the right strategy especially in the field of basic education. Graduates of basic education should have adequate and adequate knowledge, attitudes, and skills, including the ability to adjust to changes in the work situation, which is constantly changing dynamically. Discourse on bonus demographics, which means increasing the population of productive working age (15-64 years) and decreasing unproductive population (0-14 years and 65 years and over), has an impact on the dependency ratio. Dependency ratio is calculated from the unproductive age population compared to productive age. Assuming there are abundant productive age population as basic capital for increasing the capacity and productivity of labor to support economic growth. According to the Central Statistics Agency (BPS), the lowest dependency rate will occur in 2030 at 46.8% [1]. However, the demographic bonus opportunity does not automatically support economic growth, if it does not have adequate education and skills as readiness to enter the workforce [2]. On the other hand, the International Labor Organization report shows that more than 63 percent of Indonesia's workforce, basic education [3].

Vocationalization of education is a form of effort to encourage awareness of education stakeholders in providing provision of skills to students towards the world of work. This form of caring for work is carried out through the introduction of practical subjects in the world of work, or vocational education activities. The main objective of vocationalization of education is to increase the relevance of graduates' knowledge and competencies to the needs of their jobs [4]. The form of vocationalization in education can be in the form of educational programs that provide knowledge, introduction and basic understanding of science and technology, attitudes and appreciation of work, as well as the work climate and culture of the world. This is a priority component that must be obtained by students gradually from basic education to secondary education. This initiation should be a concern in making changes in the field of education as an effort to realize the focus of the national education policy to face global competition. Skill programs in general education need to be
strengthened again, through the process of re-actualization of skills programs based on local wisdom, to build balanced knowledge, attitudes and skills for graduates of their education. One form is the science and technology skills program, which has the characteristics of (1) providing reinforcement of logical thinking, critical and innovative, through the design and manufacture of simple scientific and technological products; (2) improving technical capabilities through the study, use and solving of problems in science and technology; and (3) building social care and responsibility through teamwork in the learning process [5].

Based on the description above, in this study will examine the vocationalization model of education based on local wisdom at the primary education level (junior high school), to get a model in the initial formation of attitudes, knowledge, and skills, as a provision in dealing with the world of work. In the study will also be examined about the tools and training materials that will be used for education and training, including the preparation of materials in the form of learning media. Based on the background and purpose of the study, the question is how to develop a skill education model based on local wisdom for students of primary education (junior high school level), to instill and build students' awareness of work, through initial attitudes, knowledge and skills.

A. Vocationalization of Education

In principle, knowledge, attitudes, and skills provided in the education process is the provision of students to enter the workforce as an effort to sustain work productivity. Productive work results will increase contributions to the welfare of individual and society, which in turn can support the economic growth of the community. Thus, education and employment should be an integrated whole, mutually supportive and mutually reinforcing for the purpose of improving the economy and competitiveness of the nation. This is in line with the statement of [6], that education is essentially a preparation for life, and life must be seen in basically economic terms, namely, the employability of young people and the enhanced economic welfare of the nation [6]. This was also in line with the results of the World Education Forum meeting held by UNESCO in Dakar, Senegal known as "the Dakar Framework for Action". To support the achievement of goals and objectives of Education for All (EFA), the delegates are committed that "ensuring that the learning needs of all young people and adults are met through appropriate learning and life skills programs". This is an effort to provide broad access to provide life skills to all students and at every level of education without exception, and also as an effort to provide an introduction to the employment process [7].

Various forms of initiation of vocationalization in education, including recognition programs and basic understanding of science and technology, attitudes and appreciation of work, as well as the work climate and culture of the world that can provide broad insight and knowledge to students. This initiation should be a concern in making changes in the field of education, as an effort to realize the focus of national education policy in the field of vocational education, especially related to improving the quality and access to vocational education to face global competition. Within the strategic framework of the Ministry of Education and Culture 2015-2019, it is stated that the policy focus is based on accelerating quality improvement and access to global competition with an understanding of diversity, strengthening good practices and innovation [8]. Thus, the provision of skills, attitudes in work, and the introduction of adequate employment to students is an important and necessary element in the development of educational curriculum. Legislation in the field of education, has provided open space for skill programs for every level of primary and secondary education. For this reason, skill programs in elementary, middle and high school / high school need attention and strengthening. It was also in response to various views of society towards education, namely as a vehicle for human resource development. Education should be conducted using a more functional approach to develop self-capacity so that students can think and actively participate in productive activities [4,9,10].

Skills programs in general education need to be strengthened again through the re-actualization process with programs that give an impression in students. Skills programs should be developed in addition to being able to provide understanding and skills in the technical field (hard skills), also provide provision for problem solving skills, alternative thinking, and able to evaluate academic work, and have good interpersonal skills (soft skills). To build balanced knowledge, attitudes, and skills for graduates of education, the skills program must provide a nuance that encourages these three abilities to be internalized into the students' personal selves. Skills programs in the field of science and technology have characteristics that are appropriate for these criteria, namely (1) providing reinforcement of logical thinking, critical and innovative through the design and manufacture of simple science and technology products; (2) improving technical capabilities through the study, use and solving of problems in science and technology; and (3) building social care and responsibility through teamwork in the learning process. Skills programs at every level of education, especially basic education need to be made clear categories, taking into account the age and development of students carefully, so as not to give the impression that graduates of basic education are prepared to work directly.

In other words, everyone at school age or those who have not had the opportunity to go to school, can take further education. However, we also cannot deny the fact that some of them cannot continue their education because of various factors. For this reason, educational institutions need to re-actualize skills programs earnestly at every level of education, in order to prepare students to have knowledge and basic provision of work skills, and more importantly, students have a productive mindset. Wilson in Hanafi defines knowledgeable workforce as, those who think use abstract-logic to diagnose various problems, propose solutions to problem solving, and design and implement a solution plan [11]. At present, the workforce is not only required to carry out work well in certain fields of work, but also must be able to maintain job sustainability and improve the quality of its work in order to be able to compete. The results of studies in many countries concluded that the working world environment, including industrial, service and trade sectors requires workers who not
only have technical skills related to a particular field of work, but prioritize strengthening employability skills to support job sustainability and anticipate changes in the world of work. Dynamically, employability skills are skills, attitudes, and actions that must be owned by a worker that allows them to get along with fellow workers and their leaders, and can make logical and important decisions. Employability skills are important, because every job requires initiative, flexibility, and the ability of individuals to handle different tasks.

II. METHOD

The purpose of this study was to develop a model of life skills education for students at the level of primary education which is oriented towards developing ways of thinking and attitudes in work, as well as skills. The findings are targeted in three stages. In the first year, developing instruments, and interviewing guidelines for studying and mapping of local wisdom skills in a number of areas. The second year, developing a model of vocationalization based on local wisdom at the level of primary education. The third year, implement the vocationalization model of skill-based education of local wisdom that has been developed at the level of basic education and conduct an in-depth study of obstacles and supporting factors in its implementation.

For this year, the steps taken for the development of instruments are include the preparation, review, and instrument standardization. After the instrument has been developed, the next step is preparation for the instrument review by experts.

III. RESULTS AND DISCUSSION

The research target in the first year was to develop instruments and interview guidelines to study and mapping of the types of skills based on local wisdom in junior high schools. The following are the results of research related to interview guidelines and guidelines, as shown in Table 1.

### TABLE I. ASPECTS OF THE INTERVIEW GUIDE

| No | Aspect                               | No of Item |
|----|--------------------------------------|------------|
| 1  | The potential of the area where the school is located | 1, 2, 3    |
| 2  | Suitability of the type of skill chosen by the school | 4 s/d 8    |
| 3  | Availability of equipment and materials, which are used for learning skills subjects | 9 s/d 11   |
| 4  | Resources that the school has to carry out learning skills subjects | 12 s/d 22  |
| 5  | Support of other parties in learning skills subjects | 23 s/d 50  |

At the preparation stage, preliminary studies are carried out to obtain various initial information needed. After preparation, the next step is to review the instrument to get valid and reliable instruments-instruments that can measure what actually has to be measured and the results of the measure. In other words, the instrument besides being valid must also be able to provide results that are relatively different if measurements are taken to the same symptoms at different times. At the review stage, the instrument was read by 4 experts, including to test the validity of its contents. Based on input from the experts, then the instrument was repaired according to the recommendations.

### TABLE II. ASPECTS OF QUESTIONNAIRE

| No | Aspect                               | No of Questionnaire |
|----|--------------------------------------|---------------------|
| 1  | Self-awareness                       | 1, 2, 3, 4         |
| 2  | Suitability and basis of selection, type of skill by the school | 4 s/d 8         |
| 3  | Interpersonal Skills                 | 10 s/d 13         |
| 4  | Cooperation                          | 14 s/d 17         |
| 5  | Scientific Thinking Skills           | 18 s/d 19         |
| 6  | Vocational Skills                    | 20 s/d 23         |

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IV. CONCLUSION

The results of the interim study are in the form of research instruments that have been validated by experts. Enter from the reviewer most of the words, sentences, and substance of the contents of the research instrument. Instrument development is carried out through several stages that must be carried out to produce valid and reliable instruments. The instrument that has been developed, can be used to retrieve data for the next research phase, namely the development of vocational education models for primary education.

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