

The Development of General Education in English Education Curriculum in the Industrial Revolution Era 4.0

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Abstracts. Education should be able to develop students' 3Rs plus abilities which comprise reading, writing, arithmetic and algorithm. Those skills are required by the students to face their life. However, those skills seem to be not adequate since the era develops rapidly, known as Industrial Era 4.0. Therefore, every individual should also have 4Cs skills plus i.e., (communication, collaboration, critical thinking, creativity), problem-solving and new literacy (data, technology, human literacy). Thus, curriculum particularly higher education as the highest formal institution which is responsible in preparing human resources should guarantee those skills building or competencies which are so complex that enable the students to fight against the challenge in the forthcoming life. Therefore, it becomes an obligation to design a curriculum which warrants the development of character required to face any kinds of challenges, known as character education or general education. The current study discusses the model of general education model in higher education so that the study is categorized as R & D. This study employed the method of development which was adapted from and was introduced by Borg and Gall. The procedure of the study was (1) pre-development stage, (2) development stage, (3) trying out the product stage, and (4) revision stage. The development was done based on the findings of need analysis which was carried out at pre-development stage. Then, the development product was tried out to verify the feasibility of the product in the form of (1) the curriculum expert evaluation ; (2) instructional expert judgment. Based on the data analysis and the discussion, the general education which was developed named '*Insan Kamil*' model can be integrated into higher education curriculum in facing Industrial Era 4.0.

Keywords: *higher education curriculum, general education, industrial era 4.0*

INTRODUCTION

The goal of education has been shifted from the traditional approach which is characterized with the 3 R's (reading, writing, and arithmetic) and some other simple subjects such as social studies and language [1] to more a complex one as a response to social and cultural changes happening across the world which is commonly known as the era of volatility, uncertainty, complexity, and anxiety (VUCA) and disruption. The era urges the emergence of increased attention for the competencies required for the knowledge society, schools and

educational systems around the world are called to make changes to their curricula [2]–[4]. The framework of the 21st century competencies is a matter not only of developing the current content and goals of education for those that are required by the knowledge society, but also of redefining what should be considered as core in the curriculum[5],[6]. Those competencies should be developed and internalized by the learners as an integral learning outcome as the result of instructional process and education which are designed in curriculum deliberately.

Preparing the curriculum is not a simple matter and appears to be more complicated in the recent era though the educational system and infrastructure might not been changed over decades. Some skills have become the main attention for education institutions throughout the world as the content of the curriculum for some decades such as language skills and critical thinking while some other skills are more recently emergent, namely, digital literacies [7], [8]. However, the curriculum should also provide the students with the educational foundation of skills, knowledge, habits of mind, awareness on gender and racial-ethnic diversity, and respect to non-indigenous cultures and values that enables them for success in their majors and in their personal and professional lives post the graduation [9]. The last mentioned issues i.e., habits of mind, gender and racial-ethnic diversity, and non-indigenous cultures and values become prominent recently because they have become the global awareness in creating a better world life.

To deal with the framework of education in this era, it is generally agreed that collaboration, communication, digital literacy, citizenship, problem-solving, critical thinking, creativity and productivity are essential for living in and contributing to our future societies [4]. In Indonesian context, the framework is manifested in the education policy in which the objective of education is to prepare the graduates to achieve their competencies which comprise attitudes, knowledge, and skills as what has been mandated in National Education System Act of Indonesia No.20 Year 2003 and stressed in Minister of Research, Technology, and Higher Education Decree No. 44 Year 2015. The mandate obliges that the curriculum of higher education should contain learning activities which engage the students to have learning experiences which lead them to form the expected attitudes,

knowledge, and skills. Thus, the authority of a particular program must ensure that the curriculum provided is able to form the students' competencies which are accumulated to be graduate competence needed by the students for their future.

To respond the issues of competencies, the institution authority should find strategies which guarantee that the education program enables to provide the students not only vocational skills and knowledge [10], [11]but also personality and universal values they need for their future. Universal values recognized by people from intercultural and multicultural backgrounds are covered and introduced through character education. In other words, the ultimate goal of character education is internalizing intercultural and multicultural values, such as conflict avoidance and respect for social and cultural diversity to the students of any level educations, particularly higher or tertiary education. Those values should be internalized and manifested in their life as habits and cultures.

Therefore, those values cannot be avoided, perhaps it is obligatory, to be taught to the students. One of the strategies is that the authorized institution can insert character education by reconstructing the education program curriculum. The institution should include in the curriculum the learning outcomes which convey some values which characterize a program what is so-called general education.

The present study tries to investigate the development of general education in the higher education curriculum, in particular, the English Education Program. Specifically, the study develops the learning outcomes of general education[7] of the English Education Program curriculum. It also looks for the forms of learning which are supposed to be appropriately applied in attaining the learning outcomes of general education.

METHOD

The current study discusses the development of general education in higher education curriculum, so that the study is categorized as R & D. This study employed the method of development which was adapted from and was introduced by Borg and Gall. The procedure of the study was (1) pre-development stage, (2) development stage, (3) trying out the product stage, and (4) revision stage. The development of the learning outcomes conveyed in the curriculum was done based on the findings of need analysis which was carried out at pre-development stage. Then, the learning outcomes as the result of development product was tried out to verify the feasibility of the product by implementing in the teaching learning process in forms of course subjects and softskills trainings. Before implementing in the as course subject and the materials of soft skills trainings, those learning outcomes formulations were validated in the form of (1) the curriculum expert evaluation ; (2) instructional expert judgement.

RESULT

Based on the result of the development, it was obtained the formulation of learning outcomes of the general education which is called '*Insan Kamil*' (noble man) model will be implemented in higher education. The learning outcomes are classified into three categories of competencies i.e., attitude, knowledge, and skills. The formulation of the learning outcomes is presented in the following table.

Table 1. General Education '*Insan Kamil*' Learning Outcomes

Category of Competences	Learning Outcomes Formulation
Attitude	<ul style="list-style-type: none"> To act fairly, honestly, trustworthy, saying right and conveying goodness To be proactive, visioner, focus on priority, think on win-win solution, empathize, synergize, reformist, and inspiring
Skills	Able to respond wisely based on noble moral values
Knowledge	Mastery on the theoretical concept of ' <i>Insan Kamil</i> ' (noble personalities)

The formulation of the learning outcomes, then, was consulted and validated to the experts. It was done in order to be evaluated and judged whether or not the learning outcomes were properly formulated in terms of linguistic aspect (word diction and phrases structure rules) and linearity to the concept of Bloom's taxonomy.

Having evaluated and validated by the experts, the program learning outcomes were wrapped up or inserted in some courses or subjects matters provided in the curriculum. There existed some courses such as Religion, *Pancasila*, Civics and *Kemuhammadiyah* which were loaded with those program learning outcomes but the other courses should be conveyed with though they were not written explicitly in the course outlines.

Table 2. General Education '*Insan Kamil*' Learning Outcomes-Loaded Subject Matters

Learning Outcomes	Subject Matters/Courses
<ul style="list-style-type: none"> To act fairly, honestly, trustworthy, saying right and conveying goodness To be proactive, visioner, focus on priority, think on the win-win solution, empathy, synergize, reformist, and inspirative 	Religion, <i>Pancasila</i> , Civics and <i>Kemuhammadiyah</i>
Able to respond wisely based on noble moral values	Religion, <i>Pancasila</i> , Civics and <i>Kemuhammadiyah</i>
Mastery on the theoretical concept of ' <i>insan kamil</i> ' (noble personalities)	Religion, <i>Pancasila</i> , Civics and <i>Kemuhammadiyah</i>

The values manifested in the program learning outcomes may also be loaded in other subject matters or courses as the 'hidden curriculum'. It means that the values are taught and internalized to the students by inserting them in both in the instructional process and learning materials. In short, in giving instruction, a teacher should engage and internalize the students with those program learning outcomes.

CONCLUSION

Based on the data analysis and the discussion, the general education which was developed named '*Insan Kamil*' (noble man) model can be integrated in higher education curriculum, particularly English Education Program, in facing Industrial Era 4.0. The study also pointed out that the learning outcomes can be instructed in various forms of learning which are supposed to be appropriately applied in attaining the learning outcomes

of general education. The so far forms of learning which are proven to be used in delivering the general education are the subject courses and soft skills trainings.

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