

# Curriculum Development of Postgraduate Study Program Based on Life-Based Learning Philosophy and Disruption Technology

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## ABSTRACT

The purpose of this research is to establish a doctor-level curriculum formula in the educational technology study program. The study implemented qualitative descriptive research design and data collection techniques through survey analysis, google form analysis, interviews, and questionnaires, research. The result of the study states five main foundation of the curriculum of the doctoral program of educational technology study program: (1) adjusting and strengthening the foundation of life-based learning philosophy (KBK); (2) implement the conception of national education from Ki Hadjar Dewantara (KHD); (3) adjusting and strengthening the content of the main elements of the Association of Educational, Communication, and Technology (AECT) paradigm; (4) based on the development of higher education standards and the Indonesian National Qualification Framework (KKNI); (5) in compliance with the rules and guidelines for the implementation of the study program of the Indonesian Association of Educational Technology Studies Program (APS-TPI); and (6) emphasizes the coaching, strengthening, and development of professional ethics and noble characters with Indonesian personality for the education of 21st Century millennials, and strengthening the adaptation and capability of the graduates in the digital age and the era of 21st century technology disruption.

**Keywords:** life-based learning, education technology, curriculum, learning industry, local wisdom

## 1. INTRODUCTION

The curriculum has an important position in its implementation. The position of the curriculum makes education run regularly. The curriculum can be interpreted as a guideline for educational activities at various levels [1]. To improve learning performance, the curriculum has a strategic role to play in determining learning footing [2], [3]. If the institution wants to develop an existing curriculum, then the important step that must be done is to know in advance what the is community needed. Observations and analysis of the environment are carried out to know what problems and needs are needed by the community [4].

The community environment plays a role in developing the educational curriculum. Curriculum development efforts are intended to encourage students to play an active role in solving problems in the

community [4]. As time progressed, the problems in society became more complex [5]–[7]. This should not be responded to indiscriminately but must be done in a research study, namely, by conducting evaluation [8]. Evaluation was conducted as a foothold in conducting further research.

Various educational institutions have evaluated the implementation of education, including the implementation of the curriculum. The curriculum developed is adapted to the advancement of science and technology in the 21st century [9]. Life-based curriculums have a strategic contribution to society [10], [11]. The contribution makes education a balanced role in the needs of the community. This curriculum, when developed in the 21st century, will answer the problem in the community [12], especially in Indonesia, which has a large population. Adjustments people's needs will be more diverse.

The curriculum developed with reference to a life-based curriculum will address the needs of the 21st century. Universitas Negeri Malang (UM), as a public university, has made efforts to conduct various research, evaluation, and follow-up learning innovations. One of the courses that have developed and are ready to make changes in the implementation of curriculum development is the educational technology study program [13]. This study program focuses on how students master updated educational science and solve educational problems through technology [14]. This study program seeks to form alumni who are able to compete in the global sphere and master the science of learning technology according to current developments.

Based on the above description, this research will discuss the development of the curriculum. The curriculum to be developed is at the doctoral level of Education Technology. In the development of this curriculum, and evaluation of the previous curriculum was carried out. This curriculum was developed with a life-based curriculum. Then the involvement of stakeholders, namely alumni and graduate users, is used to analyze research needs.

This research has a fundamental foundation for the preparation of the curriculum of the doctor program of educational technology studies program is: (1) adjusting and strengthening the foundation of life-based learning philosophy (KBK) which is seen as the foundation of learning and education in the era of industrial revolution and the development of people's lives based on information and communication technology; (2) implement the conception of national education from Ki Hadjar Dewantara (KHD) which has also become the policy of Malang State University (UM), adjusting and strengthening the content of the main elements of the Association of Educational Communication, and Technology (AECT) paradigm in 2012, which has been used as a reference, guideline and insight of educational technology science work nationally and internationally; (3) based on the development of higher education standards and the Indonesian National Qualification Framework (KKNI) established by the government since 2016, (4) in compliance with the rules and guidelines for the implementation of the study program of the Indonesian Association of Educational Technology Studies Program (APS-TPI), (5) emphasizes the coaching, strengthening, and development of professional ethics and noble characters with Indonesian personality for the education of 21st Century millennials, and strengthening the adaptation and capability of TEP graduates in the digital age and the era of 21st century technology disruption.

## **2. METHOD**

This research will use development research. Then the object examined in this development research is the

curriculum. The models chosen for the development of this curriculum are ADDIE models, namely analysis, design, development, implementation, and evaluation. Here is an explanation of each step of his research [15]. In this study, the curriculum developed is the curriculum of the Doctoral Study Program of Educational Technology of Malang State University.

In the early stages of the analysis phase, researchers conducted a poll that will be spread to the respondents of the study. Then from the spread of the questionnaire will be obtained the results of the evaluation from the previous curriculum. Polls are created in the form of google forms, making it easier to archive data.

The second stage is the design. The design stage allows researchers to develop curriculum design in such a way based on a life-based curriculum and technology-based. The curriculum is also guided by the needs of the community. So at this stage, it is very important to have a discussion on curriculum developer experts. The curriculum development team in the form is a development team of major and university level curriculum.

Next is the development stage. At this stage, it allows researchers to create group discussion forums with expert professors of the curriculum. At this stage, the curriculum development team and expert professors conduct curriculum discussions that will be developed.

Then the next stage is the implementation of curriculum development. At this stage, the curriculum has been strengthened. At this stage, there are also several trials and validations. Validation of the development of this curriculum is attended to professors inside and outside the university.

The final stage of this study is the evaluation stage. At the evaluation stage, poll testing is carried out. The poll was conducted on stakeholders—furthermore, the finalization of the curriculum development of doctoral education technology study program (S3).

## **3. RESULT AND DISCUSSION**

This research aims to develop the curriculum of the S3 Education Technology study program. The curriculum developed is based on life-based learning and technology. Life-based learning is one of the pillars of the paradigm developed by UNESCO [16]. This is related to the establishment of the capabilities of students who are involved in life skills. If students have good life skills, they will be ready and dexterous in the face of life problems. Pressures in the environment will be overcome proactively and creatively [17].

The development process is carried out by conducting a series of activities, namely conducting needs analysis by spreading the questionnaire in the form of google form. Then from the survey results are conducted an

analysis of the needs of curriculum development S3 Education Technology. After that, it is also done the development of this curriculum by conducting forum group discussion. The group discussion forum was attended by stakeholders, professors, and the development team of the university-level curriculum.

A stressed life-based curriculum emphasizes capability development [4], [18]. Then this curriculum supports orientations that make students different in learning. Developers utilize a variety of learning resources, where individuals can engage in a variety of learning activities. Then the balance between integrity and usability. This curriculum encourages growth by shifting responsibility for learning to individuals, changing the role of providers to creators. The curriculum also appreciates that the changes differ qualitatively, both externally and internally.

This curriculum contains reasoning curriculum updates, Vision, Mission, Curriculum Objectives and Standard Profile of Learning Outcomes (for Graduates), SCPL, Material Analysis, Mapping and Distribution, of course, Subjects for each semester, Course description. The curriculum is also based on technology that adapts to the needs of the 21st century.

#### 4. CONCLUSION

From this curriculum development research obtained a draft of the curriculum doctor program of education technology program with the foundation of life-based learning and technology disruption. This curriculum will be the implication for students studying in the class of 2020/2021. With the development of this curriculum, it is hoped that graduates will be able to answer educational problems according to the needs of the community and the capabilities of the 21st century.

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