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Development of Online Learning for Undergraduate Guidance and Counseling Students

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Blended learning is a combination of learning face to face, computer (offline), and internet-based learning (online). The main purpose of blended learning is to provide opportunities for a variety of students to learn independently, sustainably, and mature, so that learning will be more effective, more efficient, and more interesting. The development model used in the process of developing blended learning in the guidance and counselling profession course is the ADDIE model. The steps of developing this model include: (1) Analysis, (2) Design, (3) Development, (4) Implementation, (5) Evaluation. The development phase that has been carried out includes analysis, design, development and implementation. The results of expert tests obtained P = 97.5%. The interpretation criteria included "very good" criteria and obtained an alternative decision "very feasible". The evaluation results showed that 92.85% items were rated as good.

Keywords: *online learning, guidance and counselling profession, ADDIE models*

Introduction

The guidance and counselling profession is a subjects in the Bachelor Degree Guidance and Counselling study program at State University of Surabaya. Guidance and Development Counselling Courses are part of the Creative Science Subjects group. This subject is required for student guidance and counselling in semester 1 with a weight of 2 credits. This course examines the juridical foundation of the guidance and counselling profession, the nature of the guidance and counselling profession, the nature of guidance and counselling, the organization and professional code of ethics, credentials, the history of the guidance and counselling profession, the profile and role of the counsellor, the performance of the professional counsellor, the professionalization of the guidance and counselling profession, self-development and specialization. Learning methods are developed to achieve learning outcomes using blended learning, where students will carry out learning in class and online (López-Pérez, Pérez-López, & Rodríguez-Ariza, 2011).

Based on a preliminary study of lecturers and students in August 2018, the results obtained are that the lecturer teaches the guidance and counselling profession course face to face. Based on the final grade data of the guidance and counselling profession course in the odd semester of the academic year 2017/2018 from 43 students, 5% got an A, 15% got an A-, 28% got a B + grade, 36% got a B grade, 7% got a B grade - and 4% get C +.

Through learning students gain skills and develop their cognitive, affective and psychomotor potential. Learning activities are not only interpreted as a transfer of knowledge but also train students in these 3 domains so they can develop themselves in various ways. According to (Hitipeuw, 2009), learning is nothing but talking about structuring a learning environment in the sense of how information, presented through the media, is arranged in such a way as to maximize the prospects of students who are interacting with the environment. Based on this understanding, students become the components that get the main treatment (Huang, Liang, Su, & Chen, 2012).

Efforts to organize the environment are done by providing learning resources, for example: educators, textbooks, learning materials, source people, television, VCDs, radio-tapes, magazines, newspapers, internet, CD ROMs, the environment and even their own friends (Eryilmaz, 2015; Horn & Staker, 2011; Ross & Gage, 2006; Singh, 2003; Staker & Horn, 2012). The measure of learning success is the process of interaction between learners who learn and learners, not in the teacher who conveys information (teaching) (Biggs, 2011). Thus, the main learning mechanism is the provision of learning resources. Educators are not the only source of learning but are only one part of the learning resources (Bell, 2010). All learning resources are designed to encourage initiatives and learning processes to be more effective, efficient, and attractive, so that students remain "at ease" enough to continue learning. Therefore, the function of

educators will change towards the teacher as the manager of learning. The function of educators is to design the delivery of learning resources so that learning becomes easier, faster, more interesting, and more fun (Dziuban, Moskal, & ..., 2005; Lim & Morris, 2009; Milne, 2006; Thorne, 2003).

Future educators in learning activities can function as artists and scientists in designing and implementing education, and in managing learning resources that are deliberately designed and utilized (M. S. Richardson, 2000; Zierkiewicz, n.d.). Therefore, we need the knowledge, attitudes, and skills of teachers in designing learning so that the quality of learning increases and is sensitive to the development of science and technology known as Blended Learning Based Learning. In the realm of Higher Education, Blended e-learning is widely used for the implementation of distance education. The use of information technology in the implementation of learning can combine conventional learning by using information technology (Fong & Wang, 2007; López-Pérez, Pérez-López, & Rodríguez-Ariza, 2011; J. T. E. Richardson, 2000).

Blended learning "represents an opportunity to integrate the innovative and technological advances offered by online learning with the interaction and participation offered in the best of traditional learning" (Thorne, 2003). Blended learning based learning developed around 2000 and is now widely used in North American, English, and Australian universities, as well as the world of training. Through blended learning, learning resources that can facilitate learning for people who learn have been developed. Blended learning is a combination of face-to-face, computer (offline) learning and internet (online) based learning (Lloyd-Smith, 2010; MacDonald, 2006).

Thus, blended learning has two main categories: 1) The increase in the form of face-to-face activities (face-to-face). Many teachers use the term Blended learning to refer to the use of information technology and communication in face-to-face activities, either in the form utilizing the internet (web-dependent) or as a supplement (web-supplemented) that does not change the model of activity. 2) Hybrid learning: this model reduces the activity of face-to-face (face-to-face) learning but does not eliminate it, allowing students to learn online. The main purpose of blended learning is to provide opportunities for a variety of students to be independent, and engage in continuous and lifelong learning, so that learning will become more effective, more efficient, and more interesting (Holley & Oliver, 2010; Kerres & Witt, 2003; Pieri & Diamantini, 2009)

A learning Blended Learning is said to use a strategy where 30-80% of the design and implementation of learning in terms of content and delivery is done online (Avgerinou, 2008). Students do not just rely on the material given by the teacher. They can look for material in various ways like looking in the library, asking classmates or friends while online, opening a website, searching for study materials through search engines, portals,

and blogs, or with other media such as learning software and learning tutorials (Ceretta, Warne, Stirling, & Bain, 2002; Kirkley & Kirkley, 2005; Mackay & Stockport, 2006; Poon, 2013).

Blended learning represents a clear advantage in creating a learning experience that provides the right learning at the right time for every individual (Milne, 2006; Poon, 2013, Corral, Rivas, González, & ..., 2006; Smyth, Houghton, Cooney, & Casey, 2012). In Blended learning, the boundaries are truly global and universal and thus brings together groups of learners across cultures and different time zones. In this context Blended learning can be one of the most significant developments in the 21st century.

Some research results also support the importance of developing blended learning. The results of research conducted by (Dziuban, Hartman, Juge, Moskal, & Sorg, 2006) found that blended learning programs have the potential to improve student learning outcomes compared to learning that is fully online. In addition, (Rovai & Jordan, 2004) in their research showed that blended learning also produces a stronger sense of community among students than traditional or fully online learning.

Blended e-learning is the more popular term when compared to Blended Learning. The second term involves the latest educational issues in the development of globalization and technology for Blended e-learning. Blended e-learning issues are difficult to define because it is something new (Groen & Li, 2005; Rovai & Jordan, 2004). Although it is quite difficult to define the notion of Blended e-learning, there are experts and professors who are researching Blended e-learning and mention the concept of Blended e-learning. Moreover, another study found that many institutions have developed their own language (Sharpen, 2006).

Referring to the results of the analysis of teaching materials, the guidance and counselling profession course is a theoretical subject. This strongly supports the implementation of blended learning which requires teaching material to be theoretical (Fear & Woolfe, 2000; Moss, Gibson, & ..., 2014). Furthermore, the results of the analysis of student characteristics show that students are familiar with the use of technology in learning. The above description reinforces the importance of developing online learning in the guidance and counselling profession course for Guidance and Counselling Students.

Research methods

This research involves Research and Development (R&D). Research and Development is a process used to develop accountable educational products. The model chosen is the ADDIE (Analysis – Design – Develop – Implementation - Evaluate) model. ADDIE model is a systematic model used for development models. The application of ADDIE to

design instructional systems facilitates the complexity of an intentional learning environment by responding to many situations, interactions in context, and interactions between contexts (Branch, 2009).

According to (Branch, 2009), making products using the ADDIE process remains one of the most effective tools today. Because the ADDIE model is a process that serves as a guiding framework for complex situations, it is appropriate to develop educational products and other learning resources. The ADDIE model can be described as follows:

Analyse

At this stage the researcher identifies learning objectives, the characteristics of the material that must be learned and improved for students, including the skills that need to be developed or strengthened, and the specific skills that must be achieved by students. Topic analysis is carried out to identify and classify learning content. This analysis is carried out to determine the topic of learning. The results of the analysis phase are in the form of a Semester Learning Plan.

Design

The design phase includes the following activities: 1) Formulate learning objectives needed to achieve learning outcomes. Learning objectives are statements that describe the abilities or competencies that students will achieve. The goals specified must contain activities. 2) Determine the order in which objectives must be achieved (sequencing). 3) Choose learning strategies, media, and evaluation. At the design stage the resulting output is the approved Semester Learning Plan.

Development

At this stage, blended learning designs and content are developed. Design and content can vary greatly, depending on available resources. Content / material can be developed based on the purpose and breadth of the material that has been predetermined. At this stage when the design has been prepared then it is evaluated by the material expert.

Implementation

At this stage blended learning is applied to students. The learning system is ready for use by learners. Activities undertaken in this phase is to prepare and market it to the target learners.

Evaluation

At this stage, an evaluation includes 4 levels, namely perception, learning, behaviour, results. The evaluation of the 4 levels is as follows: 1) Student reactions: what they think and feel about blended learning. 2) Learning: produce increased knowledge or ability. 3) Behaviour: level of behaviour and improvement, ability, implementation/application. 4) Results: impact produced after blended learning.

Research result

The trials that have been carried out include material expert testing. The material expert test is carried out to obtain assessment data and responses in the form of comments and suggestions on aspects of usability, accuracy and feasibility.

The material expert assessment of the blended learning design on each indicator, as shown in table 1, shows that all indicators received an assessment score of 3 and 4 so that it was assessed accurately and did not need to be revised. However, suggestions and input provided by material experts are: There are clear guidelines for online learning so that students are more structured in carrying out their assignments. Learning presented online is directed to encourage students to be more independent and responsible but coordinated through lecturer feedback based on online learning outcomes.

Material expert assessment of the overall blended learning design as shown in table 1. shows a total score = 39. The total percentage of subjects can be calculated using the formula:

$$P = \frac{\text{number of answer scores}}{\text{n x highest wight}}\ x\ 100\ \%$$

$$P = \frac{39}{10\ \text{x}\ 4}\ x\ 100\ \%$$

$$P = 97{,}5\ \%$$

Discussion

Development of blended learning used ADDIE models. The ADDIE model consists of Analysis-Design-Develop-Implementation-Evaluate. According to (Branch, 2009), making products using the ADDIE process remains one of the most effective tools today. Furthermore, (Branch, 2009) states that the application of ADDIE to design instructional systems facilitates the complexity of an intentional learning environment

by responding to many situations, interactions in context, and interactions between contexts.

This learning model is a way of learning that is cheap and effective (Suyono, 2011). This model could be applied to anyone, especially for those who have high mobility and find it difficult be face to face with the educator or lecturer. In the learning process, one element that is very important is the learning media. Instructional media has a primary function as a teaching aid. It also affects climate, the conditions, and the learning environment laid out and designed by educators.

Before being implemented, a material expert test is first performed. Material expert tests are carried out to obtain assessment data and responses in the form of comments and suggestions on aspects of usability, accuracy and feasibility. The material expert test results show that all indicators received a score of 3 and 4 so they are considered accurate and do not need to be revised. Based on interpretation criteria P = 97.5% including the criteria of "very good" and obtain an alternative decision "very feasible".

The results of research and development of online learning professional guidance and counselling courses support some of the results of previous research. First, research and development (Syarifuddin, Agung, & Mahadewi, 2017) which shows that the development of blended learning with ADDIE models can improve learning outcomes in Biology subjects, Second, research (Fahrurrozi & Majid, 2017) which shows that the development of blended learning with ADDIE models is proven effective and able to improve learning outcomes in economic subjects. Third, research (Eryilmaz, 2015), which shows that there are significant differences in learning with blended. Fourth, the results of the meta-analysis (Means, Toyama, Murphy, & Baki, 2013), which shows that blended learning is better and more effective. Fifth, research (Jeffrey, Milne, Suddaby, & Higgins, 2014) shows that blended learning can be a balance between learning that is entirely online and fully face-to-face.

There are principles that need to be done in the assessment of online learning, namely: 1) design assessment centred on the student to include self-reflection, 2) design and coverage levels rubric for assessing overall contribution to discussions, assignments, projects and collaborations, 3) include a collaborative assessment through working papers published together with comments from other learners, 4) encourage learners to develop skills and provide feedback to provide guidance on how to give good feedback, 5) using valuation techniques appropriate to the context and aligning them with the purpose of learning, 6) assessment design should be clear, easily understood and able to be done in the online environment and 7) ask for the opinion of learners regarding how to conduct assessment (Palloff and Pratt 2009).

Blended learning takes as its basic principles face to face direct communication and written communication online. Blended learning concepts seem simple, but their applicability is more complex. The main assumptions of the design Blended learning is (1) learning face to face and online, (2) rethinking the fundamental design of the course to optimize the involvement of learners, and (3) restructuring and reorganizing traditional lecture hours (Dym, Agogino, Eris, Frey, & ..., 2005; Orthel, 2015; Perrotta, 2006; Watson, 2008)

The application of the principles of blended learning gives students experience. Independent learning fosters the student's sense of responsibility for their success in learning. This is not borne out of an existing sense of maturity in the student, but a maturity realised in the purpose of learning. Learning independence is self-regulated and deepens efforts to manipulate the associative network in a particular field, as well as improving the monitoring process of those concerned (Bor & Stokes, 2010; Kemmer, 2011; Wheeler & King, 2001). Learning programs do not always get satisfactory results. Often the material is already widely available in full. People can also learn anytime and anywhere: the school, home, or at a cafe connected via a wireless network. Still, the level of use of e-learning with those materials is relatively low. Learners would need a friend and need immediate feedback.

Conclusion

The conclusion of this research is: the development of online learning professional guidance and counselling courses meet the criteria for acceptability in aspects including usefulness, accuracy, and feasibility. Based on the above conclusions, some relevant research suggestions are: (a) the development of online learning can be carried out in other subjects that are classified as theoretical courses; (b) assistance needs to be given to students in implementing online learning.

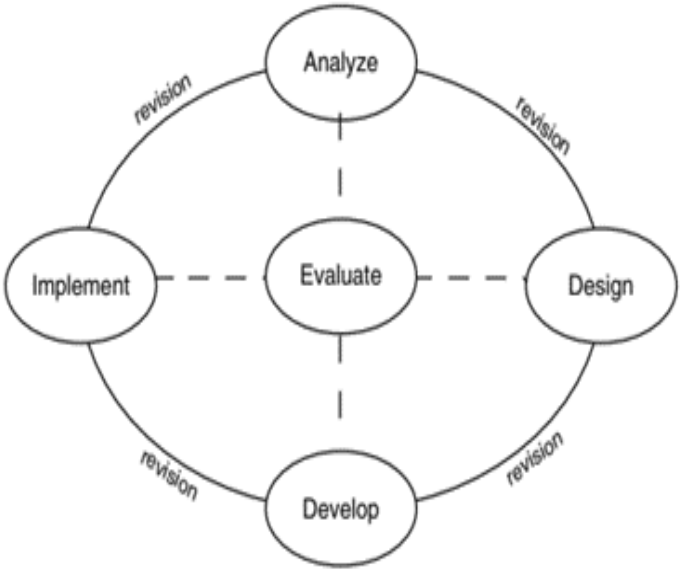

Figure 1. Model ADDIE Development

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