

ANALYSIS OF THE NEEDS LEARNING PROBLEMS DURING THE COVID 19

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ABSTRACT

The COVID-19 pandemic has brought dramatic changes in education, transforming traditional learning into e-learning around the world. The use of e-learning has been used by almost all universities in Indonesia, such as at Jakarta State University, in several faculties and study programs have used *e-learning* in the learning process. However, it is very unfortunate that the *e-learning* material used looks unspecific, unfocused, and piles all the teaching material into one teaching material. This makes students easily bored with the teaching materials used and makes students not understand the teaching material presented because the amount of material will be a burden for students. The term *blended learning* emerged after the development of information technology so that sources can be accessed by offline and *online* learners. With the development of blended learning, it can facilitate the learning process for students without having to interfere with activities. The obstacles above make researchers think that this New Orientation course in Educational Psychology has the potential to provide appropriate solutions and interventions. The intervention that can be done is to develop Blended Learning with a *Case Base Learning* approach in learning the New Orientation course in Educational Psychology. The benefits that researchers hope with the development of *Blended Learning* for the New Orientation course in Educational Psychology can make it easier for students to master the concepts in the New Orientation course in Educational Psychology and can overcome student learning difficulties during the COVID-19 pandemic

Keywords: *Blended Learning, Educational Psychology, Covid-19*

INTRODUCTION

The latest learning paradigm shift is to combine offline learning and online-based learning where students are required to be able to learn independently by developing their knowledge, skills and attitudes in the learning process. One of these challenges is to facilitate a paradigm shift from an almost exclusive focus on the social sciences to a scientific-technological approach from a discipline that generates innovation and a meaningful transfer of science and technology. (de la Fuente et al., 2018).

Science and technology, in particular information and communication technology. In student-centered learning, it requires students to be able to manage information to gain knowledge both individually and in groups. In line with the renewal of the definition of Educational Technology carried out by the Association for Education and Communication Technology (AECT) in 2018 cited by (Hastings & Bauman, 2020), the definition of Educational Technology is interpreted as follows:

"Educational technology is the study and ethical application of theory, research, and best practices to advance knowledge as well as mediate and improve learning and performance through the strategic design, management and implementation of learning and instructional processes and resources." Based on this definition, it can be interpreted that educational technology is present to improve learning and student performance using learning media through strategic design of learning processes and resources. Thus, designing online

learning in order to meet the needs of students, is an important effort in providing learning resources that will improve student learning. The COVID-19 pandemic has brought dramatic changes in education, transforming traditional learning into e-learning around the world. Educational institutions are forced to quickly restructure and adapt their educational programs to new conditions (Chikurteva, Ava, 2020). The use of e-learning has been used by almost all universities in Indonesia, such as at Jakarta State University, in several faculties and study programs have used e-learning in the learning process. However, it is very unfortunate that the e-learning material used looks unspecific, unfocused, and piles all the teaching material into one teaching material. This makes students easily bored with the teaching materials used and makes students not understand the teaching material presented because the amount of material will be a burden for students. For this reason, the development of online courses (online classes) must be developed and processed specifically for each material so that it can attract the attention of students and increase student motivation in independent learning.

METHODS

Bannan-Ritland offers a framework that he called *the integrated learning design framework* (ILDF). The ILDF development model is a model specifically developed for modern learning that integrates network-based learning into learning. The ILDF can be described as follows: The ILDF model is a learning design specifically developed for the future learning process, namely *online-learning* or *web-based learning* that optimizes the use of telecommunications technology. This model has four stages, namely exploration, preparation, local impact evaluation, and broad impact evaluation. *Informed Exploration*, *Enactment*, *Evaluation* along with clues to questions and methods of applying the research. However, in its development, this *website* is only carried out in 3 stages until the evaluation of local impacts due to time constraints and in the evaluation of broad impacts will discuss a wider problem, namely how to diffusion of these innovations. The following are the steps to develop in the 3 stages are:

1. Exploration

The first stage is exploration, exploration itself is exploring or searching that aims to identify, explain and analyze problems and phenomena according to human needs in learning. In this exploration there are 4 steps, namely:

Needs Analysis : Needs analysis

Identify existing problems in existing theory and practice. Identify the learning environment or get to know the learning process and learning that has been carried out. To collect useful information from existing data and research.

Literature Survey : Literature Survey

Identify various literature or analyze existing social, cultural, and organizational systems. In order to find out the supporting and inhibiting factors that can be useful for development needs.

Theory Develop : Theory development

Develop theories according to the characteristics of the problem or the needs of the learners. Starting from finding and determining related theories. Sort and determine the various kinds of existing literature and

develop it in a theory that can support the development process. Until the theories obtained are used for development needs.

Audiance Characterization : User Characteristics Analyze the characteristics of users who will later use the *website*. Knowing the experience and tendency of users in empowering *online* learning gained is used for development needs.

2. Preparation

The second stage is the preparation, in this stage to integrate and operationalize what has been learned into a concept design or design that is targeted to address educational needs or problems. In this preparation stage, there are 3 steps, namely:

Research / System Design: Research / System Design Integrating and operationalizing what has been learned and obtained in the first stage or exploration into a concept design or design. Determine learning targets in website development or innovation.

Articulated Prototype: Articulating the Initial Shape / prototype Making the initial or prototype form of all activities at the *research / system design* stage. Obtain design principles or strategies that allow it to be applied. How to identify and rationalize cognitive and process performance in design.

Detailed Design: Detailing the Design To what extent the design embodies the theoretical model. Detailing the prototype design that has been developed and adapting the design to the themes and *plugins* on the moodle platform until the final product.

3. Evaluation

The third stage is evaluation, the meaning of the word evaluation itself is measurement. In this case it is evaluating the system as well as identifying what learning variables may appear. In this evaluation stage, there are 4 steps, namely:

Formative Testing : Formative tests

Find out if the draft used is valid and relevant. With a review or formative test that will be carried out to assess the strengths and weaknesses of the product. Formative tests will be conducted by experts

Theory/System Refinem : System Theory/Improvement

Find out whether the design is easily accessible and efficient in delivering learning or learning.

Implement : Implementation

Re-implement improved and refined products. Know what the local impact or effectiveness of the design is to users

Evaluated Results : Evaluation of Results

How effective are the solutions provided by the design in achieving learning targets. Testdrive to users.

Table 2.2 ILDF Model Procedure

Don't.	Exploration	Assignment	Evaluation
1.	Explicitly document findings based on information obtained.	Mapping the information that is being explored in the exploratory stage into the pedagogical model.	Determine goals, expected results, and evaluation methods online learning clearly.
2.	Dulls information about the learning context.	Considering the learning characteristics of pedagogic model that has been selected.	Formatively evaluate design and development before the implementation of online learning
3.	Exploring individual perspectives on the learning process.	Choosing a specific learning strategy that fits the pedagogic model that has been chosen.	Carry out online learning and evaluate results in accordance with predetermined evaluation objectives.
4.	Integrating individual perspsectiveness into the learning process.	Establish learning strategies based on the features of the delivery system technology.	
5.	Gather perspectives and information into the learning process, content and methods Delivery.		

This research used the *Integrative Learning Design Framework (ILDF)* development model. This development model will be product-oriented consisting of three main stages/steps as follows:

1. Exploration

At this stage, the developer identifies and analyzes problems in the place and also the learning needs of users where online learning will be implemented. This exploration stage is divided into several more sub-stages to finally get information related to the problem and what solutions can be used to solve it. Some of these sub- stages are:

a. Needs Analysis

At the needs analysis stage, researchers carry out activities to find existing gaps and existing needs related to the development of *blended learning* in the New Orientation in Educational Psychology course. To determine the needs, researchers collect useful information to be analyzed so that conclusions are obtained about the needs that exist in the New Orientation in Educational Psychology course. The information collected includes obtaining from:

- 1) Observing the learning environment in the New Orientation course in Educational Psychology. This is intended to find out what kind of learning process has occurred so far carried out by the Master of Educational Technology study program, especially in the New Orientation course in Educational Psychology which will later become the initial reference for researchers to develop a product based on previously obtained information.
- 2) The next activity is to conduct interviews related to *blended learning* that will be applied to courses with material experts or lecturers from the New Orientation in Educational Psychology course. This is intended to find out the ultimate goal of the lecture, the learning experience and competencies that must be present in each student who takes this course, and what materials will be developed into a *blended learning* product which then the results of this activity will provide answers about the learning experience and competencies that must be possessed by students before carrying out the learning process, The ultimate goal of this course is to expect students who follow it to be like, and what kind of *blended learning* is needed in the course.

b. Survey Literature

At this stage of the literature survey, the activities carried out by researchers are looking for theoretical references in books, *ebooks*, journals and other sources to be the basis for carrying out *blended learning* development activities. This activity is also carried out through discussion and guidance with the supervisor so that the references used by researchers are in accordance with the existing corridors.

c. Theory Development

At this stage of theory development, the activities carried out by researchers are collecting theories related to the development process of *blended learning* and conducting studies of these theories as a basis for activities to develop *blended learning* for the New Orientation course in Educational Psychology.

d. Characteristics of Learners

In the *audience characterization* stage In this step, researchers collect information about the characteristics of participants who take the New Orientation course in Educational Psychology, namely Master of Educational Technology students. The information unearthed by researchers regarding the characteristics of the participants included:

- A. Learner experience with technology
- B. The learner experience with *online learning*
- C. Learner learning styles

Table 3.2 Details of development at the exploration stage

Exploration Phase		
Step	Activities	Result
	Survey of students who have	Information about the learning process,

Needs analysis	Take courses OBDPP	obstacles faced by students, opinions about <i>blended learning</i>
	Interviews and discussions with lecturers	Information on existing learning strategies, methods, and media; existing constraints in learning; the learning experience to be achieved; The development potential of <i>blended learning</i> .
	Observation	Information about infrastructure and potential blended development Learning in the Study Program
Survey literature	Looking for references to blended development theory learning through scientific literature	List of references that become literature for the development of blended learning
Development theory	Developing theories that are the basis for development	Theoretical <i>foundations of blended learning</i> development
Analysis of the characteristics of participants	Disseminate surveys and questionnaires to students participating in OBDPP courses	Learner profiles

RESULT

At this stage of needs analysis, the results obtained are the need for blended learning development for the New Orientation in Educational Psychology course.

Table 4. 1 Analysis Resultss Needs

Aspects	Ideal Conditions	Actual Conditions	Gap	Necessity
Duration of Learning	The duration of learning delivery is in accordance with the characteristics of the material presented.	The duration of thelearning delivery is sufficient, but students cannot repeat the material.	Students tend to feel bored as the learning process progresses because of the lack of variety of learning methods.	The learning design is blended so that it allows students to access material outside of limited classroom learning time.

Learning Methods and Strategies	Conventional methods, group discussions and practices can work effectively in the delivery of material	Conventional methods, group discussions and practices do not go well.	Conventional methods and group discussions take a long time so that students' time in practicing is lacking.	Conventional methods and group discussions are combined through online learning so that the time to discuss the material can go beyond the classroom and the practice method has sufficient time.
Media and Learning Resources	The media and learning resources used by lecturers can accommodate student needs to achieve learning goals and vary so as to accommodate student learning styles.	The media and learning resources that students can access are limited to references from books and presentation slides.	Media and learning resources have not been able to meet the needs of students in learning.	Various media and learning resources can support student learning activities and help students explore the material

The results obtained from this stage of needs analysis are the need for blended learning development for the New Orientation course in Educational Psychology. Based on the collection of information that has been carried out by the developer through interviews with lecturers who teach the New Orientation in Educational Psychology, facts about the learning process in the New Orientation course in Educational Psychology were found, namely:

1. The first fact is that learning in the New Orientation in Educational Psychology course through face-to-face in class is held with a duration of approximately 150 minutes each year. The duration of time is enough to deliver the material and deepen the materi, but because the learning method is carried out conventionally and face-to-face learning will tend to be boring and make the classroom atmosphere no longer conducive as the learning process progresses. New Orientation Learning in Educational Psychology is carried out face to *face* because there is no preparation to develop *blended learning*. The unpreparedness of lecturers is based on the limited time they have with the busy work at hand.
2. The second fact is the learning strategies used by lecturers in learning New Orientations in Educational Psychology, namely through conventional

methods, group discussions and practices. At the beginning of the meeting, the lecturer will direct to create a team that becomes a presentation group and a group assignment in the form of practice / making a simple medium. But often, presentation teams find it difficult to review learning materials due to the lack of learning resources they have.

3. The third fact is related to the reference sources and learning media available in the New Orientation course in Educational Psychology, namely in the form of presentation slides regarding orientation material. With these learning resources and media, lecturers feel that the available learning media are less diverse.
4. The analysis carried out based on existing gaps, namely learning New Orientation in Educational Psychology can be designed in the form of blended learning to overcome existing gaps so that the implementation of blended learning which combines face-to-face learning with online learning that makes interventions to be applied as needed.
5. The development of blended learning is not only an intervention in the New Orientation course in Educational Psychology, but is based on the availability of facilities and infrastructure that support the implementation of *e-learning* in the UNJ Master of Educational Technology study program, namely having a <https://onlinelearning.unj.ac.id/> page so that it can be used as a *blended learning* development for a course.

Survey Literature

At this stage, the results obtained are a list of literature used as a reference in the development of blended learning. The development of a blended form for the New Orientation in Educational Psychology course is based on supporting theories that are in accordance with the rules of scholarship, therefore the literature used as the basis for this development is:

Table 4. 2 List of supporting literature

Supporting theoretical basis	Literature
Development Model (Development procedure) e-learning	Model pengembangan <i>Integrative Learning Design Framework</i> oleh Brenda Bannan. Reference Source: Brenda Bannan, et.al., <i>An Introduction to Educational Research</i> , (Enschede: SLO Netherlands Institute for Curriculum Development, 2007)

Development of e-learning	Primary Reference Sources: Chaeruman Uwes A, <i>e-learning</i> in Distance Education (Center for Educational Information and Communication:2010)
Implementation of <i>blended learning</i>	Primary Reference Sources: Allison Littlejohn dan Chris Pegles, <i>Preparing for Blended e-learning</i> , (Oxon: Routlegde, 2007)
Implementation of learning objects	Primary Reference Sources: Dewi S. Prawiladilaga, Mosaic of Educational Technology: <i>e-learning</i> (Jakarta: Kencana, 2013)
Development of lecture materials New Orientation in Educational Psychology	Primary Reference Sources: Anita Woolfolk (2007). <i>Educational Psychology</i> (ninth edition, International edition). Boston: Pearson education, Inc.

Theory Development

The results obtained from the theoretical development step are a combination of the theories used in learning research with the findings at the needs analysis stage. The development of *blended learning* theory for the New Orientation in Educational Psychology course includes various aspects that begin with understanding the Urgency and contribution of psychology and educational psychology in educational and learning practice, Individual differences / diversity of students and their relation to the convention on human rights, and Concepts, theories, and principles of learning and learning and their implementation in educational practice and Learning. The essential topics that will be taught in the New Orientation in Educational Psychology course can be described in the following table:

Table 4. 3 Topic and Material Outline

SUBJECT MATTER	SUB SUBJECTS
1. The urgency and contribution of psychology and educational psychology in the practice of education and learning,	1. Understanding the basic concepts of psychology 2. Understanding the basic concepts of educational psychology
2. Individual differences/diversity of students and their relation to the convention on human rights	2.1 Discussing the nature and diversity and its implications in the learning / education process: 2.1 intelligence, 2.2. <i>Learning style</i> 2.3. Diversity of socioeconomic status

- 2.4. Culture (ethnicity and race)
 - 2.5 gender
 - 2.6. Convention on the Rights of the Child
 - 2.7. Higher Education Conventions,
 - 2.8. guru,
 - 2.9.the development of education,
 - 2.10. Children with special needs
 - 2.11. Inclusive Education
3. The concepts, theories and principles of learning and learning and their implementation in educational and learning practice,
- 1. Mastering learning theories and their implementation in educational and learning practice,
 - 2. Understanding the concept of learning in the perspective of psychology and its implementation in the practice of learning
 - 3. Mastering the concept / theory of motivation and its application in learning,
 - 4. Mastering the concepts / theories of classroom management and their implementation in learning practice
 - 5. Mastering the concepts / theories about assessment / assessment in learning and its application in learning,

Characteristics of Learners

In this step the result obtained is the profile of learners who take the New Orientation course in Educational Psychology. To get profiles of students who take the course, the developer distributes an *online questionnaire* form through the Google platform. *The form* distributed to respondents was a 2020 Educational Technology student who took part in the New Orientation in Educational Psychology course.

The questionnaire was distributed to Educational Technology students class of 2020 with 18 respondents, the results obtained were the following characteristic profiles of students:

Table 4. 4 Learner Profile Analysis

Aspects	Description
Age	Students who will take the New Orientation in Educational Psychology course are aged 25-35 years.

Residence distance	The distance between student housing and campus is an average of 15-30km. This is a consideration for organizing <i>blended learning</i> .
Activities outside of college	The question aspect of activities outside of college is that students as a large number of students have other activities outside of college. Online learning is an alternative learning that can be accessed for 24 hours.
Study locations other than on campus	Aspects of study locations other than on campus show that more than half of students study at home or at work
Ownership of a computer/laptop/gadget	The ownership aspect of a computer/laptop/device shows that all students have a computer/laptop, meaning that online learning can be accessed by students through a personal computer/laptop/device.
Internet access	The aspect of internet access used by students shows that most (80%) use internet access through the internet provider package quota and the rest use <i>wifi</i> access at home and at work.
Learning experience over the internet	The aspect of learning experience through the internet shows that all students have an experience of learning through the internet and all are interested in participating in learning using internet technology.
Learning Styles	In the aspect of learning style, it shows that 80% have a visual learning style.

CONCLUSION

The research on the analysis of blended learning needs for the Simple Media Development course in the Educational Technology Study Program, Jakarta State University resulted in a conclusion that *blended learning* is needed for a new orientation course in educational psychology at a state university in Jakarta based in <https://onlinelearning.unj.ac.id/>.

This research was conducted using the ILDF (*Integrative Learning Design Framework*) method where only the exploratory stage used was With the implementation of this exploration stage, it was found that the need for blended learning for new orientation courses in educational psychology at jakarta state universities and the next stage will be carried out, namely the development of blended learning in order to support student needs during a pandemic. COVID-19 and of course making the effectiveness of learning even better.

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