Learning Culture Framework in E-Learning for the Equivalency Education Program (E-LEEP Culture)

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Abstract. Understanding learning culture based on learning activities is important for learning success in an e-Learning. As an effort that can be done for this purpose, it is necessary to build a student learning culture based on students activities. The study proposes a Cultural Framework for Learning in an E-Learning. It is called E-LEEP Culture because used in an e-Learning the Equality Education Program (E-LEEP). This framework has five key components, namely: Students, E-LEEP, Learning Activities, Learning Culture, and Digital Contents. Learning culture component in E-LEEP Culture Framework consists of sharing activities, getting information, discussing Individualistic Learning, Collaborative Learning, Learning Time (learn a little), and Learning Time (learn a lot). Each of the components is expected as a basis for providing learning material that suits the needs of students.

1. Introduction
Non-format education has students in all provinces in Indonesia. It is known as the equality education program. There are various programs such as package A, B, and C. These equivalency education programs were attended by many students that have different learning cultures from all regions of Indonesia.

At the moment, the implementation of equality education has been supported by e-Learning called E-Learning for Equivalency Education Program (E-LEEP) [1] [2]. This e-Learning is still limited to the distribution of teaching materials to students, conducting discussions related to learning, and collecting assignments given by Tutors. In the implementation, E-LEEP has not yet paid any attention to the learning culture of each student.

An e-Learning needs to take into account the diverse cultural factors of students in order to most effective use of the learning process [3]. In e-Learning, paying attention to the students’ learning culture has a significant impact on student abilities [4]. The aim of considering the learning culture of the students in e-Learning is to personalize the learning process [5] [6]. It can be based on digital content as a learning resource for students [7] [8]. Thus, this research proposes a Learning Culture Framework based on digital content in E-LEEP. This framework will be used as a basis for a personalized learning in e-Learning to provide a better learning content to students based on their learning culture.

2. Literature Review
Learning culture is a student’s learning behavior or habits [9]. The act of understanding their learning culture has been widely used in e-Learning. Individualistic and collaborative are characteristics of learning culture that influence e-Learning for the purpose of personalizing learning content [10].
Individualistic Learning is the learning habit of students who tend to learn independently [10]. Collaborative Learning is the learning habits of students who tend to learn together or involve other students [11]. In addition, their learning culture can also be seen from the students' habits in using study time (learn a little or learn a lot) [12].

On the other hand, in the implementation of the E-LEEP, it is also important to pay attention to a digital content so students can get learning materials according to their necessity. E-Learning that pays attention to student teaching materials will have an impact on student achievement. Giving students' content that matches their preferences in online learning is recognized as an important influence on learning achievement [13].

Currently, teaching materials for e-Learning have been developed into digital content. The form of digital content for e-Learning consists of a variety of formats, whether it is text, text images, videos, audios or any combinations that are easily used by students for their effective learning [14]. E-Learning which presents various forms of digital content is better in facilitating the experience of learning from learning that does not use digital content [14].

The adoption of digital content in e-Learning like E-LEEP should not be separated from the learning culture of students. How digital content was provided should be based on the students' cultural standards and this must be prioritized in the development of e-Learning. Previous e-Learning research has presented digital content that considers a variety of factors, such as learning style [15] [16], motivation [16] [17], achievement [16] [18], and so on. This research, proposes the provision of digital content in accordance with the cultural standards so that it can be used to support E-LEEP, which, hopefully, can improve students' achievement.

3. E-LEEP Culture Framework

This study proposes the E-LEEP Culture Framework which aims to provide learning material in the form of digital content based on learning culture. This framework is expected to increase the learning performance of the Equality Education Programs (package A, B, and C) on E-LEEP.

Figure 1 describes the E-LEEP Culture Framework which consists of components, namely Component Student, E-LEEP, Learning Activities, Learning Culture, and Digital Contents. Student components program package A, Package B and Package C are users of E-LEEP. Components of E-LEEP are used by students to conduct various learning activities. Components of activities such as learning, discussion forums, and uploading assignments can be used to determine their learning culture.

There are four cultural components, namely Individualistic Learning, Collaborative Learning, Learning Time (learn a little) and Learning Time (learn a lot). These can be used as basis for providing learning material in digital content based on learning culture. The digital component of content is the learning material given to students according to their cultural learning.

3.1. Learning Culture

The students' learning culture component can be identified based on their learning activity. Learning Culture for Individualistic and Collaborative students can be seen in learning activities and uploading assignment. If students access learning material and uploading assignments by asking questions in forums, students have an individualistic learning culture tendency. Conversely, if students access learning material and uploading tasks by asking questions in forum discussions, students have a tendency to collaborative learning culture.

Table 1, shows the explanation of learning culture results for Individualistic and Collaborative based on activities in E-LEEP.
Figure 1. E-LEEP Culture Framework

Table 1. Learning Culture Individualistic and Collaborative based on activities in E-LEEP

| Activities       | Explanation | Learning Culture |
|------------------|-------------|------------------|
| Learning Activities | Yes         | Individualistic  |
| Forum Discussion  | A Little    |                  |


To determine the students’ learning culture Learning Time (learn a little) and Learning Time (learn a lot), these can be based on learning activities, forum discussion, and uploading assignment. If students access a bit of learning material, are a little actively involved in forum discussions and not all uploading tasks, then students have a Learning Time (learn a little) tendency. Conversely, if students access a lot of learning material, many do discussion forums and all uploading tasks, then students have a tendency to Learning Time (learn a lot).

Table 2. Learning Culture Learning Time (learn a little) and Learning Time (learn a lot) based on activities in E-LEEP

| Activities          | Explanation | Learning Culture          |
|---------------------|-------------|---------------------------|
| Learning Activities | A Little    | Learning Time (learn a little) |
| Forum Discussion    | A Little    |                           |
| Aploading Assignment| A Little    |                           |
| Learning Activities | A Lot       | Learning Time (learn a lot) |
| Forum Discussion    | A Lot       |                           |
| Aploading Assignment| A Lot       |                           |

3.2. Digital Content

Digital content is a form of learning material that will be given to students in the E-LEEP program of equal education programs (package A, B, and C) on E-LEEP. Each student will be given learning materials that are in sync with their learning culture. Table 3, shows digital explanations of content based on learning culture..

Table 3. Digital Contents based on Learning Culture For E-LEEP

| Learning Culture | Digital Contents | Explanation                                      |
|------------------|------------------|--------------------------------------------------|
| Individualistic  | PPT, Digital Text book, Digital text based modul, Animation, Video, Exercise online, and Assignment online | A digital content strategy is needed without a discussion forum |
Colaborative PPT, Digital Text book, Digital text based modul, Animation, Video, Exercise online, Assignment online, and Forum discussion. A strategy is needed to maintain discussion forum activities with digital content that motivates students.

Learning Time (learn a little) PPT, Digital Text book, Digital text based modul, Animation, Video, Exercise online, Assignment online, and Forum discussion. A strategy is needed to use digital content that is more concise.

Learning Time (learn a lot) PPT, Digital Text book, Digital text based modul, Animation, Video, Exercise online, Assignment online, and Forum discussion. A strategy is needed to use more complete digital content.

4. Conclusion
This study proposes a framework to learning culture as a basis for providing learning material that suits the needs of students in E-LEEP (E-LEEP Culture Framework). The framework has five components, which are Students, E-LEEP, Learning Activities, Learning Culture, and Digital Contents. Each component is dynamically connected with each other to support E-LEEP Culture Framework. Hopefully, the framework can be used to provide learning material that suits students’ learning culture in an e-Learning (E-LEEP).

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