E-Learning Model for Equivalency Education Program in Indonesia

Mesra Betty Yel
Faculty of Computer Science
STIKOM CKI
Jakarta, Indonesia
Betty.mby@stikomcki.ac.id

Sfenrianto Sfenrianto
Master in Information Systems Management
Bina Nusantara University
Jakarta, Indonesia
sfenrianto@binus.edu

***Abstract*—with the emergence of e-Learning, governments provide opportunities for online learning, whether formal or informal. However, most of e-learning systems in Indonesia have been used at formal education environments, today. Therefore, this study proposes an E-Learning model to support non-formal education in Indonesia. This model is called as E-learning for the Equivalency Education Program (E-LEEP) model. The E-LEEP consists of three components: User, Education Program, and Monitoring. The user will be students and tutor. The education program includes Package A, Package B, and Package C for elementary school, junior high school, and senior high school respectively. The monitoring will be used by institution and stakeholders. Each component will support the needs of students programs in e-Learning environment, in order to achieve the goal learning.**

Keywords—E-Learning; E-Learning Model; Equivalency Education

I. INTRODUCTION

Instructional models in the educational environment can be customized and adjusted according to the needs of the learners. Nowadays, instructional models of e-Learning have often been implemented in formal education. However, utilization of e-Learning in non-formal education is seldom applied. Non-formal education is not a part of well-regulated school system that can be executed step-by-step and systematically [1].

One of the non-formal educations that has implemented in Indonesia is the equivalency education programs (EEP). These programs administer the general education that consists of package A (elementary school) equivalent, package B (middle school) equivalent, and package C (high school) equivalent. In reality, the equivalency education program has its own unique trait: learners' age are not limited to the formal school starting age, face-to-face teaching is not 100% required unlike its formal education counterpart, instructional strategies focuses more on self-learning (50%), face-to-face meetings at least 20%, and tutorial at least 30%.

Instruction in equivalency education program needs to use flexibility principle and centered around the learners. Utilizing e-Learning to optimize equivalency education program will allow it to be held anywhere, at any time, and without time constraint in accordance with the aforementioned agreement so that learning flexibility can occur [2]. E-learning supports instruction process. It is designed by centering on the learners to encourage them self-reliance [3].

These are the reasons why this study proposes using e-learning model for the equivalency education programs in Indonesia. The paper is structured in the next sections as follows: literature review is described; subsequently, e-Learning model for equivalency education program; the last section concludes our study.

II. LITERATUR REVIEW

Increasing access and education quality should give equal chance to both formal and non-formal education learners. Non-formal education refers to instruction in a well-planned program to develop skills and knowledge necessary in workplace, in general society, and in their own self as an individual [4].

In Indonesia, non-formal education learners are people who try to improve their own potential through instruction process that is available in the equivalency education program. This is done (by the government) with the intention to increase and to expand an evenly distributed education access. In accordance to increase and expand an evenly distributed education access, the government can utilize e-Learning toward equivalency education program.

E-learning can be used as a means to support non-formal instruction [5]. E-learning role is to support online or remote instruction for the non-formal learners and tutors wherever they may be [6][7]. This is why e-Learning can also be used to support instruction in equivalency education programs in non-formal schools such as A, B, or C package programs. Instruction strategies with the e-Learning are very useful for learners so that they can learn independently [8].

Independent instruction has become an important model in non-formal education [9][10]. Meanwhile, e-Learning also supports learners to learn independently [11][12]. Therefore,

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non-formal learners should never hesitate to fully utilize whatever learning sources available that are provided by e-Learning tutors.

III. E-L EARNING MODEL FOR EQUIVALENCY EDUCATION PROGRAM

The study proposes e-Learning for equivalency education program (E-LEEP) model. The model consists of three main components: Users, programs and monitoring. Figure 2 describes the proposed of E-LEEP Model to support equivalency education program in Indonesia.

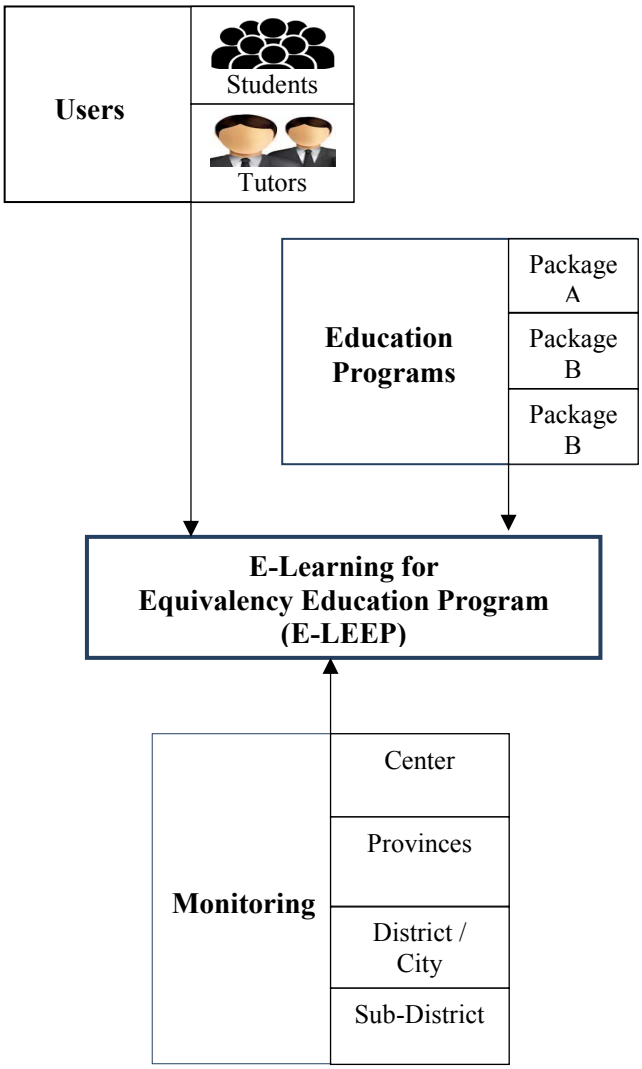

Fig. 1. The model of e-Learning for Equivalency Education Program (E-LEEP) Model.

A. Users

Users who use E-LEEP are learners and tutors involved in equivalency education program. Learners are divided into three programs, in which they become members of A, B, or C package programs. Figure 2 explain, each of students can access learning materials, do a forum discussion with tutors and with the other learners, upload an assignment, do an evaluation like quizzes and exams, and attending a video conference on schedule.

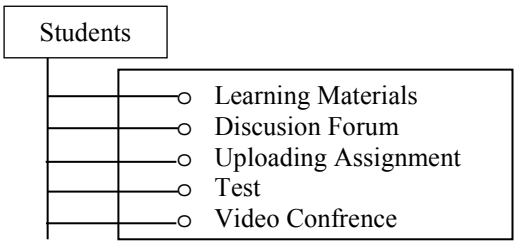

Fig. 2. E-LEEP Features for Students

Tutors are educational employees who are qualified and competent to teach, guide, and train learners. This is proved by a certificate or a tutor training statement letter. The main duties of tutors are: to create lesson plan; to arrange or improve learning materials; to teach; and to evaluation the result of their learning. Thus, tutors can use E-LEEP to upload learning materials, assignments, quizzes, forum discussions, and to attend video conferences with learners on schedule. Figure 3 shows features of E-LEEP to support tutors.

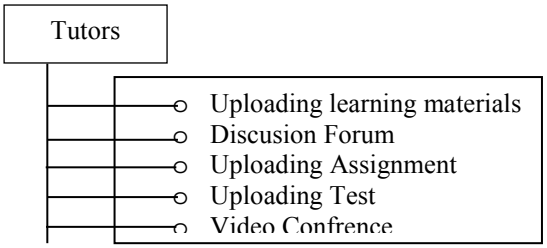

Fig. 3. E-LEEP Features for Tutors

B. Education Programs

Learning materials for each equivalency education programs provided in the E-LEEP. Table 1 shows learning subjects that are studied by each package of the equivalency education program.

TABLE I. LEARNING SUBJECTS FOR EQUIVALENCY EDUCATIO PROGRAM

No.	Learning Subjects	Packages				
		A	B	C-IPA	C-IPS	C-Bahasa
1	Religion Education	x	x	x	x	x
2	Civic Education	x	x	x	x	x
3	Indonesian Language	x	x	x	x	x
4	Mathematics	x	x	x	x	x
5	Social Studies	x	x	-	-	-
6	Natural Science	x	x	-	-	-
7	Arts and Culture	x	x	x	x	x
8	Health, Sports, and Physical Education	x	x	x	x	x
9	Functional Craftsmanship	x	x	x	x	x
10	Local Content	x	x	x	x	x
11	Professional Personal Development	x	x	x	x	x
12	English Language	-	-	x	x	x

13	Physics	-	-	x	-	-
14	Chemistry	-	-	x	-	-
15	Biology	-	-	x	-	-
16	History	-	-	x	-	-
17	Geography	-	-	-	x	-
18	Economy	-	-	-	x	-
19	Sociology	-	-	-	x	x
20	Anthropology	-	-	-	x	x
21	Indonesian Arts	-	-	-		x
22	Foreign Language	-	-	-		x

To provide instruction materials in E-LEEP, there needs to be plenty of features provided for each package of the equivalency education program. As seen in Figure 4, features E-LEEP provides various choices of subjects for the program of package A, which is equivalent to elementary school. Students the program can be selecting their subjects for access and download learning materials.

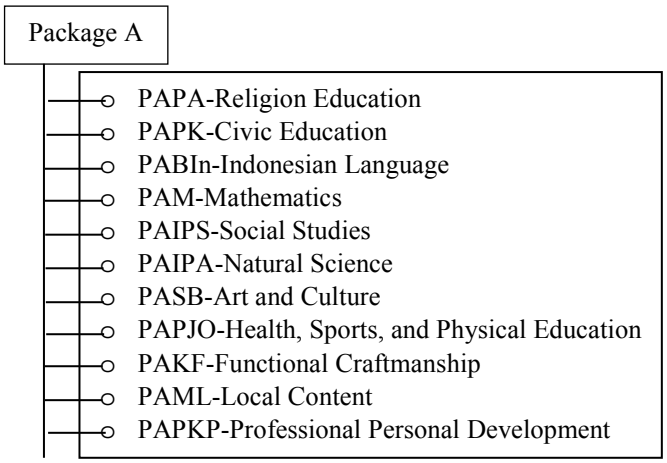

Fig. 4. E-LEEP Features for subjects of Packege A Program

As seen in Figure 5, features of E-LEEP provide various choices of subjects for the program of package B, which is equivalent to junior high school. Students the program can be selecting their subjects for access and download learning materials.

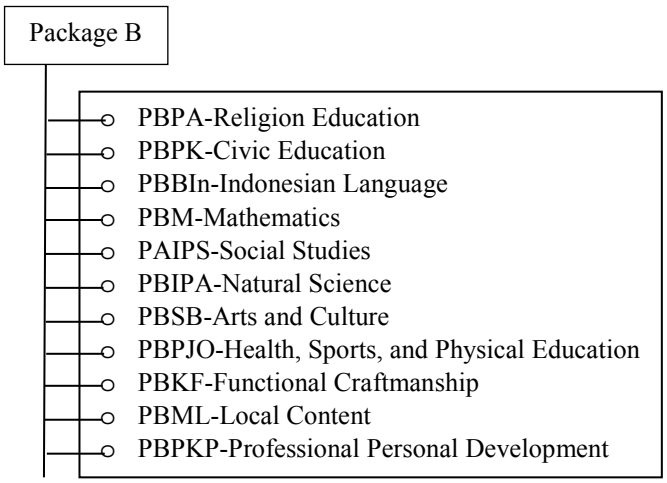

Fig. 5. E-LEEP Features for subjects of Packege B Program

As seen in Figure 6, features of E-LEEP provide various choices of subjects for the program of package C-IPA, which is equivalent to high school, majoring in natural science. Students the program can be selecting their subjects for access and download learning materials.

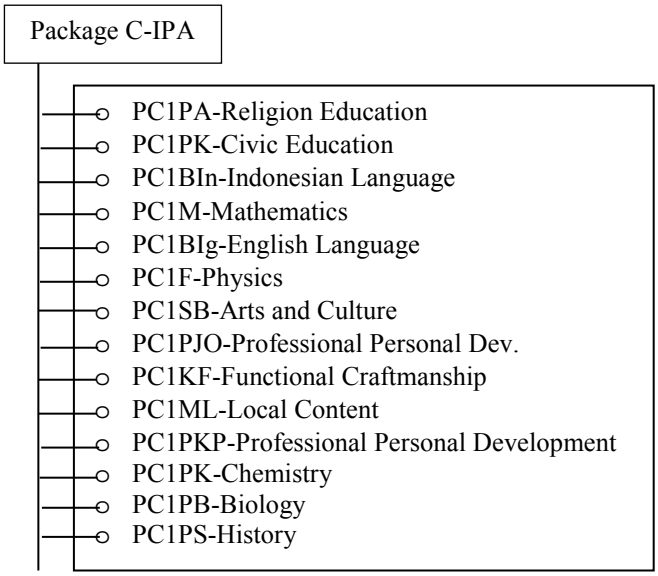

Fig. 6. E-LEEP Features for subjects of C Packege-IPA Program

As seen in Figure 7, features of E-LEEP provide various choices of subjects for the program of package C-IPS, which is equivalent to high school, majoring in Social Science. Students the program can be also selecting their subjects for access and download learning materials.

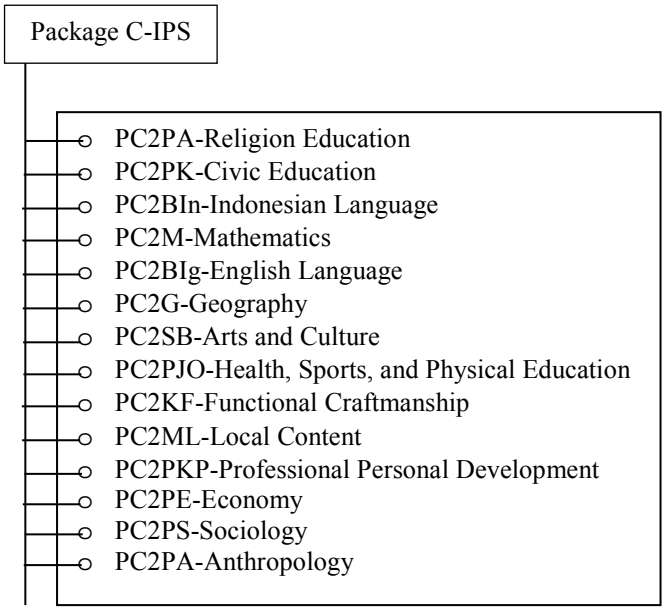

Fig. 7. E-LEEP Features for subjects of Packege C-IPS Program

As seen in Figure 8, features of E-LEEP provide various choices of subjects for the program of package C-Bahasa, which is equivalent to high school, majoring in Language

Sciences. Students the program can be also selecting their subjects for access and download learning materials.

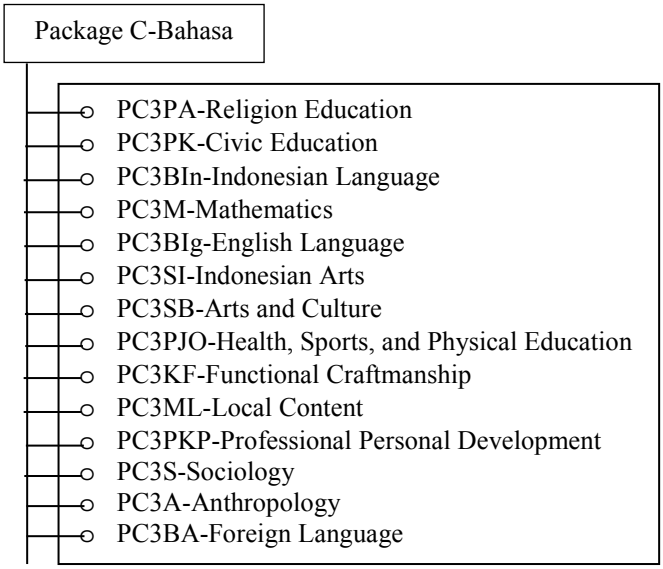

Fig. 8. E-LEEP Features for subjects of Packege C-Bahasa Program

C. Monitoring

Monitoring the implementation refers to a valid equivalency education standard. Technically, monitoring equivalency education implemented in central level, provincial level, district/city level, and sub-district level. Each level should cooperate with each other in doing their job.

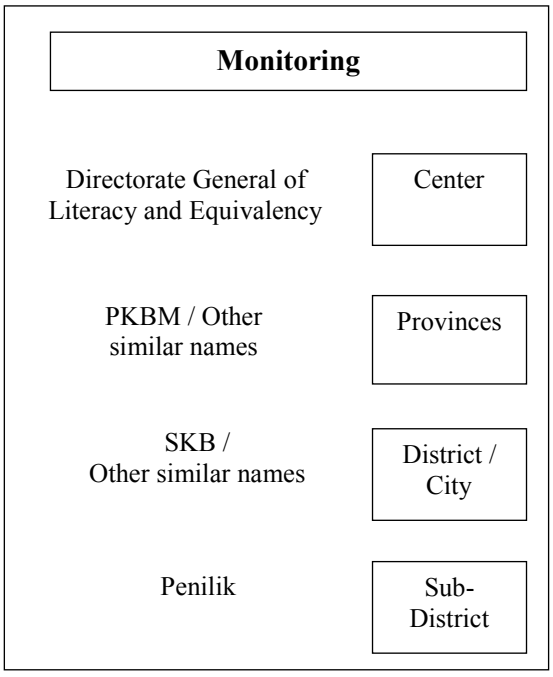

Fig. 9. Monitoring equivalency education

As seen in Figure 9, monitoring equivalency education in central level is done by Directorate General of Literacy and Equivalency. Community Learning Centre (PKBM) or other similar names are responsible for provincial level. Learning Activity Centre (SKB) or other similar names are responsible for district/city level. Later on, equivalency education quality insurance on each unit of equivalency education (package A, B, and C) practically becomes the job for inspector in sub-district level (Penilik).

In E-LEEP, it is also possible to do learning development monitoring done by the institutions responsible on each level. Figure 10, shows features of E-LEEP provides various choices for responsible for equivalency education program on center level by Directorate General of Literacy and Equivalency. These features consists of: the user's profile to find out information about learners and tutors; discussion forum to discuss progress and problems program; monitoring that functions as an assessment at the central, provinces, district / city, and sub-district.

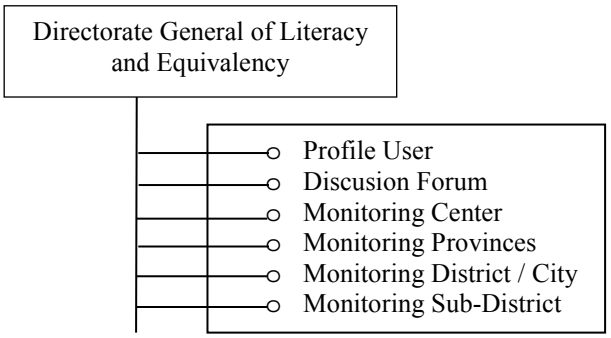

Fig. 10. E-LEEP Features for monitoring center

Then, Figure 11, shows features of E-LEEP provides various choices for responsible for equivalency education program on provinces by Community Learning Centre (PKBM). These features consists of: the user's profile to find out information about learners and tutors; discussion forum to discuss progress and problems prorgram; monitoring that functions as an assessment at the level of provinces, district / city, and sub-district.

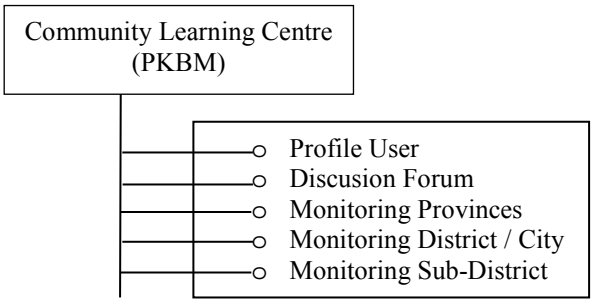

Fig. 11. E-LEEP Features for monitoring Provinces

Then, Figure 12, shows features of E-LEEP provides various choices for responsible for equivalency education program on district / city by Learning Activity Centre (SKB). These features consists of: the user's profile to find out information about learners and tutors; discussion forum to discuss progress and problems prorgram; monitoring that functions as an assessment at the level of district / city, and sub-district.

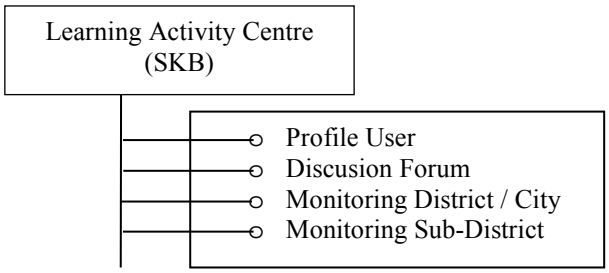

Fig. 12. E-LEEP Features for monitoring District / City

Then, Figure 13, shows features of E-LEEP provides various choices for responsible for equivalency education program on sub-district by Penilik. These features consists of: the user's profile to find out information about learners and tutors; discussion forum to discuss progress and problems prorgram; monitoring that functions as an assessment only at the sub-district level.

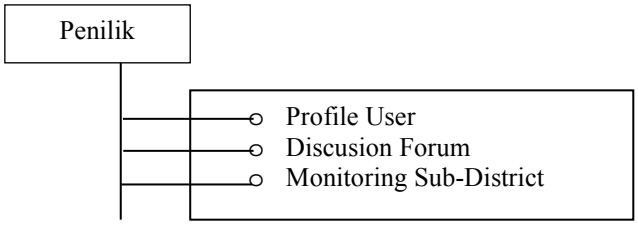

Fig. 13. E-LEEP Features for monitoring Sub-District

IV. CONCLUSION

The paper has proposed a model of the e-Learning for students in the equivalency education program in Indonesia, which called E-LEEP Model. The Model consists of tree main components: users component, education program component, and the monitoring component. Each component will support students in to achieve the goal of learning. Thus, the E-LEEP model should be used to guide the development of e-learning for the equivalency education program in Indonesia. The future of research is to implement the model in e-learning system, and usability evaluation of the e-LEEP system.

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