Applying Obejctivist Instructional Design of Addie Model on Learning Reading Comprehension

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Abstract. **This research is formulated to have an answer to (1) university learner's response and (2) learning achievement during learning reading comprehension through the ADDIE model. Instruments used in this research are questionnaires and tests, which must be given and done by university learners during the learning of reading comprehension. Thirty university learners joined material delivery during the learning process in the classroom. The university learners consist of 23 females and seven males. However, two university learners (one male and one female) did not attend the learning due to personal reasons. The research is conducted in seven meetings of 14 meetings. In each session after the learning of reading comprehension conducted, data are gained, analyzed, and counted by using descriptive quantitative. Based on the result of analysis and calculation, it shows that university learner's responses are positive, that is 0,93 (93%), and the result of learning achievement is categorized mastered because university learners in this research achieve more than 85 and it is categorized as satisfying.**

Keywords: Learning, Reading, ADDIE

INTRODUCTION

Learning is a process of interaction among teachers and students. The focus of learning is to the learners on learning something and how the learners connect with their prior knowledge [1]. Learning specifies explicitly what will be learned and implicitly what will be taught. Learning involves four aspects; they are material, implementation, lecturers, and university learners. They have integrated influence and play a crucial role in the success of learning in the classroom. However, lecturers and learners have more dominant roles. In other words, the learning would not exist if lecturers and learners are not coming to the classroom. It seems that the existence of lecturers and learners in presenting and receiving material is crucial. Nevertheless, it can be said that most university learners are reluctant to do scientific and critical thinking on learning when the lecturers do not come to the class. They tend to be passive. The passiveness of learners in learning could affect their achievement. It indicates that the students themselves must construct their knowledge in leaning something based on their learning style. Learning styles are personal characteristics that make learning effective for some students and not useful for others [2], [3]. Meanwhile, the creativity of lecturers on designing and conveying material is also said as the core of learning. Moreover, there has to be mutual learning from one to another between the lecturers and learners. Vividly, the key principle in learning design is that it represents learning activities and support activities being performed by different persons in the context of a unit in learning [4], [5].

This research was conducted before COVID-19 rule is undertaken, precisely in the academic year of 2018-2019. Currently, most university learners have similar negative perceptions when online learning is held. Based on the result of an interview gained during online learning to learners of the English department at University Wiranegara in Pasuruan, they stated that having an online lecture and tasks make them frustrated. They also add that learning by having face to face with the lecturer makes them feel contentment rather than online class. They also state that online lecture is not a lecture because there are no depth discussion and exploration. The existence of technology has made E-Learning an attractive option, yet technology does not ensure the successful implementation of coursework [6]. In addition, there are over 200 studies on technology for distance education that report no significant difference in student learning when technology, instead of traditional classroom approaches, are used to deliver course instruction [7]. Establishing well teaching is not easy because it needs a lot of preparation. If the instruments of learning are not set as well as possible, the learning cannot be obtained optimally. The instructional design of the learning should be designed well because it is the systematic and reflective process of translating principles of learning and instruction

into plans for instructional material, activities, information resources, and evaluation [8], [5].

Reading comprehension is the ability to read a text, its process, and comprehend its meaning. An individual's ability to understand a text is influenced by their skill to comprehend, one of which is the ability to make inferences. Preparing and presenting a proper model for learning reading comprehension should be taken cautiously. Not only because of the ability and learning style which exist in university learners but also the complexities of reading comprehension aspects, such as vocabulary, grammar, and contents. Having less vocabulary and grammar will influence university learner's ability to comprehend the content of the text. Comprehension occurs when the reader extracts and integrates information variety from the text and combines it with what is already known [9]. Moreover, lecturers are hoped to be able to design and develop the model of learning before implementing the material of learning. There are many kinds of the model on learning which can be implemented. One of them is ADDIE (analysis, design, development, implementation, and evaluation).

ADDIE comes from the behavioralists approach in which the position of its instructional design model is usually sequential and linear in its process; the planning is top and down systematically, and the goals are the delivery of preselected knowledge, complete with a summative evaluation. As one of the models from this approach, ADDIE reflects fundamental beliefs in the power of instruction [10]. ADDIE model is the generic process traditionally used by instructional designers and training developers, which represent a dynamic and flexible guideline for building practical training and performance support tools [11]. Besides, it implies an analysis of how its components interact with each other and require coordination of all phases [12]. Shortly, the steps of ADDIE are 1) Analyzing and identifying all variables that need to be considered when designing the course, such as the characteristics of learners, the prior knowledge, the resources, etc.; 2) Designing learning objectives for the lectures and the way how materials will be designed and created; 3) Developing content and media; 4) Implementing a lecture in which the lecturer performs his teaching; 5) Evaluating and giving feedback. All those phases must be done in order and integrated by designers, developers, lecturers, and teachers in implementing and developing teaching and learning. Based on the explanation above, the researchers formulate the purposes of the research on how university learner's response and achievement during the learning through the ADDIE model.

METHOD

The researchers specify the steps of objectivist design activities of ADDIE as follows:

First, in the analysis phase, the researchers analyze some aspects related to the research field, such as content. The content of the reading comprehension subject is obtained from the syllabus, which consists of some materials, such as comprehending genre-based texts, language features, and social function. The learners are coming from the first semester in the academic year 2018/2019, whereas the students consist of 30, male and female. Third, instructional need; it is determined in line with the need for fresh university learners, which is already defined and elaborated in every meeting of the lesson plan. The lesson plan of this learning has different instructional needs, which are not only suitable for the material based on the course description but also the university learners. In addition, the researchers also use a picture as the media on learning. Last, the Instructional goal, which can be seen from each indicator of the content which will be delivered.

Second, Design. After the first phase has been conducted, the researchers then formulate some steps as; first, instructional objective. It is gained specifically from the instructional goal, which already determined. Here, the researchers elaborate on the objectives of the instructional through the university learners' achievement in learning. It is indicated through the learning outcomes of the learners, such as having the ability to understand, to comprehend, or to apply the knowledge. Second, task analysis. The task is given and done in or out of the classroom, individually or in a group. Third, Criterion-referenced assessment. Objectively, the researchers make the criteria of assessment based on the courses or subjects as below:

Determining university learners' responses. It is analyzed by using analysis procedure which is adopted [13], as below:
1. Collecting all university learners' responses
2. Calculating the average score from each university learners' responses
3. Analyzing university learners' responses by using the criterion below;
    a. if $\geq 0,5$, positive response
    b. if$< 0,5$, negative response
4. Determining the number of positive responses by using the formula as below:

$$R = \frac{P}{S} \times 100\%$$

Note:
P: University learners' positive response
S: University learners' number
If more than 85%, it can be said that university learners give positive responses.

Table 1. Result of university learners' achievement

No	Aspects of scoring	Score
1	The answer is right, grammar is right, and has various Vocabulary	5
2	The answer is right, grammar is wrong, and has various Vocabulary	4
3	The answer is right, grammar is wrong, and has monotonous vocabulary	3
4	The answer is wrong, grammar is right, and has monotonous vocabulary	2
5	The answer is wrong, grammar is wrong and has monotonous vocabulary	1

Learning achievement level:
90–100%   = excellent
80–89%   = satisfying
70–79%   = satisfying enough
<70%   = less of satisfying
a) If the score <85, university learners are categorized as less mastering
b) If the score ≥85, university learners are categorized as mastering

Third, Development. After the first and second steps have already done, the researchers develop all the things in it. In this research, the researchers only develop the instructional materials gained from the syllabus. After analyzing the syllabus, the researchers develop the reading ability of university learners not only what already stated in the syllabus but also in university learners' ability in pronunciation, speaking, grammar, vocabulary, and reading strategy.

Fourth, Implementation. It is conducted during a reading comprehension course is held. From 14 meetings, the researchers observed seven meetings. In this research, the researchers use a picture and SQ3R strategy.

Fifth, Evaluation. Evaluation is taken by giving a test at every meeting. Meanwhile, for knowing that and knowing how, the researchers also use ongoing evaluation during the learning by asking the college learner some questions, pronouncing, inferencing the vocabulary, and also using proper grammar.

Meanwhile, for recognizing lecturer's activity on learning activity, researchers distribute questionnaires consist of 14 items for university learners. They have to give a clue (v) for indicating "yes" or even "no."

RESULT & DISCUSSION

After preparations are ready to be implemented in the classroom, one researcher conducted research; meanwhile, the rests acted as the observers and stayed in the classroom. As stated earlier, the researcher only joined seven meetings during the learning in the classroom. Afterward, the researchers analyze the university learner's response and calculate the score from the result of analysis of university learner's response and learning achievement, as follows:

University Learner's Questionnaire Responses

The questionnaire is distributed to the university learners individually. It has "yes" or "no" responses for each item in the questionnaire. This questionnaire is given at the end of learning. Each questionnaire is analyzed in every meeting. From this occasion, the researchers get the result of university learner's questionnaire responses from each meeting of a total of 7 meetings. The result shows that two learners responded differently; they are students number 4 and 20 in meeting 1 and 6. In meeting 1, the student number 4 gives 'yes' in 13 items from total questions 14 (0,93), but she gives "no" in the aspect number 6 that is in the question," are the media used attractive to be used on the learning"?. So, in the next meeting, the researchers use another attractive media. Meanwhile, in meeting 6, student number 20 gives 'yes' in 13 items from total questions 14 (0,93), but she gives "no" in aspect number 7, which is "do media help you in understanding the material given"?.Although this case occurs, based on the result of the calculation, it does not reduce the positive response of university learners on learning—twenty-eight university learners filled in the questionnaire.

University Learner's Test

As the test has already been conducted, the researchers present the result of university learner's learning achievement as seen in the table 2.

After analyzing and calculating the score obtained from the test, the researchers get seven university learners who have scores of 86 as the final score. They can be said as passing or mastering reading comprehension. Based on the result of calculations from all scores obtained, it can be said that all university learners are mastering the subject. It is shown from the total score (2.466), which are broken down with the total number of college learners (28) who always attend the learning, the score gained is 88.

Designing a good atmosphere in learning in the classroom is not an easy task for all lecturers. They have to design not only classroom management but also its preparation and strategy. Otherwise, the learning result both for lecturer and university learners will occur in unwanted conditions. Models of learning (in this case, lecturers) should be able to select and compose teaching strategies, methods, skills, and students' activities for a particular instructional emphasis. A model is an abstraction of

something used for supporting and help to comprehend objects or occasion which cannot be seen or occur in indirect occasion [14]. ADDIE is one model that can be implemented in learning. ADDIE is a generic model, which has a systematic approach to the process of designing instruction and provides a regular framework to ensure that the educational products produced are efficient and effective [15]. Based on the result of research (Dole, Brown, & Trathen, 1996; Janzen,2003; Karbalaei & Rajyashree, 2010; Khoshsima & Rezaeian, 2014; Pakzadian & Eslami Rasekh, 2012; Nurhayati, 2014; Roohani et al., 2015; Deshpande, 2016; Teng, 2016; Damayanti, 2017) states that together with direct instructions when students are taught reading strategies, this will improve not only their comprehension of the reading passage but also their performance on the tests [16]. Therefore, the lecturer must be able to integrate the model used with the strategy implemented in the classroom.

CONCLUSION

Designing learning through the ADDIE model should be taken carefully. The five phases existing in the ADDIE model have positive effects on learning. As conclusion, 1, based on the result of the research which is taken in 7 meetings, it shows that learning through the ADDIE model has positive responses. It is shown from the result of the questionnaire obtained that is 0,93. And 2, based on the result of the tests which are already conducted and calculated, it shows that the result of learner's learning achievement is satisfying, in which 27 university learners obtained more than 85 and 1 learner obtained 92 (categorized as excellent). It means that university learners can be categorized as mastering reading comprehension.

Table 2. Data and data analysis from the result of university learners' learning

Number of attendance list	Meeting-1	2	3	4	5	6	7	Total	Final Score
	Evaluation score from meeting-								
	1	2	3	4	5	6	7		
1	83	87	90	88	90	89	91	618	88
2	84	84	90	87	88	88	90	617	87
3	88	90	89	91	89	93	95	635	90
4	83	87	84	88	85	90	89	606	86
5	89	90	88	89	87	90	90	623	89
6	87	90	89	85	84	90	89	614	87
7	85	85	87	90	89	90	92	618	88
8	86	88	90	91	89	90	90	624	89
9	-	-	-	-	-	-	-	-	-
10	88	87	90	88	87	90	90	620	88
11	90	89	88	89	90	91	91	628	89
12	89	89	88	89	90	92	91	628	89
13	87	87	90	89	90	94	92	629	90
14	90	88	90	95	93	93	95	643	92
15	83	87	84	88	85	90	89	606	86
16	89	90	88	89	87	90	90	623	89
17	87	90	89	85	84	90	89	614	87
18	83	87	84	88	85	90	89	606	86
19	87	87	90	89	90	94	92	629	90
20	83	87	84	88	85	90	89	606	86
21	83	87	84	88	85	90	89	606	86
22	89	90	88	89	87	90	90	623	89
23									
24	87	90	89	85	84	90	89	614	87
25	83	87	84	88	85	90	89	606	86
26	87	87	90	89	90	94	92	629	90
27	87	90	89	85	84	90	89	614	87
28	83	87	84	88	85	90	89	606	86
29	89	90	88	89	87	90	90	623	89
30	87	87	90	89	90	94	92	629	90
								17.337	2.466

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