

The Effectiveness of Developing Learning Media Based-Lectora Inspire in English Course

Andri Kristianto Sitanggang
Primary School Teacher
Education Department
State University of Medan
Medan, Indonesia

Naeklan Simbolon
Primary School Teacher
Education Department
State University of Medan
Medan, Indonesia

Eva Betty Simanjuntak
Primary School Teacher
Education Department
State University of Medan
Medan, Indonesia

Charles Fransiscus Ambarita
Economic Education Study
Program
State University of Medan
Medan, Indonesia

Laurensia Masri Perangin
Angin
Primary School Teacher
Education Department
State University of Medan
Medan, Indonesia

Dody Feliks Pandimun
Ambarita
Primary School Teacher
Education Department
State University of Medan
Medan, Indonesia

Edizal Hatmi
Primary School Teacher
Education Department
State University of Medan
Medan, Indonesia

Abstract: The research's aim is to determine to find out the increase in college student learning outcomes using learning media based-Lectora Inspire developed in English courses. The Dick and Carey's ADDIE model is being used in this research and development. The college students' cognitive learning outcomes can be improved through the development of learning media based-Lectora Inspire because the gain score obtained is 0.307 which is included in the medium category.

Keywords: Learning Media Based-Lectora Inspire, English Course, Students' Cognitive Learning Outcomes

1. INTRODUCTION

Technological progress is controlled by Human Resources, while Human Resources depend on education. Education is very important to create a smart and quality society. Education is one of the important fields that must be developed in every country. Improvements made in education will determine the progress and retreat of a nation because education is an effort to create quality human resources. Medan State University is one of the higher education institutions in Indonesia that has the responsibility to produce competitive graduates in the form of quality teachers. One of Indonesia's higher education institutions, Medan State University is tasked with producing qualified teachers who are competitive graduates. As an important element of Medan State University, the Faculty of Science Education study program contributes to the achievement of the university's purpose. By helping college students develop their creative thinking abilities which are also important life skills, they may develop a strong graduation profile. The capacity for critical thought is a crucial skill that college students need to have. It is focused on educational objectives that are broadly based, practical, concrete, and meaningful in preparing college students to face future challenges, particularly preparation for the 4.0 industrial revolution. Through mastery of learning,

namely from the outcomes and the actual learning process, the quality of learning is assessed.

However, based on observation at an English course that has been taught at the State University of Medan's Primary School Teacher Education, Faculty of Science Education, it was discovered that the course is dominated by powerpoint learning materials, which makes college students feel bored and less enthusiastic while learning, which makes the learning process ineffective and prevents learning objectives from being met.

Because of this, attention must be paid to student level, the development of students' self-potential, and the use of creative, diverse, fascinating, contextual learning material. In order to build an effective learning process and accomplish learning objectives, this learning medium might start a pleasant learning process. According to Hamidjojo and Latuheru (in Arsyad) suggests that the media as a form of intermediary used by humans to convey or spread ideas, ideas, or opinions so that ideas, ideas or opinions that are delivered to the intended recipient [1]. Meanwhile, Miarso states that learning media are everything that is used to channel messages and can stimulate the thoughts, feelings, attention, and willingness of students so that it can encourage a

deliberate, purposeful, and controlled learning process [2]. As a result, English courses at Primary School Teacher Education study program must construct learning materials. Holding a learning media based-Lectora Inspire platform that is elegantly packed is one of the optimization strategies that lecturers may use.

Based on the background of the study described above, the problem of this study is how is the increase in student learning outcomes using learning media based-Lectora Inspire developed in English course in the Primary School Teacher Education study program, Faculty of Science Education, State University of Medan? The purpose of this study is to find out the increase in student learning outcomes using learning media based-Lectora Inspire developed in English course in the Primary School Teacher Education study program, Faculty of Science Education, State University of Medan.

2. METHOD

This study employed research and development as its methodology. Research and Development is a process or steps to develop a new product or improve an existing product that can be accounted for. These products are not always in the form of objects or hardware, such as books, modules, learning aids in the classroom or in the laboratory, but can also be software, such as computer programs for data processing, classroom learning, libraries or in the laboratory, or models. education, learning, training, guidance, evaluation, management, etc [3]. Dick and Carey's ADDIE model, which is utilized in this study. The product that will be produced in this research is learning media based-Lectora Inspire at English course at Primary School Teacher Education, Faculty of Science Education, State University of Medan. The instruments used are tests. This paper explains about the increase in college student learning outcomes using the product being developed.

3. RESULT AND DISCUSSION

3.1 Result

After the developed product is declared eligible to be tested by material and media experts, it will proceed to the field trial. The trial was carried out in learning using learning media based-Lectora Inspire for the Primary School Teacher Education department college students in class F 2022. The data from the results of this field trial were used to determine the increase in college student cognitive learning outcomes. The results of the field trial are presented in the following table.

Table 1. Pre-Test Result

Respondents	Items															Correct	Score	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15			
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	14	93.3	
2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	15	100.0	
3	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	14	93.3	
4	0	1	1	1	1	1	1	1	1	1	0	0	1	1	1	12	80.0	
5	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	0	13	86.7
6	1	0	0	0	1	1	1	0	1	0	0	1	0	0	0	6	40.0	
7	1	1	1	1	1	0	0	1	1	1	1	1	1	1	1	13	86.7	
8	0	1	1	1	1	1	1	1	1	1	1	0	1	1	0	12	80.0	
9	1	1	1	1	1	1	1	1	1	1	1	1	0	1	0	13	86.7	
10	1	1	1	1	1	1	0	0	1	0	1	1	1	1	1	12	80.0	
11	0	1	1	1	0	1	1	1	1	1	1	0	1	1	0	11	73.3	
12	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	15	100.0	
13	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	14	93.3	
14	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	14	93.3	
15	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	14	93.3	
16	1	1	1	1	1	1	1	1	1	0	1	1	1	1	0	13	86.7	
17	0	1	1	1	1	1	1	1	1	0	1	1	1	1	1	13	86.7	
18	0	1	1	1	1	1	1	0	1	1	1	1	0	1	1	12	80.0	
19	1	1	1	1	1	1	1	1	1	1	1	0	1	1	0	13	86.7	
20	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	14	93.3	
21	1	1	1	1	1	0	1	1	0	1	1	1	1	1	1	13	86.7	
22	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	15	100.0	
23	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	15	100.0	
24	1	0	1	1	1	0	1	1	1	1	1	1	1	1	1	13	86.7	
25	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	14	93.3	
26	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	15	100.0	
27																0	0.0	
28	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	14	93.3	
29	0	1	1	1	1	1	1	1	1	0	1	1	1	1	1	13	86.7	
30	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	14	93.3	
31	1	1	1	1	1	1	1	1	1	1	1	0	1	1	0	13	86.7	
32	1	1	1	1	1	1	0	1	1	0	1	1	1	1	1	13	86.7	
33	0	1	1	1	1	1	1	1	1	1	1	0	1	1	0	12	80.0	
34	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	14	93.3	

Based on the table, it can be seen that in the pre-test used 14 items and 34 college students as respondents who answered the items but one of them was not present during the pre-test.

Table 2. Post-Test Result

Respondents	Items															Correct	Score
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15		
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	15	100.0
2	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	14	93.3
3	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	14	93.3
4	1	1	1	1	1	1	1	0	0	1	1	1	1	1	1	13	86.7
5	0	0	1	1	1	1	0	1	1	1	1	1	1	1	1	12	80.0
6	1	0	1	1	1	1	1	0	1	1	1	0	1	1	1	12	80.0
7	1	1	1	1	1	1	0	1	0	1	1	1	1	1	1	13	86.7
8	1	0	1	0	1	1	1	1	1	1	1	1	1	1	1	13	86.7
9	1	1	1	1	1	0	0	1	1	1	1	1	1	1	1	13	86.7
10	1	1	1	1	1	1	0	1	0	1	1	0	1	1	1	12	80.0
11	0	1	1	1	1	1	1	1	1	0	1	0	1	1	1	12	80.0
12	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	14	93.3
13	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	14	93.3
14	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	14	93.3
15	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	15	100.0
16	1	1	1	1	1	1	0	0	1	1	1	1	1	1	1	13	86.7
17	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	15	100.0
18	1	0	1	1	1	1	0	1	1	1	1	1	1	1	1	13	86.7
19	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	14	93.3
20	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	15	100.0
21	1	1	0	1	1	1	0	1	1	1	1	1	0	1	1	12	80.0
22	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	14	93.3
23	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	14	93.3
24	1	0	1	0	1	1	1	1	1	1	1	1	1	1	1	13	86.7
25	1	1	0	1	1	1	1	1	0	1	0	1	0	1	1	11	73.3
26	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	14	93.3
27																0	0.0
28	1	1	0	1	1	1	0	1	1	1	1	1	1	0	1	12	80.0
29	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	15	100.0
30	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	14	93.3
31	1	1	1	1	1	1	0	1	1	1	1	1	1	1	0	13	86.7
32	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	14	93.3
33	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	14	93.3
34	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	14	93.3

Based on the table, it can be seen that in the pre-test used 14 items and 34 college students as respondents who answered the items but one of them was not present during the post-test.

Table 3. Gain Analysis Of College Students' Cognitive Learning

Subject	Total Pre-test Score	Total Post-test Scores	Sid Gain
1	93,3	100	1,0000
2	100	93,3	0,0000
3	93,3	93,3	0,0000
4	80	86,7	0,3350
5	86,7	80	-0,5038
6	40	80	0,6667
7	86,7	86,7	0,0000
8	80	86,7	0,3350
9	86,7	86,7	0,0000
10	80	80	0,0000
11	73,3	80	0,2509
12	100	93,3	-1,0000
13	93,3	93,3	0,0000
14	93,3	93,3	0,0000
15	93,3	100	1,0000
16	86,7	86,7	0,0000
17	86,7	100	1,0000
18	80	86,7	0,3350
19	86,7	93,3	0,4962
20	93,3	100	1,0000
21	86,7	80	-0,5038
22	100	93,3	0,0000
23	100	93,3	0,0000
24	86,7	86,7	0,0000
25	93,3	73,3	-2,9851
26	100	93,3	0,0000
27			0,0000
28	93,3	80	-1,9851
29	86,7	100	1,0000
30	93,3	93,3	0,0000
31	86,7	86,7	0,0000
32	86,7	93,3	0,4962
33	80	93,3	0,6650
34	93,3	93,3	0,0000
Total Score	2900,0	3053,3	0,307
Score Average	85,3	89,8	0,306
Lowest Score	0,0	0,0	
Highest Score	100,0	100,0	
Gain Category			Sedang

Based on the table, it can be seen that the total pre-test score was 2900, the total post-test score was 3053.3, the average pre-test score was 85.3, the average post-test score was 89.8, the lowest pre-test score was 0, the lowest post-test score is 0, the highest pre-test score is 100, the highest post-test score is 100 and the gain score is 0.307. If seen from the gain score obtained, the increase in college student cognitive learning outcomes is in the medium category. This shows that the use of learning media based-Lectora Inspire can improve college students' cognitive learning outcomes.

3.2 Discussion

The Dick and Carey's ADDIE model (Analysis, Design, Development, Implementation, and Evaluation) is used in this research and development. The results show that the total pre-test score was 2900, the total post-test score was 3053.3, the average pre-test score was 85.3, the average post-test score was 89.8, the lowest pre-test score was 0, the lowest post-test score is 0, the highest pre-test score is 100, the highest post-test score is 100 and the gain score is 0.307. If seen from the gain score obtained, the increase in college student cognitive learning outcomes is in the medium category. Based on the results, the research that has been done proves that college students' cognitive learning outcomes can be improved through the development of learning media based-Lectora Inspire.

4. CONCLUSION

Based on the results, the research that has been done proves that college students' cognitive learning outcomes can be improved through the development of learning media based-Lectora Inspire because the gain score obtained is 0.307 which is included in the medium category.

5. ACKNOWLEDGMENT

Special thanks to Prof. Dr. Baharuddin, M.Pd. for the funds that have been given through the Community Service Institute of State University of Medan, may you always be blessed by God Almighty in your work, health, long life and all elements of life.

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