

The Effect of Pelajar Go! as a Boardgame to Improve Student's Speaking Skill

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Abstract—This study was conducted based on the teacher's need for learning media to train students' speaking skills. Based on a survey conducted in a public elementary school in Bantul area, Yogyakarta, speaking skills become the standard of graduation that must be mastered by students and are very important for further study. Unfortunately, many students still think that public speaking is frightening. The purpose of this paper is to see the effectiveness of Pelajar Go!, a board game-based learning medium, on students' speaking skills, with pre-test and post-test control group design and experimental group selection based on random sampling, Kolmogorov-Smirnov test, Levene's test, and analysis of variance (t-test). The results show that learning using Pelajar Go! is more effective to improve students' speaking skills than using conventional media. There are significant differences in terms of task achievement and communication skills (0.006), speech clarity and naturalness (0.015), grammar (0.006), and vocabulary (0.003). This medium works well to help students participating in a discussion, motivate students to learn because of the interesting forms and content, encourage students to convey their ideas, and provide fun and exciting ways to practice their skills.

Keywords—learning media, speaking skill, board game, elementary student

I. INTRODUCTION

As a language aspect in integrated learning in Indonesia, speaking skill is important to be taught to enable students to speak clearly and persuasively, regardless of the career field they will enter [1]. Therefore, speaking skill is required from early on at any level in everyday life [2]. Having good speaking skill will also train other skills such as critical thinking skills [3], [4]. This skill is related to the ability of the brain to find a solution of a problem quickly and precisely. [5]

Speaking skills include: (1) process of narrowing information gap, (2) process of negotiation of meaning, (3) process or intervention according to the affective factors, (4) they goes side by side with nonverbal tools [6]. The main purpose in teaching speech skill is verbal fluency: the ability to express themselves intelligently, naturally, accurately and without undue hesitation.

The importance of the speaking skill for students compels teachers to work hard to build a cooperative

and supportive atmosphere for learning [7] especially for State Elementary School SD N 2 Wijirejo and SD N 2 Sanden where not a few students think that public speaking is a difficult task. Preliminary research conducted on fourth graders of SD N 2 Wijirejo, Bantul, Yogyakarta revealed that 64% of students felt that it is burdensome to speak in front of the class. The same thing occurred in SD N 2 Saden, Bantul, Yogyakarta. Around 55% of its students felt that speaking in front of the class is an 'arduous' task. Teachers often persuade students to speak up. Unfortunately, only certain students can and dare to voice their opinions in front of the class. The rest complains of not being confident or afraid, especially to speak spontaneously.

Difficulties in public speaking are experienced by many students characterized by symptoms of rapid heartbeat, abdominal cramps, nausea, and sweating. One in five persons will experience communication apprehension that is not related to an individual's intellect [7], [8]. Shafer's research even shows that speech difficulty is also felt by students who have above-average intelligence. Beyond the student's physical aspect, another source of anxiety is experience such as the speaker's previous public speaking experiences, the fear of being in the spotlight, the fear of being judged, the amount of preparation for the speech, and the amount of experience in delivering a speech [9]. Therefore, speaking skills cannot be obtained instantly. Speaking becomes something that needs to be prepared and developed since the elementary level of education, and trained continuously [10].

As educators, bringing new things into learning process is essential to improve students' learning competencies [11]. One of them presents a learning medium for practicing speaking [12]. Nowadays, various types of instructional media have evolved especially in terms of presentation which is in both conventional and digital forms [13]. Digital media such as multimedia, education games and interactive learning are widely used for being practical, cheap, and interesting [14]. However, there is a drawback: the tendency to make students become addicted and not really hone their social skills.

Fourth graders are generally 8-10 years old. At that age, students are at a concrete operational stage [15]. Student thinking begins to be logical,

systematic, and it can develop thoughts based on certain rules. Another characteristic of elementary students is their fondness of moving and imitating as well as having a great curiosity. Therefore, good learning media are very necessary to educate students through the right concept. "Children's play is a clear opportunity to observe intrinsic motivation at its best,"[16]. Fun conditions such as playing unconsciously will make it easy for students to absorb the information provided.

Given that fourth graders in elementary schools are experiencing obstacles in speaking skills, we consider the game as the best motivation to help them practicing speaking in the right atmosphere and providing them with the opportunities to freely express themselves [17]. Games are assumed as fun activities to do in the classroom, both for teachers and students. [18]

Using games as a teaching strategy is a good way to teach content, create conducive conditions, and enhance critical thinking skills, promote active, student-centered learning as students interact freely to solve problems collectively [19]. The game format was used to provide a safe space in which the students could interact and make mistakes; the format removes pressure and creates fun learning experiences [20]. Games are used to provide a safe space where students can interact in a fun way, relieve stress, channel all desires, satisfaction, creativity, imagination, and add a layer of fun to the learning experiences [21].

The educative game media that will be used in this study is the board-game. A game type that can be easily adapted into a classroom /school situation is the board or card games, [22]. Board-game itself has been widely used in the world of education to improve student competence, [23]. The advantages of this board-game media is that it is able to provide an interesting learning experience so that the passion of learning and student achievement could be increased. Game-based learning has better academic outcomes than traditional learning [24].

This board-game based learning media is named Pelajar Go!. Technically, this media contains a dramatic flow so it affects the students' emotions in voicing his opinion. Like board-game in general, Pelajar Go! has several components in order to be played in a batch. These components include; 1 square board with 45x45 cm long, 36 pieces of elemental card, 36 pieces of trivia card, 5 pieces of pawn as iconic player, 1 point man, and a guide book. The method in this game is the making of a picture story [25]. Therefore, the player is said to win if he/she is able to collect at least one set of cards with the same element (6 cards), arrange the series card and tell the message in the card to the other students.

The findings of this study are important to provide information about the effectiveness of the Pelajar Go! on students' speaking skills when compared to conventional textbooks. This study contributes to the primary school education, especially on the

application of instructional media to improve the speaking skills of fourth grade students.

II. MATERIAL AND METHOD

This is quasi experimental research with a pre-test and post-test control group design [26]. The experimental group was selected by means of random sampling technique. The experimental class consisted of the fourth graders A of SD N 2 Wijirejo with 25 students. The control group consisted of the fourth graders A of SD N 2 Sanden with 20 students. Design of field trial is presented in Table 1.

TABLE I. PRE-TEST AND POST-TEST CONTROL DESIGN

Intact Classes	Pretest	Treatment	Posttest
Experimental	T ₁	X _a	T ₂
Control	T ₃	X _b	T ₄

Note:
 X_a= Treatment with Pelajar Go!
 X_b= Treatment with conventional Learning
 T₁= Pretest for performance speaking skills of the experimental class
 T₂= Posttest for performance speaking skills of the experimental class
 T₃= Pretest for performance speaking skills of the control class
 T₄= Posttest for performance speaking skills of the control class

Data collection technique was performed with performance tests. Speech skills assessment rubric referred to Speaking Assessment Scale for Empowering Eight (E8). [27] Here is a scoring rubric used to assess students' speaking skills.

TABLE II. SPEAKING ASSESSMENT SCALE FOR EMPOWERING EIGHT (E8)

N	Task Achievement & Communication Skills	Clarity & Naturalness of Speech	Grammar	Vocabulary
81-100	<ul style="list-style-type: none"> detailed information communicated reliably description or narrative with main points expanded by relevant, detailed information and examples effective turn-taking through initiating, maintaining and/or closing discourse, sometimes using stock phrases 	<ul style="list-style-type: none"> fluent and spontaneous at a fairly even tempo with natural pauses longer stretches of language clear, natural pronunciation and intonation 	<ul style="list-style-type: none"> good range of structures relatively high degree of grammatical control and few inaccuracies which do not impair communication message clear 	<ul style="list-style-type: none"> good range of vocabulary communicating clear ideas; formulations sometimes varied to avoid repetition generally accurate vocabulary
61	<ul style="list-style-type: none"> clear and 	<ul style="list-style-type: none"> some degree 	<ul style="list-style-type: none"> generally 	<ul style="list-style-type: none"> sufficient

80	concrete information of immediate relevance with main points communicated comprehensibly	of fluency with some pausing for repair or grammatical and lexical planning	sufficient range of structures	range of vocabulary communicating clear ideas
41-60	limited information on familiar and routine matters communicated in a simple and direct exchange or narrative in a simple list of points on sentence or word-group level	noticeable pauses, hesitation or false starts, sometimes breakdown of communication	limited range of simple structures	limited range of vocabulary mostly communicating clear ideas
21-40	very little information even in simple everyday situations	much hesitation frequently causing breakdown of communication	extremely limited range of simple structures	extremely limited range of vocabulary communicating few clear ideas
0-20	no task achievement	no assessable language	no assessable language	no assessable language

Data were analyzed by using descriptive and inferential statistical analysis. Data processing was assisted with the SPSS 20 for Windows. The steps of hypothesis testing were as follows: (1) prerequisite test of normality analysis (Kolmogorov-Smirnov test) and homogeneity (Levene's test), (2) ANOVA (Analysis of Variance) test with t-test statistic. T-test was used to analyze differences in experimental group speaking skills with the control group.

III. RESULTS AND DISCUSSION

A. Results

TABLE III. DESCRIPTIVE STATISTICS OF SPEAKING SKILLS

Final score	Asymp. Sig. (2-tailed)		Mean	Std. Deviation	Levene's Test for Equality of Variances		t-test for Equality of Means	
	Pre test	Post test			F	Sig.	t	Sig. (2-tailed)
Task Achievement and Communication Skills								
Experimental	.70	.28	2.3000	2.78762	.48	.493	2.918	.006
Control	.45	.50	.6500	1.59852	5.6	.03		
Clarity and Naturalness of Speech								
Experimental	.47	.53	1.9200	1.78932	.0	.99	2.540	.015
Control	.57	.43	.4250	2.15989	1.2	.27		
Grammar								
Experimental	.50	.50	2.4800	1.51712	.0	.99	2.918	.006
Control	.00	.00	.0000	.00000	4.6	.03		

Control	.6	.7	1.2 750	1.17 513	5	3
	2	40				
	9					
Vocabulary						
Experi mental	.1	.3	3.0 200	2.38 258	.	. . 3.1 42 .003
	5	72			0	9
	7				0	8
Control	.9	.8	.70 00	2.55 672	0	4
	1	53				
	5					

Table III shows that there are differences in the results of the speaking skills in the experimental and control classes before and after being treated using the Pelajar Go! Board-game. The result of normality test of students' speaking skills in both pretest and posttest performances shows that the value exceeds 0.05 ($P > 0.05$). Thus, the samples in this stud are normally distributed. The result of homogeneity test of students' speaking skill shows that the significant value of Levene's Test dependent variable had significant value > 0.05 ($P > 0.05$), which suggests that all subject of research are homogeneous. Normality and homogeneity tests show that the distribution of data obtained from initial and final tests of all study subjects are qualified as normal and homogeneous data. Therefore, it could be continued on t-test to find out the difference and significance level of Student Go! on students' speaking skills.

The t-test results in the above four components are less than 0.05 ($P < 0.05$) which means that there is a difference in the performance results of speech between the groups. For the task achievement and communication skills components, the significance difference is 0.006. For clarity and naturalness of speech, the significance difference is 0.015. For grammar, the significance of the difference is 0.006. Finally, vocabulary gains a significance difference of 0.003.

Of the four components, the experimental class acquires higher skills than the control class. Therefore Ho "there is a significant effect difference between groups of students using Pelajar Go! boardgame, compared to the group of students using conventional media" is accepted.

B. Discussion

Pelajar Go! played by the students has all speaking elements. Students are asked to develop stories based on pictures. The game stimulates students to develop main ideas into conversation topics. Speaking skills on task achievement aspect and communication skills could be developed through Pelajar Go! because it provides interesting visual assistance to help organize information and plan what they would deliver for public audiences.

On board games, students are conditioned as adventurers exploring the island with the mission of collecting 6 cards of the elements in the same series. The board game route is adopted from the problem-based learning model. This model could stimulate the students' emotional thinking into problems and contribute to problem solving, [28]. The game route has clearly shown the topic of conversation, topic benefit or usefulness, examples of behaviors that will damage the topic, the adverse effects of destructive behavior, possible remedial efforts, and real actions that can be done by the students. Through this model, students unconsciously get a clear and coherent picture of the whole topic.

In the center of the board game, there is a trivia card containing a puzzle or question to guess that will be given to the opponent players. Technically the board game for education is a question game. Questions need short-answers or multiple-choices, and players are asked a question while everyone else sits quietly. The player either gives the correct or wrong answer; the correct answer is then given [29]. Trivia is meant for students to retrieve the words they already have and prompt them to find new vocabulary that will increase their speaking skills.

Each card element that the student will collect includes cartoon illustrations to help students generating original ideas and triggering memories easily. Kim [30] states that stimuli such as pictures and explanations are able to stimulate students to develop their creativity into a wider subject. From this card element, students can develop sentences supported by the vocabulary they get from the trivia card.

Using cartoon illustrations also serves to create an impression and to name both positive and negative messages learned. It is in accordance with the opinion of Hurwitz and Day [31] that the picture shows the subject of the storyline with one scene. The picture illustrates the pleasant or distressing circumstances intended to enable students to convey their ideas.

To train the clarity and naturalness of speech, it is true that Pelajar Go! is not an audio medium that can provide sound samples of sound pronunciation or intonation. However, the Pelajar Go! game system facilitates students to learn in small groups. Thus students will automatically be encouraged to talk to their teammates. Students will correct each other and give feedback about what they are discussing.

The results also take into account the characteristics of students that when playing Pelajar Go! students are more courageous to express their opinions and more expressive. Practicing small talk subsides the students' fear, it is then replaced by the motivation to convey ideas well and clearly. This positively affects students performance in front of the class after several meetings using Pelajar Go There is an increase of 5 out of 25 students in the experimental class who are in excellent speaking clusters, whereas in the control class only 1 out of 20 students.

In the control class, learning speaking skills using conventional media (textbooks) made it difficult for students to convey the topic of discussion coherently. This is because students prepares the topic globally without any outline of the discussion such as the beginning, climax, and solutions. In addition, in the performance tests, students are sometimes not really fluent and roll their eyes often because they forget what they are going to say or get nervous. Besides, some topics of the talks raised by students did not match with title that is initiated by the students.

IV. CONCLUSION

Practicing speaking skills using educational game media such as Pelajar Go! is more effective than using conventional media such as textbooks. This article has been successful in proving that the quality of students' speaking is improved in terms of task achievement and communication skills (content of discourse, coherence, courage), clarity and naturalness of speech (intonation, vocabulary, fluency), grammar, and vocabulary. This research is very useful for educators as it introduces Pelajar Go! as a language training media with an enjoyable and fun atmosphere to improve students' speaking skills. The novelty of this research is that the training techniques are packed in small groups first then in the wider public group. This can reduce anxiety and increase students' courage where speaking skills do require much practice. The data in this study are only seen from the student performance test in front of the class. The researchers have not done triangulation of other data. Therefore, further research is needed in order to get a more significant result.

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