Enhancing 21st Century Skill through Teaching Model Collaboration in Indonesian EFL Classroom

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Abstract—21st Century Learning requires EFL students to enhance interpersonal communication skill, cognitive skill and creativity. Yet, the considerable problem faced by Indonesian EFL students was not being able to communicate with others by using English dexterously as they did not have much opportunities to practice their communication skill by using English appropriately. This research revealed teaching model collaboration that was project based learning and experiential based learning models to enhance interpersonal communication skill, cognitive skill and creativity of EFL students. A quantitative research method with factorial design 3X2 was applied, then two classes of English students of UMN Al Washliyah University were chosen as the sample of research. To collect the data, the instrument used were questionnaire with Likert scale and formative test. Based on data analysis, Multivariate Anova was applied to investigate teaching model collaboration significantly affected on interpersonal communication skill, cognitive skill and creativity of EFL students. Obviously, EFL students with higher creativity in project completion would be able to communicate with others, and achieve the cognitive skill. In brief, an innovative teaching model collaboration that engaged a comprehensive project definitely affected on how EFL students communicate with others by using English appropriately and creatively.

Keywords—EFL Students; project-based learning; experiential-based learning; interpersonal communication; creativity

I. INTRODUCTION

21st century learning provides four essential competencies, namely; the competetency of critical thinking, the competency of creative thinking, the competency of communication and elaboration, and the competency of technology and information mastery [1]. The communication competency will be considered by EFL students in this age since interpersonal communication skill lead the students to communicate with others by using English accurately, and by presenting the topic properly. Being able to speak English is the most demanding skill encountered by EFL students since English speaking is the most difficult skill of the four language skills that must be achieved by EFL students to involve in effective communication [2-4]. There are three factors affecting the communication skill of EFL students, such as; language barriers, psychological factors, learning environment, and language practice [5].

Based on previos research, 21th century learning can be achieved through the implementation of project-based learning since project-based learning present multiple benefits as the students are allowed to reflect their own knowledge and to solve the problems found during project completion [6,7]. Moreover, the implementation of project-based learning gives a great impact to students’ creative thinking in conducting the project [8]. In addition, human aspects such as; emotion, thought, behavior, and attitudes are completely affected by the project-based learning implementation [9] in which all those aspects are constructed through kinds of logical and real activities carried out by the students [10]. Consequently, project-based learning does not only gain the fantastic academic result but it also gains other skill in which one of them is students’ creativity [11,12].

Furthermore, the purposes of project-based learning implementation will fit in the experiential-based learning since it allows the students to share what they have experienced with others [13]. In addition, mastering the learning materials are achieved smoothly since experiential-based learning is kind of sharing-based learning [14].

Based on the real fact, interpersonal communication skill of EFL students of Muslim Nusantara Al Washliyah are dominantly categorized into two levels, namely; intermediate, and advanced. In other words, mostly students need more effort to achieve 21th century English language skill. To meet this urgency, the collaboraoration of project-based learning and experiential-based learning in Rherotic subject through mini project are highly expected to enhance interpersonal communication skill, cognitive skill, and creativitv of EFL students.

II. METHODS

A. Research Design

This research was conducted by applying quantitative research method with factorial design modified from design true experimental conducted in Universitas Muslim Nusantara (UMN) Al Washliyah Medan as seen as table 1.
TABLE I. FACTORIAL DESIGN 3X2

<table>
<thead>
<tr>
<th>Teaching Models (X)</th>
<th>Project Based Learning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communication</td>
<td>X,Y</td>
</tr>
<tr>
<td>Interpersonal</td>
<td>X,Y</td>
</tr>
<tr>
<td>Creativity (Z)</td>
<td>X,Z</td>
</tr>
<tr>
<td>Cognitive Skill (O)</td>
<td>X,O</td>
</tr>
</tbody>
</table>

Moreover, the sample was taken by random purposive sampling in which there were two classes chosen with 40 students for each class; experimental class I was taught by using the collaboration between project-based learning and experiential learning model. Experimental class II was taught by using project-based learning. In this research, there was one independent variable; collaboration between project-based learning and experiential learning model represented as treated variable, and two dependent variables; interpersonal communication, and creativity represented as moderator variable [15].

There three kinds of instrument of the research used, namely; students’ mini project which is inspiring video contained persuasive values and observation during sharing session for interpersonal communication skill, questionnaire with Likert Scale for creativity, and formative test for cognitive skill

Then, technique of collecting data for interpersonal communication and creativity was done through questionnaire with Likert scale in which the questionnaire was designed with related indicators. For analyzing the data, all data found would be tested normally through one sample of Kolmogorov Smirnov and also be tested through one way anova to investigate the homogeneous with Sig > 0.05, then, all the data found were analyzed by using multivariate anova (manova) with sig < 0.05. Last, father analysis used SPSS 22 IBM for Windows in order to measure each questionnaire score [16].

III. FINDINGS AND DISCUSSION

Based on data analysis, it was found that all the data were distributed normally as shown as table 2.

TABLE II. TESTS OF NORMALITY

<table>
<thead>
<tr>
<th></th>
<th>Kolmogorov-Smirnov*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Com Int</td>
<td></td>
</tr>
<tr>
<td>Experimental Class I</td>
<td>206</td>
</tr>
<tr>
<td>Experimental Class II</td>
<td>119</td>
</tr>
<tr>
<td>Creativity</td>
<td></td>
</tr>
<tr>
<td>Experimental Class I</td>
<td>159</td>
</tr>
<tr>
<td>Experimental Class II</td>
<td>142</td>
</tr>
<tr>
<td>Cognitive Skill</td>
<td></td>
</tr>
<tr>
<td>Experimental Class I</td>
<td>243</td>
</tr>
<tr>
<td>Experimental Class II</td>
<td>181</td>
</tr>
</tbody>
</table>

* This is a lower bound of the true significance

Moreover, the data analysis also showed that all the data were distributed homogeneously as shown as table 3.

TABLE III. THE HOMOGENEITY OF DATA

<table>
<thead>
<tr>
<th></th>
<th>F</th>
<th>df1</th>
<th>df2</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communication</td>
<td>3.467</td>
<td>1</td>
<td>58</td>
<td>200</td>
</tr>
<tr>
<td>Interpersonal</td>
<td>2.978</td>
<td>1</td>
<td>58</td>
<td>102</td>
</tr>
<tr>
<td>Creativity</td>
<td>2.491</td>
<td>1</td>
<td>58</td>
<td>103</td>
</tr>
</tbody>
</table>

* Tests the null hypothesis that the error variance of the dependent variable is equal across groups

It was found that students taught by using this collaboration had better interpersonal communication skill as shown in figure 1.

![The Differences of Interpersonal Communication Indicators Between Experimental Class I and II](image)

Fig. 1. The indicators of interpersonal communication skill.

The figure 1 above clearly visualizes that students’ interpersonal communication skill was higher when they are taught by using collaboration between project-based learning and experiential learning model. It could be seen from five indicators tested through questionnaire given, namely; open, empathy, supporting, positive, and fair. The students in experimental class I were more open in communicating with others and scored 91.67 while the score of the students when they were taught by project-based learning was only 80.67.

Furthermore, the implementation of collaboration between project-based learning and experiential learning model significantly affects to the students’ creativity as seen figure 2.
The above figure 2 shows that, score of creativity obtained from questionnaire formulated for experimental class I and class II was different in which all the indicators analyzed. The students who were taught by using project-based learning and experiential learning model felt more fluent in improving creativity with the score 93 while class II was only 76.67.  

In addition, the improvement of students’ cognitive skill taught by implementing model collaboration was also visualized in figure 3.

Based on data analysis, interpersonal communication and creativity obtained Sig < 0.05. Based on data analysis, collaboration between project-based learning and experiential learning model significantly affects to the students’ interpersonal communication skill and creativity. Furthermore, data analysis also proves that there is an interaction occurred between students’ interpersonal communication skill and creativity taught by implementing the collaboration between project based learning and experiential learning with Sig 0.0342 < 0.05. Based on the finding, it could be inferred that the innovative teaching learning process designed by lecturer definitely led to the better significance of students’ interpersonal communication skill and creativity in using English accurately. Last, implementing project-based learning and model experiential learning also affected to students’ cognitive skill. It could be seen from the data analysis in which there was an interaction occurred between students’ interpersonal communication and cognitive skills with Sig < 0.005 in which the data obtained was 0.000. In other words, Sig 0.000 < 0.005 in which hypothesis was accepted.

The finding of the research to research was conducted by[6] that revealed that all the 21st century skills urgently needed by the students could be achieved through the implementation of project-based learning since it allowed the students to explore knowledges and informations related to materials taught independently, creatively, and critically. It was also supported by the research carried out by [8] concluded that project-based learning led to the multiple benefits and skills in which the students would not only gain academic achievement but also they gained other skills, such as; creative thinking. Moreover, the students reached out the human aspects such as; emotion, thought, behavior, and attitudes are completely affected that completely achieved during project completion and project presentation. The finding also showed that the fluency of EFL students in communication with English could be investigated smoothly as the project was organized and created based on their own experiences and real fact so it absolutely led to the logical thinking [10]. Since project-based learning, specifically in this research the students were asked to create an short video contained the persuasive text composed based on the theory of persuasive text in interpersonal communication, the students had much opportunities to investigate the knowledges learned in advance so that all the materials would be easy to be tested out through formative test, it was similar with the research that concluded that project-based learning affected on academic result, and creativity [11,10]. Based on the finding of the research, the EFL students were able to communicate among others in sharing their own experience during the project accomplishment, the interaction was going as smooth as they expected since all the idea came from the information, knowledge, and experience they got from project completion [9]. This finding also supported by the research carried out by [5] concluded that experiential-based learning was kind of sharing-based learning which gave much opportunities for the students to communicate, interact, discuss, and solve the problems among the students. Hence, in order to meet the 21 century skill, the teaching model collaboration; project-based learning, and experiential-based learning opens up the way of thinking since the EFL students of UMN Al Washliyah university Indonesia were being more collaborative, talkative, creative, and supportive.

IV. CONCLUSION

Based on the data analysis, this research inferred that the implementation of teaching model collaboration; project-based learning and experiential-based learning offered multiple opportunities for EFL students since the students would not only achieve the cognitive skill, but they would also achieve creativity and interpersonal communication skill so that the EFL students easily developed the ideas both to communicate and to collaborate as well as 21 century skills expected.
V. ACKNOWLEDGMENT

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REFERENCES


