

Integrating Teaching Models to Enhance Efl Students' Interpersonal Communication Skill and Creativity

Nazriani Lubis*, Asnarni Lubis, Rido Imam Ashadi

Department of English Education, Faculty of Education and Teacher Training, Universitas Muslim Nusantara Al Washliyah, Indonesia

Corresponding author: Nazriani Lubis, E-mail: nazrianilubis@gmail.com

ARTICLE INFO

Article history

Received: August 08, 2018

Accepted: October 22, 2018

Published: October 31, 2018

Volume: 6 Issue: 4

Conflicts of interest: None

Funding: None

ABSTRACT

This research aims to investigate the effectiveness of integrating project-based learning and experiential learning models toward students' interpersonal communication skill and creativity particularly in using English. This research was conducted by applying quantitative research method with factorial design 2X2 ANOVA. The subjects were English as a Foreign Language (EFL) students in English Department of Universitas Muslim Nusantara (UMN) Al Washliyah Medan, Indonesia. The instrument was a questionnaire with Likert scale and used to measure each formulated indicator. The data were analyzed by using multivariate ANOVA (MANOVA). The finding of the research showed that project-based learning and experiential learning models had a significant effect on students' interpersonal communication skill and creativity. Moreover, interaction was found between communication skill and creativity of students taught by implementing the models. It indicated that ELT classroom activities will be more creative integrating these teaching models. It allows EFL learners to explore knowledge and information independently and to use English as natural as they can either in speaking or writing.

Key words: Creativity, ELT Classroom, Interpersonal Communication, Experiential Learning, Project-based Learning

INTRODUCTION

Interpersonal communication by using English correctly and accurately is one of the major problems faced by English as a Foreign Language (EFL) students in Indonesia. EFL students are expected to have sufficient interpersonal communication skill by using English appropriately since the working life in this globalization age is highly competitive. Yet, based on our observation, most English department students of UMN Al Washliyah face many difficulties and obstacles to communicate with others in English. Some problems include the difficulty in constructing the idea, lacking confidence and creativity as well as lacking interest in practice. This situation is not only caused by the students but also by the implementation of conventional teaching model. Therefore, students do not have many possibilities to gain better English skill. One possible way to change this situation is that EFL lecturers in Indonesia can apply innovative teaching methods by integrating teaching models such as project-based learning and experiential learning model. Such as integrated model is expected not only to improve students' interpersonal communication skill but also to enrich students' creativity for getting involve in any kinds of communication situation, such as, interpersonal communication. According to Pi, Hong Hu (2018), students' creativity can be investigated by peers' ideas and students' openness

in group context. Moreover, Gralewski and Karwowski (2018) argued that there are two students' creative styles; adaptors and innovators. Azlina, Amin and Lukito (2018) stated that there are three components of creativity on mathematical-problem solving; flexibility, novelty and fluency. Then, students' creativity as a result, the creativity of EFL students will have more opportunities to produce creative idea, to speak a specific topic, and to build up the confidence. Maulany (2013) stated that Project-based Learning is an activity of completing the certain problem in certain time arranged comprehensively in order to allow students to explain all the phases, to communicate the process, and to produce a well-arranged project in accordance with the steps planned in advance. In addition, Eskrootchi and Oskrochi (2010) also pointed out that through Project-based learning the students' metacognitive would be productively activated. Tiantong and Siksen (2013) also believes that the students should be involved in any kind of activities individually so the students have opportunity to enrich their own skill that comes along with their own logical idea. Lindawati, and Maftukhin (2013) argued that Project-based learning allows the student to complete the case and involve the students in whole activities. In addition, some studies related to this research have been conducted by some researchers; Kusumawati (2012) found out that project-based learning

significantly affects to the students' mathematic skill and the students are more active in completing the task. Then, the research by Lindawati and Maftukhin (2013) also concluded that project-based learning significantly improves students' creativity in each cycle of physics class. Project-based learning in this sophisticated technology was very appropriate for it did not only offered multiple purposes for students in this 21st century learning era such as; proficient communicator and advanced problem solver but it also comprehensively opened up various activities to exercise students' capacities (Bell, 2010; Hafner & Miller, 2011; Helle, Tynjälä & Olkinuora, 2006). In solving the problem, the learning process was being held based on constructivism theory in which students completely constructed their communication skill based on facts, concepts, and principles occurred in their own surroundings so that the students were easily able to understand the materials (Cahyo, 2013).

In this research, the project offered is creating a short video which contains inspiring story. The students are asked to compose a comprehensive and persuasive text by using right word choice and accurate English. In order to achieve the outcome, the phases followed by the students are elaborated in Table 1.

Moreover, experiential learning model is cognitive-based learning stated by Dewey, Lewin and Piaget in which this

model allows the students to have learning process through practice, perception, cognitive, and behavior (McCarthy, 2010). Azizi, Susanto and Pambudi (2013) argued that experiential learning model directly invites students to share a certain concept they have in accordance with the materials taught. Furthermore, Mughal and Zafar (2011) stated that experiential learning model allows the students who are in the same class/level/atmosphere to have an opportunity to interact with each other which topics is normally easier to understand. Previous research conducted by Warsito (2015) also concluded that implementing experiential model learning increases both students' achievement and students' mastery on certain learning materials. The implementation of experiential learning absolutely led to the students' higher participation and enjoyment during learning process since all the materials were successfully delivered to the students (Lazar, Moysey, Brame, Coulson, Lee, & Wagner, 2018). In other words, implementing model of experiential learning will encourage the students to share their own experience during the project completion. Thus, it is expected that the students can speak and communicate well during the process. The experiential learning has seven stages as stated as Table 2.

Based on the explanation above, the integration of project-based learning and experiential learning models affects the students' interpersonal communication skill and

Table 1. The stages of project-based learning

Stages	Learning activities
Orientation	Lecturer explains and decides the purpose of the project based on the problems identified.
Formulating the problems	Lecturer gives the students the opportunity to decide the theme
Creating the idea of video	Lecturer explains things the students will undertake such as; deciding the idea of video, composing the persuasive text.
Collecting the data	The students collect the data needed, such as; the object of the video, the persuasive text, and the lecturer will provide the logbook for evaluating each step undertaken.
Designing the video	Lecturer let the students work on the project in two weeks. As long as the process, the lecturer keep monitoring students' project for several times
Performing the video	The students are allowed to show their video in front of classroom
Taking the note	The students formulate the short explanation they have experienced during project making, and then it will be presented in front of the class.

Table 2. The Stages of experiential learning

Stages	Learning activities
Orientation	Lecturers introduces the learning activities and motivates the students to develop the confidence while sharing the experience
Cooperative group	The students will be working in group to share their own project completed with other members prior to sharing in front of classroom
Identifying the problem	As long as discussion, the students try to identify, to solve the problems found during completing the project.
Reflection observation	The students are motivated to keep being active in expressing the idea during the discussion
Abstract conceptualization	The students are asked to investigate the mistakes found in others' project such; the steps of designing the video, the terms of persuasive text, word choice, grammar, and accuracy.
Active experimentation	The students are asked to correct the mistakes found by others, and then they clarify it so the project completion is well done technically.
Concluding from the experience	The students have the opportunity to share their own learning experience in front of classroom by using English accurately.

creativity. Majid and Rochman (2014) stated that interpersonal communication is the process which involves two or more people who have an intention to exchange the information and to achieve the purpose of communication. Suhendar, Lasmono and Heryana (2014) argued that during teaching learning process, interpersonal communication may be used to recognize both strengths and weakness, so it becomes a stimulus for creating more conducive teaching learning process. Iriantara and Syaripuddin (2013) also said that the problems occurred during studying would be solved easily during the interaction through interpersonal communication. Gaining interpersonal communication is assumed to create more dynamic interaction in English classroom. Therefore, the students can construct their own knowledge, develop the confidence, and share the idea accurately. Both students' interpersonal communication and creativity are expected being better since creativity leads to the flexibility of students in expressing the idea. Abidin (2016) stated that creativity will run successfully if the students follow up the indicators, namely; elaborative, original, flexible, fluent, and imaginative. Yet, based on the observation, most English students of UMN Al Washliyah still have insufficient knowledge and skills for developing their interpersonal communication skill and creativity to communicate with others by using English accurately.

Objectives

This research has two major aims;

1. to enhance students' interpersonal communication skill and creativity through the integration project-based learning and experiential learning model and
2. to investigate the possible interaction between interpersonal communication skill and creativity taught by project-based learning and experiential learning model.

METHOD

This research was conducted by applying quantitative research method in Universitas Muslim Nusantara (UMN) Al Washliyah Medan. The sample was taken by random purposive sampling in which there were two classes chosen with 40 students each; experimental class I was taught by integrating 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; a new teaching method which integrated project-based learning and experiential learning model, and two dependent variables; interpersonal communication, and creativity (Sugiyono, 2008). The study had a factorial design as seen in Table 3.

Moreover, technique of collecting data for interpersonal communication and creativity was done through a questionnaire with Likert scale. In order to obtain the data of students' creativity, the questionnaire was formulated with 10 items. The questionnaire was administered in both experimental groups. The questionnaire was adopted from the aspects and indicators of creativity based on William scale, while, the questionnaire of interpersonal communication

skill was adopted from the indicators of presentation scoring rubric (Abidin, 2016). Moreover, the results of validation of questionnaire showed that the questionnaire of creativity and interpersonal communication skill was valid. The results of validation showed that the item completely met the objectives of learning and measured the indicators achieved by the students. In detail, the table of validity and reliability was visualized in Appendix 1. Furthermore, IBM SPSS for Windows (Version 22) was used in order to analyze the data. All the data were tested for normality using Kolmogorov Smirnov and once normality was confirmed one-way ANOVA was run to investigate homogeneity, the data were analyzed by using multivariate ANOVA (MANOVA).

It was believed that all the data could be obtained by comprehensive teaching plan so that experimental group I would have been treated by implementing teaching model collaboration; project-based learning and experiential-based learning in which the learning objectives were completely achieved based on the stages of project-based learning and experiential-based learning (Rochman & Majid, 2014), while experimental group II was only treated by project-based learning. The way the researcher designed the teaching plan for both experimental groups was shown in Appendix 2.

RESULTS AND DISCUSSION

Based on data analysis, it was found that all the data were distributed normally. Moreover, Levene's test of equality of error variances indicated that the assumption of equality of variances was met (Table 4).

Based on data analysis, it was found that the implementation of project-based learning and experiential learning model significantly affects the students' interpersonal skills. Students taught by using this integrated method had better interpersonal communication skill as shown in Figure 1:

Figure 1 clearly visualizes that students' interpersonal communication skill was higher when taught by using both project-based learning and experiential learning model. It could be seen from the five indicators given in the questionnaire, namely; open, empathetic, supporting, positive, and fair. The students in experimental class I were more open in

Table 3. Factorial design with true experimental

MP →	Teaching models	
↓	Project-based learning and experiential learning models	Project-based learning model
SE		
Interpersonal skill (Y)	X1Y	X2Y
Creativity (Z)	X2Z	X2Z

Table 4. Test of homogeneity (Levene's test of equality of error variances)

	F	df1	df2	Sig.
Interpersonal communication	3.467	1	58	.200
Creativity	2.978	1	58	.102

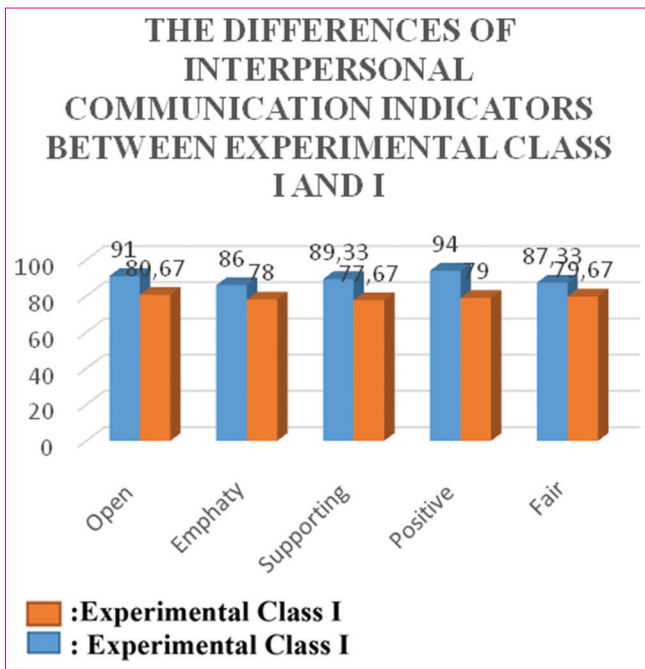


Figure 1. The indicators of interpersonal communication skill

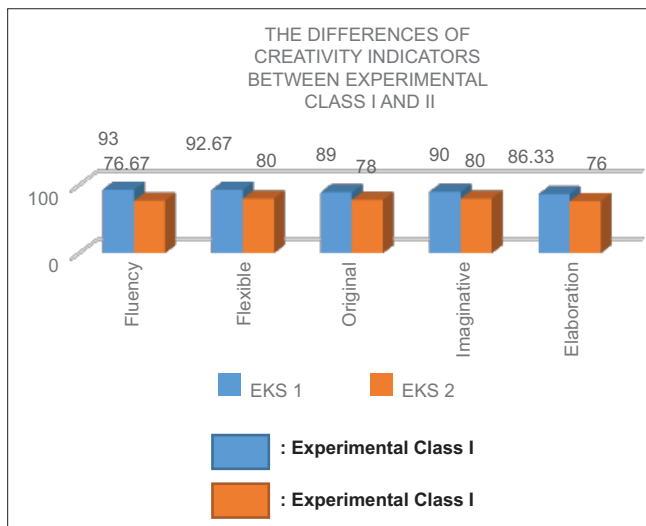


Figure 2. The indicators of students' creativity

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. Then, for the indicator of empathy, the students in class experimental I obtained 86 whereas experimental class II was only 76. The students who were taught by integrating project-based learning and experiential learning model reached 89.3 which was higher than 77.67 for experimental class II. The students in experimental class I were more positive in interpersonal communication skill with 94 which was higher than 79. Finally, the students who were taught by integrating project-based learning and experiential learning model showed fairness during the interaction with score 87.33 while experimental class II was only 79.67. Furthermore, the integrated method significantly affects the students' creativity as seen in Figure 2.

Figure 2 shows that score of creativity obtained from questionnaire formulated for experimental class I and class II was different in terms of all the indicators. The students who were taught by using both project-based learning and experiential learning model were more fluent in improving creativity with the score 93 while class II was only 76.67. The results also showed that class I scored higher (92.67) in flexibility than class II (80). The students in experimental class I were also able to create more original content with 89 while class II scored only 78. Creativity also leads to the level of imagination in order to produce more innovative idea in which class I scored 90, while class II that was taught by implementing project-based learning alone scored only 80. The indicator of elaboration also showed that class I are more capable of elaborating the idea with a score of 86.33 while experimental class II scored only 76. Table 5 presents the inferential statistics results.

The table clearly showed that all variables; interpersonal communication and creativity obtained $p < 0.05$. Based on data analysis, integration project-based learning and experiential learning model significantly affects to the students' interpersonal communication skill and creativity. In addition, after analyzing the data, it was found that there was an interaction between interpersonal communication and creativity through implementing the collaboration between project-based learning and experiential learning model as seen in Table 6.

According to the results presented in Table 6, there is an interaction between students' interpersonal communication skill and creativity when taught by a combination of project based learning and experiential learning methods with Sig a significant value of $p = 0.0342 < 0.05$. Based on the finding, it could be inferred that the innovative teaching learning process designed by the lecturer definitely led to significance of students' interpersonal communication skill and creativity in using English. The students would also get some benefits such as; constructing the original idea creatively, being more confident, supporting between peers, sharing the experience and being more fair and creative in communicating with others. Considering these benefits, the students would have more opportunity to increase their interpersonal communication skill. They would have to share the topic with others who were very close to their own experience. Obviously, the interaction would be more smoothly and naturally because they communicated based on their own experience especially during the process of completing the project.

The finding of the research was consistent with that of previous research conducted by Azizi, Susanto and Pambudi (2013) which concluded that experiential learning significantly affected the students' achievement. Another study conducted by Maulany (2013) also found that students' speaking skill was higher through implementing project based learning. Integrating project-based learning and experiential learning model not only improve students' the cognitive skills but also enriched their soft skills. Eskrootchi and Oskkronchi (2010) also pointed out that the teaching learning process would be more active in project-based learning and the students who followed the classroom activities showed better attention and

Table 5. Tests of between-subjects effects

Source	Dependent variable	Type III sum of squares	df	Mean square	F	p
Corrected model	Interpersonal communication	2160.000 ^a	1	2160.000	531.448	0.000
	Creativity	2720.267 ^b	1	2720.267	88.754	0.000
Intercept	Interpersonal communication	92512.267	1	92512.267	22761.785	0.000
	Creativity	88320.067	1	88320.067	2881.622	0.000
Experimental class	Interpersonal communication	2160.000	1	2160.000	531.448	0.000
	Creativity	2720.267	1	2720.267	88.754	0.000
Error	Interpersonal communication	235.733	58	4.064		
	Creativity	1777.667	58	30.649		
Total	Interpersonal communication	94908.000	60			
	Creativity	92818.000	60			
Corrected total	Interpersonal communication	2395.733	59			
	Creativity	4497.933	59			

a. R Squared = .902 (Adjusted R Squared = .900), b. R Squared = .605 (Adjusted R Squared = .598), c. R Squared = .811 (Adjusted R Squared = .808)

Table 6. Tests of between-subjects effects

Source	Dependent variable	Type III sum of squares	df	Mean square	F	p
Corrected model	Experimental class	15.000 ^a	47	.319	.	.
	aspek kognitif	12862.314 ^b	47	273.666	11.231	0.000
Intercept	Experimental class	128.059	1	128.059	.	.
	Cognitive skill	266943.154	1	266943.154	10955.500	0.000
Interpersonal communication	Experimental class	2.083	13	.160	.	.
	Cognitive skill	1568.273	13	120.636	4.951	0.005
Creativity	Experimental class	.000	23	.000	.	.
	Cognitive skill	1048.883	23	45.604	1.872	0.130
Interpersonal communication * creativity	Experimental class	.000	11	.000	.	.
	Cognitive skill	340.595	11	30.963	1.271	0.342
Error	Experimental class	.000	12	0.000		
	Cognitive skill	292.394	12	24.366		
Total	Experimental class	150.000	60			
	Cognitive skill	386563.167	60			
Corrected total	Experimental class	15.000	59			
	Cognitive skill	13154.708	59			

a. R Squared = 1.000 (Adjusted R Squared = 1.000), b. R Squared = .978 (Adjusted R Squared = .891)

interest. This finding also echoes the findings of research conducted by Bell (2010); Hafner and Miller (2011) and Helle, Tynjälä, and Olkinuora (2006) who argued that the implementation of project-based learning certainly met the demands of 21st century as the students' capacities would be exercised with various activities. Moreover, the implementation of project-based learning had been more meaningful to the students since it was collaborated with experiential-based learning in which this research found out that the students significantly

achieved both project completion and project presentation. As for project presentation, the students were actively engaged and more fluent in promoting their own project. It was similar with the research carried out by Lazar, Moysey, Brame, Coulson, Lee, and Wagner (2018) that focused on breaking out the traditional lecture by applying experiential learning in geology course. They reported that the students' participation and curiosity were higher. This finding also showed that students' creativity was higher because of the interaction among the

groups. Pi, Hong and Hu (2018) proved that students' creativity can be investigated by peers' ideas and students' openness in group context. Moreover, the willingness of completing the project showed that students' creativity styles included adaptors and innovators as stated by Gralewski an Karwowski (2018). Then, the video created by the students also showed that flexibility and fluency as two highest indicators achieved by the students in project accomplishment. It was similar with the research by Azlina, Amin, and Lukito (2018) who stated that flexibility, novelty and fluency were the elements of students' creativity. It can also be interpreted that students who have better interpersonal communication skill would think more creatively. In this research, the students successfully produced a creative short video containing the persuasive text in English. They were also able to share what they had done with their classmates by using English. In short, it was interpreted that the more creative students are, the more convenient they are in communicating with others.

CONCLUSION

Based on the analysis of the current data, it was concluded that students' interpersonal communication skill and creativity were higher when taught by a method which integrated two method than students who were only taught by project-based learning. It was found that the students had more opportunities to complete a creative project with guidance from lecturers. There was an interaction between students' interpersonal communication skill and creativity. In conclusion, the integration of teaching models offers multiple significant benefits especially in studying English as students' will be more productive and communicative.

ACKNOWLEDGMENT

The authors would like to express sincere gratitude to The Ministry of Research, Technology, & Higher Education of the Republic of Indonesia for the financial support.

REFERENCES

- Abidin, Y. (2016). Revitalisasi Penilaian Pembelajaran dalam Konteks Pendidikan Multiliterasi Abad Ke-21. *Bandung: PT Refika Aditama*.
- Azlina, N., Amin, S. M., & Lukito, A. (2018). Creativity of Field-dependent and Field-independent Students in Posing Mathematical Problems. In *Journal of Physics: Conference Series*, 947(1). IOP Publishing.
- Azizi, A., Susanto, S., & Pambudi, D. S. (2013). Penerapan Model Experiential Learning Untuk Meningkatkan Hasil Belajar Pokok Bahasan Unsur Lingkaran Siswa Kelas VIII SMP Salafiyah Miftahul Huda Jenggawah Tahun Ajaran 2012/2013. *Kadikma*, 4(3).
- Bell, S. (2010). Project-based learning for the 21st century: Skills for the future. *The Clearing House*, 83(2), 39-43.
- Cahyo, A. N. (2013). Panduan aplikasi teori-teori belajar mengajar teraktual dan terpopuler.
- Eskrootchi, R., & Oskrochi, G. R. (2010). A study of the efficacy of project-based learning integrated with computer-based simulation-STELLA. *Educational Technology & Society*, 13(1), 236-245.
- Gralewski, J., & Karwowski, M. (2018). Are teachers' implicit theories of creativity related to the recognition of their students' creativity?. *The Journal of Creative Behavior*, 52(2), 156-167.
- Hafner, C. A., & Miller, L. (2011). Fostering learner autonomy in English for science: A collaborative digital video project in a technological learning environment.
- Helle, L., Tynjälä, P., & Olkinuora, E. (2006). Project-based learning in post-secondary education—theory, practice and rubber sling shots. *Higher Education*, 51(2), 287-314.
- Iriantara, Y., & Syaripuddin, U. (2013). *Komunikasi Pendidikan*. Simbiosis Rekatama Media
- Kusumawati, N. (2012). Pengembangan Perangkat Pembelajaran Matematika Model Project Based Learning (PBL) Untuk Meningkatkan Kemampuan Komunikasi Matematik. *Pena Jurnal Ilmu Pengetahuan Dan Teknologi*, 23(1).
- Lazar, K. B., Moysey, S. M., Brame, S., Coulson, A. B., Lee, C. M., & Wagner, J. R. (2018). Breaking out of the traditional lecture hall: Geocaching as a tool for experiential learning in large geology service courses. *Journal of Geoscience Education*, 1-16.
- Lindawati, S. D. F., & Maftukhin, A. (2013). Penerapan Model Pembelajaran Project Based Learning untuk Meningkatkan Kreativitas Siswa MAN I Kebumen. *Jurnal Radiasi*, 3(1), 42-45. Majid, A dan C.Rochman. 2014. *Pendekatan Ilmiah Dalam Implementasi Kurikulum 2013*. Editor Engkus Kuswandi. Cetakan Pertama. PT Remaja Rosdakarya. Jakarta
- Maulany, D. B. (2013). The Use of Project-based Learning in Improving the Students Speaking Skill (a Classroom Action Research at One of Primary Schools in Bandung). *Journal of English and Education*, 1(1), 30-42.
- McCarthy, M. (2010). Experiential learning theory: From theory to practice. *Journal of Business & Economics Research*, 8(5), 131-139.
- Mughal, F., & Zafar, A. (2011). Experiential learning from a constructivist perspective: Reconceptualizing the Kolbian cycle. *International Journal of Learning and Development*, 1(2), 27-37.
- Pi, Z., Hong, J., & Hu, W. (2018). Interaction of the originality of peers' ideas and students' openness to experience in predicting creativity in online collaborative groups. *British Journal of Educational Technology*.
- Rochman, C., & Majid, A. (2014). Pendekatan Ilmiah dalam Implementasi Kurikulum 2013. *Bandung: Rosda karya*.
- Suhendar, N., Lasmono, D., & Heryana, N. Peningkatan Keterampilan Komunikasi Interpersonal Guru Bahasa Indonesia Kepada Siswa Menggunakan Metode Problem Solving di Man 2. *Jurnal Pendidikan dan Pembelajaran*, 3(9).
- Sugiyono. (2008). *Metode penelitian pendidikan: (pendekatan kuantitatif, kualitatif dan R & D)*. Alfabeta.

Tiantong, M., & Siksen, S. (2013). The online project-based learning model based on student's multiple intelligence. *International Journal of Humanities and Social Science*, 3(7), 204-211.

Warsito, V. (2015). Penerapan Model Experiential Learning untuk Meningkatkan Hasil Belajar IPA Fisika Siswa Kelas VII SMP Negeri 5 Palu. *Jurnal Pendidikan Fisika Tadulako Online (JPFT)*, 3(1).

APPENDIX 1

Validity and reliability results of creativity and interpersonal communication skill questionnaires

The validity of interpersonal communication skill questionnaire

Cronbach's Alpha	Reliability Statistics of Communication Interpersonal										
	N of Items										
0.579	Item 1	Item 2	Item 3	Item 4	Item 5	Item 6	Item 7	Item 8	Item 9	Item 10	Skor total
Item 1											
Pearson correlation	1	0.402*	-0.037	0.000	0.000	-0.041	-0.246	0.207	0.054	-0.329	0.355*
Sig. (2-tailed)		0.028	0.848	1.000	1.000	0.830	0.190	0.273	0.776	0.076	0.024
N	30	30	30	30	30	30	30	30	30	30	30
Item 2											
Pearson correlation	-0.402*	1	0.387*	-0.171	0.259	0.158	0.141	-0.063	-0.192	-0.104	0.387*
Sig. (2-tailed)	0.028		0.035	0.366	0.167	0.404	0.459	0.743	0.310	0.583	0.034
N	30	30	30	30	30	30	30	30	30	30	30
Item 3											
Pearson correlation	-0.037	0.387*	1	0.114	0.187	0.089	0.389*	0.146	-0.283	-0.166	0.600**
Sig. (2-tailed)	0.848	0.035		0.549	0.323	.638	0.034	0.442	0.130	0.382	0.000
N	30	30	30	30	30	30	30	30	30	30	30
Item 4											
Pearson correlation	0.000	-0.171	0.114	1	0.045	.234	0.102	-0.172	0.226	-0.076	0.390*
Sig. (2-tailed)	1.000	0.366	0.549		0.815	0.213	0.590	0.363	0.230	0.690	0.020
N	30	30	30	30	30	30	30	30	30	30	30
Item 5											
Pearson correlation	0.000	0.259	0.187	0.045	1	-0.059	0.103	0.016	-0.200	0.115	0.467**
Sig. (2-tailed)	10.000	0.167	0.323	0.815		0.756	0.587	0.932	0.290	0.545	0.009
N	30	30	30	30	30	30	30	30	30	30	30
Item 6											
Pearson correlation	-0.041	.158	0.089	0.234	-0.059	1	-0.244	0.008	0.024	-0.186	0.399*
Sig. (2-tailed)	0.830	0.404	0.638	0.213	0.756		0.193	0.967	0.900	0.326	0.018
N	30	30	30	30	30	30	30	30	30	30	30
Item 7											
Pearson Correlation	-0.246	0.141	0.389*	0.102	0.103	-0.244	1	-0.009	0.053	0.306	0.463**
Sig. (2-tailed)	0.190	0.459	0.034	0.590	0.587	0.193		0.961	0.780	0.100	0.010
N	30	30	30	30	30	30	30	30	30	30	30
Item 8											
Pearson correlation	0.207	-0.063	0.146	-0.172	0.016	0.008	-0.009	1	0.031	0.076	0.395*
Sig. (2-tailed)	0.273	0.743	0.442	0.363	0.932	0.967	0.961		0.871	0.688	0.031
N	30	30	30	30	30	30	30	30	30	30	30
Item 9											
Pearson correlation	0.054	-0.192	-0.283	0.226	-0.200	0.024	0.053	0.031	1	0.082	0.375*
Sig. (2-tailed)	0.776	0.310	0.130	0.230	0.290	0.900	0.780	0.871		0.666	0.017
N	30	30	30	30	30	30	30	30	30	30	30
Item 10											

(Contd...)

The validity of interpersonal communication skill questionnaire

Cronbach's Alpha	Reliability Statistics of Communication Interpersonal											
	N of Items											
0.579												
	Item 1	Item 2	Item 3	Item 4	Item 5	Item 6	Item 7	Item 8	Item 9	Item 10	Skor total	
Pearson correlation	-0.329	-0.104	-0.166	-0.076	0.115	-0.186	0.306	0.076	0.082	1	0.378*	
Sig. (2-tailed)	0.076	0.583	0.382	0.690	0.545	0.326	0.100	0.688	0.666		0.025	
N	30	30	30	30	30	30	30	30	30	30	30	
Skor Total												
Pearson correlation	0.355*	0.387*	0.600**	0.390*	0.467**	0.399*	0.463**	0.395*	0.375*	0.378*	1	
Sig. (2-tailed)	0.024	0.034	0.000	0.020	0.009	0.018	0.010	0.031	0.017	0.025		
N	30	30	30	30	30	30	30	30	30	30	30	

*. Correlation is significant at the 0.05 level (2-tailed), **. Correlation is significant at the 0.01 level (2-tailed).

AQ1

The validity of creativity questionnaire

Cronbach's Alpha	Reliability Statistics of Creativity Questionnaire											
	N of Items											
0.528												
	Item 1	Item 2	Item 3	Item 4	Item 5	Item 6	Item 7	Item 8	Item 9	Item 10	Skor total	
Item 1												
Pearson correlation	1	-0.218	-0.124	-0.307	-0.117	0.447*	-0.310	0.222	0.022	-0.548**	0.362*	
Sig. (2-tailed)		0.247	0.515	0.099	0.538	0.013	0.096	0.238	0.907	0.002	0.028	
N	30	30	30	30	30	30	30	30	30	30	30	
Item 2												
Pearson correlation	-0.218	1	-0.142	-0.045	0.204	0.000	0.073	-0.302	0.136	0.073	0.372*	
Sig. (2-tailed)	0.247		0.455	0.815	0.279	1.000	0.702	0.105	0.473	0.702	0.040	
N	30	30	30	30	30	30	30	30	30	30	30	
Item 3												
Pearson correlation	-0.124	-0.142	1	0.259	0.159	-0.178	0.237	-0.185	-0.154	0.031	0.424*	
Sig. (2-tailed)	0.515	0.455		0.166	0.401	0.346	0.208	0.328	0.416	0.871	0.020	
N	30	30	30	30	30	30	30	30	30	30	30	
Item 4												
Pearson correlation	-0.307	-0.045	0.259	1	0.233	-0.192	0.400*	-0.182	0.073	-0.185	0.479**	
Sig. (2-tailed)	0.099	0.815	0.166		0.216	0.310	0.029	0.336	0.702	0.327	0.007	
N	30	30	30	30	30	30	30	30	30	30	30	
Item 5												
Pearson correlation	-0.117	0.204	0.159	0.233	1	0.159	0.356	-0.185	0.167	-0.089	0.680**	
Sig. (2-tailed)	0.538	0.279	0.401	0.216		0.400	0.053	0.329	0.379	0.640	0.000	
N	30	30	30	30	30	30	30	30	30	30	30	
Item 6												
Pearson correlation	0.447*	0.000	-0.178	-0.192	0.159	1	-0.227	0.216	0.159	-0.227	0.369*	
Sig. (2-tailed)	0.013	1.000	0.346	0.310	0.400		0.227	0.252	0.400	0.227	0.047	
N	30	30	30	30	30	30	30	30	30	30	30	
Item 7												
Pearson correlation	-0.310	0.073	0.237	0.400*	.356	-0.227	1	-0.230	0.208	0.048	0.526**	
Sig. (2-tailed)	0.096	0.702	0.208	0.029	0.053	0.227		0.221	0.270	0.803	0.003	
N	30	30	30	30	30	30	30	30	30	30	30	
Item 8												
Pearson correlation	0.222	-0.302	-0.185	-0.182	-0.185	0.216	-0.230	1	-0.185	-0.066	0.374*	
Sig. (2-tailed)	0.238	0.105	0.328	0.336	0.329	0.252	0.221		0.329	0.730	0.019	

(Contd...)

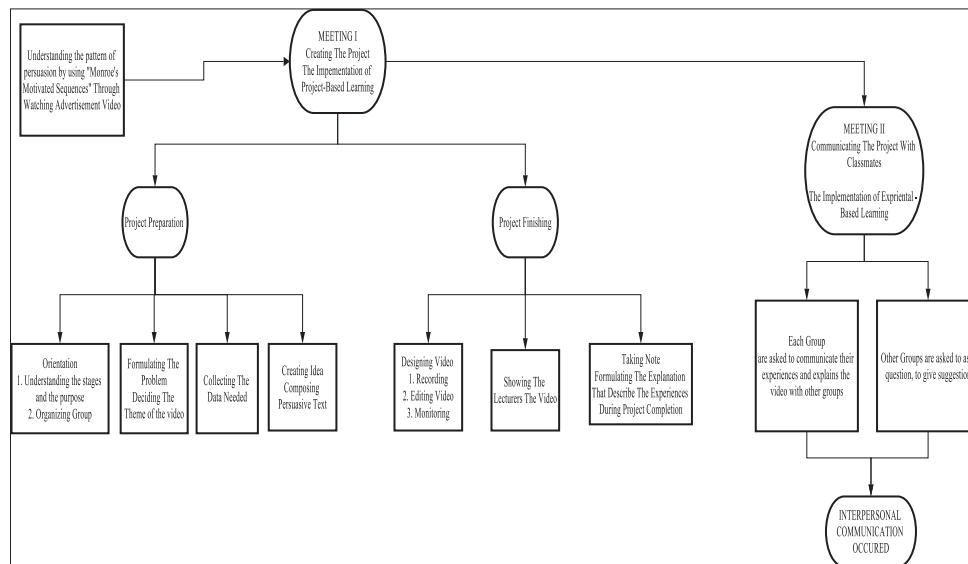
The validity of creativity questionnaire (Continued)

Reliability Statistics of Creativity Questionnaire											
Cronbach's Alpha	N of Items										
0.528	Item 1	Item 2	Item 3	Item 4	Item 5	Item 6	Item 7	Item 8	Item 9	Item 10	Skor total
N	30	30	30	30	30	30	30	30	30	30	30
Item 9											
Pearson correlation	0.022	0.136	-0.154	0.073	0.167	0.159	0.208	-0.185	1	-0.238	0.365*
Sig. (2-tailed)	0.907	0.473	0.416	0.702	0.379	0.400	0.270	0.329		0.206	0.045
N	30	30	30	30	30	30	30	30	30	30	30
Item 10											
Pearson correlation	-0.548**	0.073	0.031	-0.185	-0.089	-0.227	0.048	-0.066	-0.238	1	0.377*
Sig. (2-tailed)	0.002	0.702	0.871	0.327	0.640	0.227	0.803	0.730	0.206		0.037
N	30	30	30	30	30	30	30	30	30	30	30
Skor total											
Pearson correlation	0.362*	0.372*	0.424*	0.479**	0.680**	0.369*	0.526**	0.374*	0.365*	0.377*	1
Sig. (2-tailed)	0.028	0.040	0.020	0.007	0.000	0.047	0.003	0.019	0.045	0.037	
N	30	30	30	30	30	30	30	30	30	30	30

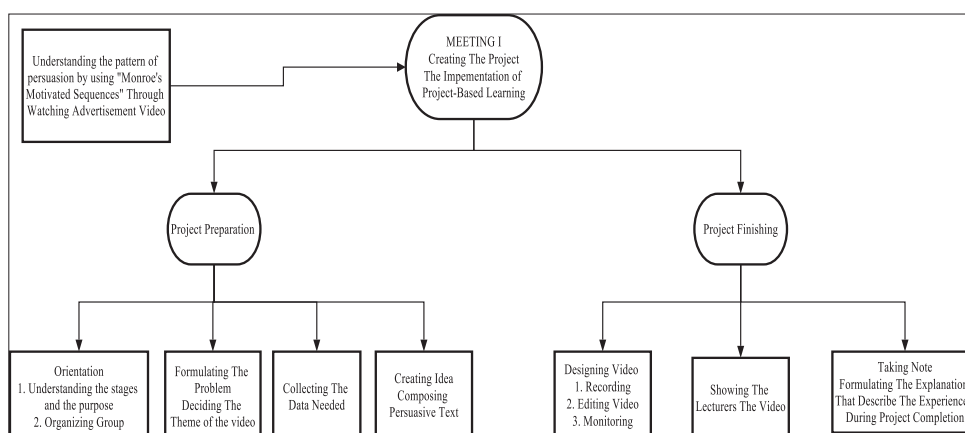
*. Correlation is significant at the 0.05 level (2-tailed), **. Correlation is significant at the 0.01 level (2-tailed).

APPENDIX 2

The Example of Teaching Plan of Experimental Group I



The Example of Teaching Plan of Experimental Group II



Author Queries:
AQ1: Kindly check table format