Technology-Assisted Project-Based Language Learning on Wetland Concern

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In the midst of independent learning, the implementation of project-based learning method is inseparable. By employing a quasi-experimental study involving English Department students in an experimental class and a control class, this study investigated the effectiveness of Technology-Assisted Project-Based Language Learning with wetland-based concern. The data was collected from the presentation project score and a questionnaire given to the students. The collected data was then analyzed by using Mann-Whitney test and descriptive statistics. Focusing on the two-fold foci, the results showed significant result where the students in the experimental class performed better than those in the control class. Collaboration, motivation, authenticity and students' mastery to the technology that is

Storyjumper impacted to the significant result in this study as confirmed in the questionnaire results. Students perceived positively to the implementation of technology-assisted project based language learning in wetland concern. The result of this research study is expected to be used in teaching and learning in the field of learning English as a foreign language and to encourage students to apply technological innovations in the field of learning English in a wetland environment.

INTRODUCTION

Technology-assisted Project-Based Language Learning (PBLL) is used to create learning so that learning can be more engaging and natural, and students are interested in and motivated to acquire languages using technology. This method of leaning can be in line with Lantolf and Thorne (2006) that stated learning that is identical in educational sector is a collaborative and social experience in which learners create authentic, meaning-based activities using the tools around them. This method also supports the independent learning policy established by the Ministry of Education of Republic Indonesia. Furthermore, Chabibie (2020) stated that there are three important things to consider in the policy of independent learning, namely: building a technology-based education ecosystem, collaboration with other parties, and the importance of data.

PBLL is not a new approach since it has been used for a long time ago in various disciplines, including language learning (Levy, 1997; Moss & Van Duzer, 1998) in (Thomas 2017). A project is defined in terms of a series of interconnected extended tasks which take place over a more significant period of time from one week to one semester or longer than it. In PBLL, student will accomplish several tasks namely brainstorming, planning, exchanging opinions, discussing, editing, evaluating and finalizing. In accomplishing the tasks, students participating in

projects may use language skills such as speaking, listening, reading and writing and engage in collaborative problem solving before reporting their results to their instructor and/or peer groups (Stoller 2002). According to (Le, 2021; Trianto, 2011; Santyasa, 2006), the project-based learning model has enormous potential to create a more interesting and useful learning experience for students. In simple terms project-based learning is defined as a teaching that tries to link technology with everyday life problems that are familiar to students or with school/ university projects.

One of the technology-assisted learning alternatives that can be applied in the classroom is the learning by using Storyjumper website. Storyjumper provides teachers and students with facilities to create, design, and write stories. By using Storyjumper in learning English, teachers can create *narrative text* using a variety of interesting illustrations and even add audio to read the text. These websites are very practical, attractive, and easy to modify according to the needs of students. Previous studies have been conducted by several researchers such as Güvey Aktay (2020) and Rameswara et al. (2019). By involving 92 pre-service elementary school teachers, Aktay (2020) investigated the use of digital folktales with Storyjumper as an activity of written expression. The results showed that the Storyjumper was beneficial and inspirational since it allowed the pre-service teachers to use their creativity due to the feature of adding suitable audio and interesting visuals. Moreover, by using Storyjumper the written expression skills of the pre-service teachers were improved. The other researcher, Rameswara et al. (2019), aimed to investigate the use of Storyjumper as the teaching media for kindergarten students. In this study, all the teachers agreed that Storyjumper was accessible and easy to be utilized as teaching media.

In addition, Rameswara et al. (2019) found the Storyjumper also provided benefits for the students besides the pre-service teachers. The students' learning motivation and participation were increased when the Storyjumper was used as the teaching media. Their vocabulary mastery was also improved. This finding is similar to Mohammad & Yamat (2020). Involving 36 Form 5 students from a secondary

school, the study was aimed to examine the students' perspective and motivation on the use of Storyjumper in teaching writing. The results showed that they had positive perceptions toward Storyjumper in which they can create their own outlined narrative text creatively. Their motivation in writing was also fostered, for Storyjumper helped them to solve the writing issue in brainstorming ideas by reviewing other clients' accounts and using various potential layouts.

Preliminary studies conducted through interviews with Innovation in Education course lecturers yielded information that there was no integration of technology and wetland environment concern in the teaching instruction and the other class was taught by discussion and delivering presentation on innovation in education issues. Given the importance of this gap, there is an urgency of this research study is to unravel empirically the effectiveness of the implementation of Technology-Assisted Project-Based Language Learning with wetland-based concern to train English skills and mastery of technological innovations in the implementation of independent education for wetland-based learning. This is in line with the implementation of independent learning education where learning is carried out with project-based learning and case-based learning to trigger students' independence, skills, and thinking skills not only when they are in class but especially in real life application. Therefore, the research problems to be raised are (1) Do students who were taught by implementing Technology-Assisted Project-Based Language Learning with wetland-based concern in the experimental class have better English skills than students who were not taught by implementing Technology-Assisted Project-Based Language Learning with wetland-based concern? (2) How do students perceive the application of Technology-Assisted Project-Based Language Learning with wetland-based concern to practice English skills and mastery of technological innovation in the implementation of independent education for wetland-based learning?

The result of this research study is expected to be used in teaching and learning in the field of learning English as a foreign language by proving the effectiveness of Technology-Assisted Project-Based Language Learning on wetland

concern and to encourage students to apply technological innovations in the field of learning English in a wetland environment.

METHOD

Research Design

This study was conducted to investigate the effect of project-based learning to train students' English skills and innovation competencies regarding Wetland Environments as learning innovations in the independent learning program. The research design that aims to measure the effect accurately is an experimental research design. However, because subjects cannot be assigned randomly, this study used a quasi-experimental (Alsaleh, 2013) because random assignments cannot be carried out in the scope of learning in the classroom.

The independent variable in this study is Project-Based Language Learning which is an input variable that is measured and manipulated by researchers to study or assess its possible influence on other variables and to determine its relationship with the observed phenomena (Cohen et al., 2007; Fraenkel & Wallen, 2006; Tuckman, 1999). Another variable, namely the dependent variable is the output or response variable caused or influenced entirely or partially by the independent variable where the dependent variable in this study is the English language ability and innovation competence of students (Cohen et al., 2007; Fraenkel & Wallen, 2006; Tuckman, 1999).

Apart from selecting the appropriate design to test the research hypotheses of this study, there is a need to provide adequate control in the design. It is a major problem in experiments to establish appropriate controls for threats to experimental validity that come from unanticipated confounding variables in the experimental process (A. Latief, 2013). A study is likely to have a low level of confidence in the relationship between variables if the design cannot control for the confounding variables (Ary et al., 2010). Therefore, there is a need to select an appropriate experimental design that controls internal validity threats (Gall et al., 2007). Some

confounding variables that may threaten the internal validity of experimental research findings are history, maturation, testing, instrumentation, selection bias, experimental mortality, selection-maturation interactions, subject effects, and diffusion (Ary et al., 2010).

Research Setting and Subjects

This research study spanned over a semester in Lambung Mangkurat University. The research subjects of this study were people who fit the conceptual definition for this study. They were the fourth semester students. The subjects of this research were students who are taking the Innovation in Education Course for the 2021/2022 Academic Year in the even semester. They were grouped into several small groups of about 4-5 students. These students were experimentally fit, accessible, and available. Those according to the criteria were experimenting with project-based learning to generalize the results of this study. The 4th semester students have passed a series of language skills courses such as Listening, Speaking, Reading, and Writing and were assumed to have sufficient basic knowledge. Therefore, they met the requirements of this study. The students were randomly selected to be the control and the experimental group with cluster random sampling used lottery coins nine times. The students in the experimental group were 24 students while 23 students were on the control group.

Project Overview

The treatment in the experimental class using Technology-Assisted Project-Based Language Learning was carried out with the procedure that can be seen in Table 1.

Table 1. The treatment in the experimental class

No.	Steps	Description	Meeting
1.	Brainstorming	Students were given lectures in the classroom.	1 - 5

		Lecturer explain relevant materials and learning sources.	
2.	Planning	Lecturer explain the project that students must finish. Students were grouped. Students in groups selected target class where they would bring the project and interviewed school teachers about current problem that they were facing.	6 - 7
3.	Exchanging opinions	Students decided the technology to use (Story Jumper) and started to work. Students exchanged ideas on the wetland concerns that they would embed in the project.	9 - 10
4.	Discussing	Students in big class discussed the technology, design, wetland topics. Students considered their lecturer's and peers' suggestions to their project. Lecturer facilitated students and offered solutions.	11 - 12
5.	Editing	Students edited their current work of the project. Students implemented the Story Jumper that they have made.	13
6.	Evaluating	Students delivered the presentation to report how their project ran.	14
7.	Finalizing	Students revised their project and submitted it to the lecturer.	15

Research Instruments

There are three instruments used in this study, namely a test, a scoring rubric for presentation and a questionnaires on student perceptions of the implementation of Technology-Assisted Project-Based Language Learning.

Table 2. Research Instruments

No.	Instrument	Variables	Function
1	English skill: Speaking test in the form of Presentation	Students' speaking ability after implementing the treatment	To test the hypotheses
2	Speaking scoring rubric		To measure the students' speaking ability
3	Questionnaire on students' perception on innovation technology	Students' perception on innovation technology after implementing the treatment	To establish students' perception on innovation technology

The main instrument to measure students' English skills was represented through productive skills. One of the productive skills is the ability to speak. The first stage was the development of the blueprint of the speaking test in the form of presentation, the second stage was making the test, the third was is measuring the validity and reliability of the test, the fourth stage was validation of the test to the expert, the fifth stage was the revision of the speaking test, the sixth stage was tried out the test, the eighth stage was the revision of the speaking test. The ninth was the analysis of the test results, and the last stage was the finalization of the speaking test.

Careful steps and considerations were taken into account in developing the grading rubric. This assessment rubric would be used to measure students' speaking

skills. First, among the three types of rating scales commonly used in the assessment of speaking skills, namely holistic, primary trait, and analytic assessments (O'Malley & Pierce, 1996), the analytic one was chosen. It is also because the evaluation of learning in the classroom is best served through an analytical evaluation (Brown, 2004). In addition, the analytic scoring rubric provides high reliability and higher construct validity because it is suitable for L2 writers as there are different aspects of skills that develop at different levels and provide useful diagnostic information (Latief, 2016; Weigle, 2002).

The competency instrument that would be used in this study was redeveloped by Keinänen et al. (2018). This instrument is an assessment tool that can present methods in scientific research and be applied to direct work. This instrument could be used to measure the development of students' perceptions of innovation competence across degree programs and to measure the effectiveness of universities and their pedagogical practices for generating innovative skills. The results of the five-dimensional model reinforce the approach that innovation competence is not just an individual feature but a combination of individual and social factors (Keinänen et al., 2018). Jussila et al. (2008) in Keinänen et al. (2018) also caution that innovation is rarely the result of a single individual. According to them, the competence of innovators consists of two parts, both personal competence and social competence (see also for example, Bikfalvi, et al., 2010) in Keinänen, et al. (2018). As stated by Melkas, et al. (2012) and Wolf, et al. (2021), nowadays innovation is most often seen as the result of cooperation in normal social activities.

This instrument can also be used as a development tool to raise awareness of the important aspects of innovative behavior. It helps students to understand the importance of applying innovation competencies in the innovation process and in work life. Understanding their own level of innovation competence prepares students better for more complex life and work environments. Assessment tools require students to monitor and regulate their own learning as they reflect on their achievements and demonstrate that they have met or exceeded the standards of their

programs and institutions (Postareff et al., 2017) in Keinänen, Ursin, & Nissinen (Keinänen et al., 2018).

To ensure the instruments used were good, validation of tests to experts was carried out to obtain evidence that the prompts and scoring rubric of speaking tests in this study were good to use. The speaking test for the posttest was validated by experts. Experts as validators in this study are lecturers of the English Education Study Program who have expertise in teaching speaking who have good academic qualifications with experience in teaching speaking skill for more than 10 years. The things covered by the expert in the form of validation are the suitability of the test to the student's level, test length, test objectives, test instructions, and scoring rubrics. In addition, it was piloted by asking three different raters to rate two different students' performance. It turns out that the raters understand the scoring rubric and the differences are only slight. This means that the scoring rubric was understandable and measurable.

Data Collection

All data was collected from students in the control and experimental groups who were enrolled in the Innovation in Education course FKIP ULM. Each instrument was used. The first data, in the posttest, they were asked to speak in the form of a presentation. Then, two raters will judge based on the analytical scoring rubric created for this study. The consideration of having two raters and an analytic scoring rubric is to maximize the accuracy of spoken and written assessments and minimize differences due to different backgrounds. Student names on reports are hidden and reports are coded to avoid subjectivity. Students in the control group were coded as student A 1, student A 2, and so on. Meanwhile, students in the experimental group were coded as student B 1, student B 2, and so on. This posttest data was calculated and used to determine the effect of Project-Based Language Learning. Then, the questionnaire was given to find students' perception after the post-test was carried out.

Data Analysis

The first step was to conduct preliminary statistics by analyzing the data obtained to meet the statistical assumptions. Statistical assumptions that are maintained were homogeneity, normality, and linearity tests. Homogeneity is the extent to which the variance of the groups is homogeneous to obtain the same information. Tests were carried out using Levene's test with a significance level of 0.05 criteria. Then, normality, which is the extent to which the distribution of scores is close to the standard normal curve, was tested using the Kolmogorov-Smirnov test with the acceptance criteria for rejecting this assumption at 0.05 level of significance.Meanwhile, the linearity was done using linearity test for SPSS.

The second step in data analysis was to test the hypothesis. There were also a few steps to take here. The first was to state a statistical hypothesis. This statistical hypothesis was created to answer the research question. It is fulfilled by formulating the null hypothesis. Then, the researchers set the criteria for a decision. The criteria for acceptance or rejection of the null hypothesis are at a significance level of 0.05 (p = 0.05) as accepted in the field of education. The third was calculating the statistical test by analyzing the data using an independent sample t-test using the SPSS 23.0 program. This test was chosen because it was used for two large groups, to compare the mean of these groups, and to investigate one data being tested, namely the posttest (Salkind et al., 2000). In addition, this test aims to determine whether there is a difference in the calculation of the average score between the two groups that are independent of each other. Finally, the final step in data analysis is making a decision to accept or reject the null hypothesis. The last analysis is analyzing the results of research on student perceptions of the application of Technology-Assisted Project-Based Language Learning to train students' English skills and mastery of technological innovations in the implementation of independent education for wetland-based learning.

FINDINGS AND DISCUSSIONS

The results of descriptive statistics showed that the minimum score of the student in the experimental class is 68 and the maximum score is 86,5. Meanwhile,

students in the control class got 70 on the minimum score and 80 for the maximum score. Details of the descriptive statistics are given in Table 1.

Table 3. Descriptive Statistics Results

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Post.Exp	24	68.00	86.50	79.2500	5.03466
Post.Cont	23	70.00	80.00	76.6522	3.26982
Valid N (listwise)	23				

The data of the post-test in this study was analyzed statistically. Before testing the hypothesis, the fulfillment of the statistical assumption was conducted. The data was homogeneous (sig .019) and linear (.114) , but it was not normally distributed (0.200 in the experimental class and .000 in the control class) as seen in Tables 2, 3, and 4.

Table 4. Homogeneity Test Results

Test of Homogeneity of Variances			
Exp.Cont			
Levene Statistic	df1	df2	Sig.
5.876	1	45	.019

Table 5. Linearity Test Results

ANOVA Table						
		Sum of Squares	df	Mean Square	F	Sig.
Exp * Cont	(Combined)	206.234	6	34.372	1.580	.217

Between Groups	Linearity	60.888	1	60.888	2.799	.114
	Deviation from Linearity	145.346	5	29.069	1.336	.299
Within Groups		348.006	16	21.750		
Total		554.239	22			

Table 6. Normality Test Results

One-Sample Kolmogorov-Smirnov Test

		Post.Exp	Post.Cont
N		24	23
Normal Parametersa,b	Mean	79.2500	76.6522
	Std. Deviation	5.03466	3.26982
Most Extreme Differences	Absolute	.143	.269
	Positive	.075	.153
	Negative	-.143	-.269
Test Statistic		.143	.269
Asymp. Sig. (2-tailed)		.200c,d	.000c
a. Test distribution is Normal.			
b. Calculated from data.			
c. Lilliefors Significance Correction.			
d. This is a lower bound of the true significance.			

Since the data was not normally distributed, non-parametric test would be used. The Mann-Whitney test was employed to answer the research question to find whether the students who were taught by implementing Technology-Assisted Project-Based Language Learning with wetland-based concern in the experimental class have better English skills than students who were not taught by implementing Technology-Assisted Project-Based Language Learning with wetland-based concern. The obtained result was .029 showing the significant result. The complete result of the post-test is given in Table 6.

Table 7. The Results of the Experimental and Control Group Post-Test

Test Statisticsa

	Post.Exp
Mann-Whitney U	174.000
Wilcoxon W	450.000
Z	-2.183
Asymp. Sig. (2-tailed)	.029

a. Grouping Variable: Post.Cont

The significant result obtained in this study is interesting to unravel. Project based learning was fully supported to implement in the classroom including language classes particularly in the current curriculum, *Kurikulum Merdeka*. The other concern that is technology employed in the use of Storyjumper was started to investigate since three to four years back. Showing significant result, this present study strengthens the results of the previous study such as research conducted by Sari & Arini (2021) and Kautsar, Mariani, and Amelia (2021). Kautsar's et al., study (2021) was conducted in university level while Sari &Arini (2021) showed that storyjumper was found to be an effective platform for teaching English to primary school students. In Sari & Arini (2021), the researchers utilized the storyjumper that was presented as an online audiobook and helped students enhance their English-speaking skills. Similarly, Kautsar, et al., (2021) conducted a study that showed comparable results. This study, which aimed to examine the effectiveness of using video and story jumpers to improve students' speaking abilities, discovered that using story jumpers can help students become more fluent in English.

The project-based learning is proven to increase the students' English skills, for it provides a meaningful (Aktay, 2020; Syarifah, 2018; Trianto, 2011) and authentic learning (Grant, 2017; Lampert, et al., 2013) for the students. The

authentic learning allows the students to produce language in a relatively natural context (Haines and Watson 1989). The students in the experimental class did the project in the State Elementary School 6 Banjarmasin. Every group taught one class. After finished using the Storyjumper in the classroom on the implementation stage, the students in the experimental class were given a questionnaire. The results of the questionnaire showed that students 21,7% of the participants stated they strongly agree that they suggest ideas for others and 52,5% stated agree. Meanwhile, 26,1% of the participants stated they strongly agree that they suggest ideas for solving problems while 69,6% stated agree. In short, students showed positive responses in problem solving. The challenge that they have that was completing a project of making a Storyjumper in wetland concern was done successfully. Therefore, solving problems in the real world makes the learning more meaningful and authentic.

According to Kean & Kwe (2014), authentic learning is the learning process that allow students to apply the knowledge or insights they had obtained to the real situations. Project-based learning in English subject provides the opportunity to students to have authentic learning in which the students can use their knowledge of language and their language skills in the real-life context. In this current research, the students applied their knowledge, language skills and creativity in making the story by using Storyjumper and implemented it to the real teaching process in the school they have chosen. The story they have made in Storyjumper was used as the instructional media in teaching English in the school. In this way, the students engaged in authentic learning. Since the students finished the project by utilizing their knowledge and implemented it to the real-life situation, it gave them the meaningful experience. In project-based learning, they did not completely depend on the lecturer because they could use the knowledge that they have obtained to finish the project. In addition to that, the project they made was implemented in the teaching and learning in the schools. This is in line with the studies conducted by Kean & Kwe (2014) and Syarifah (Syarifah 2018). They found that project-based learning made the students thought that the learning process is more meaningful, for the knowledge and experience they had could be applied in doing the project.

Moreover, this finding is also supported by Grant (2017) highlighted that project-based language teaching "provides a number of potential language learning benefits through opportunities for authentic meaningful language use".

In addition, the project-based language learning assisted with Storyjumper improves the students' English skills as it fosters their motivation in learning. Shin (Shin 2018) claimed that the project-based learning using technology had great impact on increasing learning motivation since the students found it interesting and relevant to their real-life context. This is related to goal orientation dimension given in the questionnaire. The students responded positively (39,1% stated strongly interested in the matter and 26,1% stated that they are interested in the matter). Then, 30,4% of the participants said that they worked strongly persistently to achieve the goals and 39,1% stated that they worked persistently to achieve the goals. On the other study such as Mohammad & Yamat's study (2020), it is found that the use of Storyjumper increases the students' motivation because Storyjumper allows them to design creatively. In this current research, the students created their own story in English as the project by using Storyjumper. In designing the story, they could use the interesting layouts provided in the Storyjumper as the example. Furthermore, the students could brainstorm the ideas by reviewing other stories that had been made by other clients in the Storyjumper. Since the students could create the story creatively with the assistant of the available potential layouts, the students were motivated in the learning process as their English skills, specifically writing and speaking skill, are improved. This is in line with Masgoret & Gardner's (2003) and Saito's (2018) claims stating that motivation was positively correlated with second language achievement and usage. This motivation is probably due to the ease of Storyjumper use. Rameswara et al. (2019) claimed that the use of storyjumper is accessible to everyone. Storyjumper has two versions namely free and paid version. Students can use the free version to make a complete audiobook. This version is easy to utilize and access by people worldwide. This makes the impact wider, for many teachers and students can access it freely and easily. This ease triggers students to be more motivated to finish their project.

The most important point that contribute to the significant result of this present study is collaboration. A project that must be finished within a long period of time on some steps from brainstorming to finalizing unites students to work in groups. Some previous studies have shown that project-based learning promoted knowledge sharing and collaboration (Astawa, Artini, & Nitiasih, 2017; Gómez-Pablos, del Pozo, & Muñoz-Repiso, 2017; Vogler, et al., 2018). According to Sari and Arini (2021), it has been proven that Storyjumper is an effective tool for teaching English to primary school students. This claim was supported by the utilization of story jumpers by students teaching in elementary schools. Students' teamwork is one of the factors that makes project-based learning successful as indicated in the questionnaire result in this current research. The teamwork and networking dimension showed positive perception given by the students. The data revealed that 34,8% of the participants stated that they were strongly capable of collaborating and 43,5% stated that they were capable of collaborating. Students are required to complete group projects as part of project-based learning. The outcomes of student collaboration are significant, particularly in improving students' English ability.

Collaborative learning is significant and has long been acknowledged since it is one way to create a relaxed and low-threat learning environment in the language learning classroom. It is generally agreed that a learner's language acquisition progresses more effectively when they feel relaxed and less worried. The idea of collaborative learning comes from Vygotsky's social constructivism. Smith, B.L., and MacGregor (1992) stated that it is an umbrella term for a multitude of educational strategies requiring collaborative thought from students or students and teachers. "A sense of the social aspect of learning and the emphasis on a social approach to the development of learning skills, work skills, and life skills" are included (Ingleton, C., Doube, L., Rogers, T. & Noble 2004). Collaboration is one of essential factor in promoting foreign language learning (Storch and Aldosari 2013; Dobao 2012; Kim and McDonough 2008). Dobao (Dobao 2014) and Shehadeh (Shehadeh 2011) stated that students positively perceive the benefits of

collaboration in pairs and groups. Through collaboration, students can share their ideas and knowledge with their peers to discover the solution, make products, or finish the projects.

CONCLUSIONS AND SUGGESTIONS

In the nutshell, this study revealed that the students who were taught by implementing Technology-Assisted Project-Based Language Learning with wetland-based concern in the experimental class have better English skills than students who were not taught by implementing Technology-Assisted Project-Based Language Learning with wetland-based concern. Project-based language learning was meaningful as it provides useful learning experience for them. In addition, during the completion of the steps, collaborative, motivation, and mastery of the technology use of Storyjumper play an important role of the significant result of this study. The results were confirmed from the questionnaire given to students. The students perceived positively to the application of Technology-Assisted Project-Based Language Learning with wetland-based concern to practice English skills and mastery of technological innovation in the implementation of independent education for wetland-based learning.

REFERENCES

Aktay, E Güvey. 2020. "Writing a Folktale as an Activity of Written Expression: Digital Folktales with StoryJumper." *Educational Policy Analysis and Strategic Research* 15 (3): 159–85.

Aktay, Emel Güvey. 2020. "Writing a Folktale as an Activity of Written Expression: Digital Folktales with StoryJumper." *Educational Policy Analysis and Strategic Research* 15 (3): 159–85. https://doi.org/10.29329/epasr.2020.270.8.

Alsaleh, A. 2013. "Family Transitions, Conduct Problems, and Self-Esteem in Elementary School in Kuwait: A Quasi-Experimental Design." *Journal of Social Service Research* 39 (5): 662–74.

Ary, D, L. C Jacobs, C. K Sorensen, D. A Walker, and A Razavieh. 2010. "Introduction to Research in Education." *USA: Wadsworth, Cengage Learning.* 4.

Brown, G. T. 2004. "Teachers' Conceptions of Assessment: Implications for Policy and Professional Development." *Assessment in Education: Principles, Policy & Practice* 11 (3): 301–18.

Chabibie, M. H. 2020. "Panduan Penerapan Model Pembelajaran Inovatif Dalam BDR Yang Memanfaatkan Rumah Belajar." Retrieved from Ministry of Education and Culture Website: Http://Repositori. Kemdikbud. Go. Id/20869. 2020.

Cohen, J, M Barlow, P. J Kushner, and K Saito. 2007. "Stratosphere–Troposphere Coupling and Links with Eurasian Land Surface Variability." *Journal of Climate* 20 (21): 5335–43.

Dobao, Ana Fernández. 2012. "Collaborative Writing Tasks in the L2 Classroom: Comparing Group, Pair, and Individual Work." *Journal of Second Language Writing* 21 (1): 40–58. https://doi.org/10.1016/j.jslw.2011.12.002.

———. 2014. "Vocabulary Learning in Collaborative Tasks: A Comparison of Pair and Small Group Work." *Language Teaching Research* 18 (4): 497–520. https://doi.org/10.1177/1362168813519730.

Fraenkel, J. P, and N. E Wallen. 2006. *How to Design and Evaluate Research in Education (Eight Edition)*. New York: McGraw Hill Companies.

Gall, M. D, J. P Gall, W. R Borg, and P. C Mendel. 2007. "A Guide for Preparing a Thesis or Dissertation Proposal in Education, for Gall, Gall, and Borg'Educational Research: An Introduction'and'Applying Educational Research'." *Pearson Education*.

Haines, D. E, and D. D Watson. 1989. "Tissue Heating during Radiofrequency Catheter Ablation: A Thermodynamic Model and Observations in Isolated Perfused and Superfused Canine Right Ventricular Free Wall." *Pacing and Clinical Electrophysiology* 12 (6): 962–76.

Ingleton, C., Doube, L., Rogers, T. and Noble, A. 2004. "Leap into … Collaborative Learning." *Centre for Learning and Professional Development (CLPD). The University of Adelaide, Australia*.

Jussila, J, A Suominen, and H Vanharanta. 2008. "Competence to Innovate." In *In 2008 AHFE International Conference*, 14–17.

Kautsar, Muhammad Amin Al, Nanik Mariani, and Rizky Amelia. 2021. "The Effectiveness of Using Story Jumper in Teaching Speaking for Second Semester Students of English Language Education Study Program in Lambung Mangkurat University Batch 2020," 114–29.

Kean, Ang Chooi, and Ngu Moi Kwe. 2014. "Meaningful Learning in the Teaching of Culture: The Project Based Learning Approach." *Journal of Education and Training Studies* 2 (2): 189–97. https://doi.org/10.11114/jets.v2i2.270.

Keinänen, Meiju, Jani Ursin, and Kari Nissinen. 2018. "How to Measure Students' Innovation Competences in Higher Education: Evaluation of an Assessment Tool in Authentic Learning Environments." *Studies in Educational Evaluation* 58 (October 2017): 30–36. https://doi.org/10.1016/j.stueduc.2018.05.007.

Kim, You Jin, and Kim McDonough. 2008. "The Effect of Interlocutor Proficiency on the Collaborative Dialogue between Korean as a Second Language Learners." *Language Teaching Research* 12 (2): 211–34. https://doi.org/10.1177/1362168807086288.

Lantolf, J. P, and S. L Thorne. 2006. *Sociocultural Theory and Genesis of Second Language Development*. Oxford: Oxford University Press.

Latief, A. 2013. "Growth, Yield and Economics of Maize as Affected by Cropping Sequences, Rates and Frequency of Farm Yard Manure (FYM)." *African Journal of Agricultural Research* 8 (27): 3632–38.

Latief, M. A. 2016. "Reliability of Language Skills Assessment Results." *Jurnal Ilmu Pendidikan* 8 (3).

Le, Thu T K. 2021. "Project-Based Learning in 21st Century : A Review of Dimensions for Implementation in University-Level Teaching and Learning . PROJECT-BASED LEARNING IN THE 21 ST CENTURY : A REVIEW OF DIMENSIONS FOR IMPLEMENTATION IN UNIVERSITY-LEVEL," no. July.

Levy, M. 1997. *Computer-Assisted Language Learning: Context and Conceptualization*. Oxford University Press.

Masgoret, A. M, and R. C Gardner. 2003. "Attitudes, Motivation, and Second Language Learning: A Meta-analysis of Studies Conducted by Gardner and Associates." *Language Learning* 53 (1): 167–210.

Melkas, S, J. V Laurila, R Vataja, N Oksala, H Jokinen, T Pohjasvaara, and T Erkinjuntti. 2012. "Post-stroke Delirium in Relation to Dementia and Long-term Mortality." *International Journal of Geriatric Psychiatry* 27 (4): 401–8.

Mohammad, A, N., & Yamat, H. (2020). "Students' Perspectives and Motivation towards," 1–12.

Moss, D, and C Van Duzer. 1998. *Project-Based Learning for Adult English Language Learners*. ERIC Digest.

O'Malley, J. M, and L. V Pierce. 1996. *Authentic Assessment for English Language Learners: Practical Approaches for Teachers*. New York: Addition.

Rina Listia

Postareff, L, M Mattsson, S Lindblom-Ylänne, and T Hailikari. 2017. "(2017). The Complex Relationship between Emotions, Approaches to Learning, Study Success and Study Progress during the Transition to University." *Higher Education* 73 (3): 441–57.

Rameswara, K.H, L.D.S Adnyani, and N.P.A Pratiwi. 2019. "Developing Story Jumper-Based Teaching Media To Enrich Kindergarten Students ' Vocabulary." *International Journal of Language and Literature* 3 (3): 147–58.

Salkind, N, D Adams, C Dermer, J Heinerikson, B Jones, and E Nash. 2000. "Guns and Chewing Gum: The Perceptions and Reality of Problem Behaviours in Public Schools." *School Psychology International* 21 (1): 106–12.

Sari, Valentina Dyah Arum, and Restu Arini. 2021. "SPARK: Utilization of StoryJumper Platform in English Learning for Elementary School Students" 2: 171–77. http://journal.neolectura.com/index.php/kangmas.

Shehadeh, Ali. 2011. "Effects and Student Perceptions of Collaborative Writing in L2." *Journal of Second Language Writing* 20 (4): 286–305. https://doi.org/10.1016/j.jslw.2011.05.010.

Shin, Myeong-Hee. 2018. "Effects of Project-Based Learning on Students' Motivation and Self-Efficacy." *English Teaching* 73 (1): 95–114. https://doi.org/10.15858/engtea.73.1.201803.95.

Smith, B.L., and MacGregor, J. T. 1992. "What Is Collaborative Learning? National Center on Postsecondary Teaching, Learning and Assessment at Pennsylvania State University."

Stoller, F. 2002. "Project Work: A Means to Promote Language and Content." *Methodology in Language Teaching: An Anthology of Current Practice* 10: 107–19.

Storch, Neomy, and Ali Aldosari. 2013. "Pairing Learners in Pair Work Activity." *Language Teaching Research* 17 (1): 31–48. https://doi.org/10.1177/1362168812457530.

Syarifah, Eva Fitriani. 2018. "The Implementation of Project Based Learning To Promote Students' Motivation in Efl Writing Class." *ELT in Focus* 1 (1): 40–44. https://doi.org/10.35706/eltinfc.v1i1.1318.

Thomas, G. 2017. *How to Do Your Research Project: A Guide for Students*. Sage.

Trianto. 2011. *Model Pembelajaran Terpadu : Konsep, Strategi, Dan Implementasinya Dalam Kurikulum Tingkat Satuan Pendidikan (KTSP)*. Edition 1. Jakarta: Jakarta : Bumi Aksara.

Tuckman, B. W. 1999. *Tuckman, B. W. (1999). Conducting Educational Research Fith Edition*. New York: Harcount Brace college Puplisher.

Weigle, S. C. 2002. *Assessing Writing*. Cambridge University Press.

Wolf, Victoria, Renata Dobrucka, Robert Przekop, and Stephan Haubold. 2021. "COOPERATIVE INNOVATION STRATEGIES – REVIEW AND ANALYSIS" 17 (4): 477–84.

Aktay, E Güvey. 2020. "Writing a Folktale as an Activity of Written Expression: Digital Folktales with StoryJumper." *Educational Policy Analysis and Strategic Research* 15 (3): 159–85.

Aktay, Emel Güvey. 2020. "Writing a Folktale as an Activity of Written Expression: Digital Folktales with StoryJumper." *Educational Policy Analysis and Strategic Research* 15 (3): 159–85. https://doi.org/10.29329/epasr.2020.270.8.

Alsaleh, A. 2013. "Family Transitions, Conduct Problems, and Self-Esteem in Elementary School in Kuwait: A Quasi-Experimental Design." *Journal of Social Service Research* 39 (5): 662–74.

Ary, D, L. C Jacobs, C. K Sorensen, D. A Walker, and A Razavieh. 2010. "Introduction to Research in Education." *USA: Wadsworth, Cengage Learning.* 4.

Brown, G. T. 2004. "Teachers' Conceptions of Assessment: Implications for Policy and Professional Development." *Assessment in Education: Principles, Policy & Practice* 11 (3): 301–18.

Chabibie, M. H. 2020. "Panduan Penerapan Model Pembelajaran Inovatif Dalam BDR Yang Memanfaatkan Rumah Belajar." Retrieved from Ministry of Education and Culture Website: Http://Repositori. Kemdikbud. Go. Id/20869. 2020.

Cohen, J, M Barlow, P. J Kushner, and K Saito. 2007. "Stratosphere–Troposphere Coupling and Links with Eurasian Land Surface Variability." *Journal of Climate* 20 (21): 5335–43.

Dobao, Ana Fernández. 2012. "Collaborative Writing Tasks in the L2 Classroom: Comparing Group, Pair, and Individual Work." *Journal of Second Language Writing* 21 (1): 40–58. https://doi.org/10.1016/j.jslw.2011.12.002.

———. 2014. "Vocabulary Learning in Collaborative Tasks: A Comparison of Pair and Small Group Work." *Language Teaching Research* 18 (4): 497–520. https://doi.org/10.1177/1362168813519730.

Fraenkel, J. P, and N. E Wallen. 2006. *How to Design and Evaluate Research in Education (Eight Edition)*. New York: McGraw Hill Companies.

Gall, M. D, J. P Gall, W. R Borg, and P. C Mendel. 2007. "A Guide for Preparing a Thesis or Dissertation Proposal in Education, for Gall, Gall, and Borg'Educational Research: An Introduction'and'Applying Educational Research'." *Pearson Education*.

Haines, D. E, and D. D Watson. 1989. "Tissue Heating during Radiofrequency Catheter Ablation: A Thermodynamic Model and Observations in Isolated Perfused and Superfused Canine Right Ventricular Free Wall." *Pacing and Clinical Electrophysiology* 12 (6): 962–76.

Ingleton, C., Doube, L., Rogers, T. and Noble, A. 2004. "Leap into … Collaborative Learning." *Centre for Learning and Professional Development (CLPD). The University of Adelaide, Australia*.

Jussila, J, A Suominen, and H Vanharanta. 2008. "Competence to Innovate." In *In 2008 AHFE International Conference*, 14–17.

Kautsar, Muhammad Amin Al, Nanik Mariani, and Rizky Amelia. 2021. "The Effectiveness of Using Story Jumper in Teaching Speaking for Second Semester Students of English Language Education Study Program in Lambung Mangkurat University Batch 2020," 114–29.

Kean, Ang Chooi, and Ngu Moi Kwe. 2014. "Meaningful Learning in the Teaching of Culture: The Project Based Learning Approach." *Journal of Education and Training Studies* 2 (2): 189–97. https://doi.org/10.11114/jets.v2i2.270.

Keinänen, Meiju, Jani Ursin, and Kari Nissinen. 2018. "How to Measure Students' Innovation Competences in Higher Education: Evaluation of an Assessment Tool in Authentic Learning Environments." *Studies in Educational Evaluation* 58 (October 2017): 30–36. https://doi.org/10.1016/j.stueduc.2018.05.007.

Kim, You Jin, and Kim McDonough. 2008. "The Effect of Interlocutor Proficiency on the Collaborative Dialogue between Korean as a Second Language Learners." *Language Teaching Research* 12 (2): 211–34. https://doi.org/10.1177/1362168807086288.

Lantolf, J. P, and S. L Thorne. 2006. *Sociocultural Theory and Genesis of Second Language Development*. Oxford: Oxford University Press.

Latief, A. 2013. "Growth, Yield and Economics of Maize as Affected by Cropping Sequences, Rates and Frequency of Farm Yard Manure (FYM)." *African Journal of Agricultural Research* 8 (27): 3632–38.

Latief, M. A. 2016. "Reliability of Language Skills Assessment Results." *Jurnal Ilmu Pendidikan* 8 (3).

Le, Thu T K. 2021. "Project-Based Learning in 21st Century : A Review of Dimensions for Implementation in University-Level Teaching and Learning .

PROJECT-BASED LEARNING IN THE 21 ST CENTURY : A REVIEW OF DIMENSIONS FOR IMPLEMENTATION IN UNIVERSITY-LEVEL," no. July.

Levy, M. 1997. *Computer-Assisted Language Learning: Context and Conceptualization*. Oxford University Press.

Masgoret, A. M, and R. C Gardner. 2003. "Attitudes, Motivation, and Second Language Learning: A Meta-analysis of Studies Conducted by Gardner and Associates." *Language Learning* 53 (1): 167–210.

Melkas, S, J. V Laurila, R Vataja, N Oksala, H Jokinen, T Pohjasvaara, and T Erkinjuntti. 2012. "Post-stroke Delirium in Relation to Dementia and Long-term Mortality." *International Journal of Geriatric Psychiatry* 27 (4): 401–8.

Mohammad, Nur Athirah, and Hamidah Yamat. 2020. "STUDENTS ' PERSPECTIVES AND MOTIVATION TOWARDS," 1–12.

Moss, D, and C Van Duzer. 1998. *Project-Based Learning for Adult English Language Learners*. ERIC Digest.

O'Malley, J. M, and L. V Pierce. 1996. *Authentic Assessment for English Language Learners: Practical Approaches for Teachers*. New York: Addition.

Postareff, L, M Mattsson, S Lindblom-Ylänne, and T Hailikari. 2017. "(2017). The Complex Relationship between Emotions, Approaches to Learning, Study Success and Study Progress during the Transition to University." *Higher Education* 73 (3): 441–57.

Rameswara, K.H, L.D.S Adnyani, and N.P.A Pratiwi. 2019. "Developing Story Jumper-Based Teaching Media To Enrich Kindergarten Students ' Vocabulary." *International Journal of Language and Literature* 3 (3): 147–58.

Salkind, N, D Adams, C Dermer, J Heinerikson, B Jones, and E Nash. 2000. "Guns and Chewing Gum: The Perceptions and Reality of Problem Behaviours in Public Schools." *School Psychology International* 21 (1): 106–12.

Sari, Valentina Dyah Arum, and Restu Arini. 2021. "SPARK: Utilization of StoryJumper Platform in English Learning for Elementary School Students" 2: 171–77. http://journal.neolectura.com/index.php/kangmas.

Shehadeh, Ali. 2011. "Effects and Student Perceptions of Collaborative Writing in L2." *Journal of Second Language Writing* 20 (4): 286–305. https://doi.org/10.1016/j.jslw.2011.05.010.

Shin, Myeong-Hee. 2018. "Effects of Project-Based Learning on Students' Motivation and Self-Efficacy." *English Teaching* 73 (1): 95–114. https://doi.org/10.15858/engtea.73.1.201803.95.

Smith, B.L., and MacGregor, J. T. 1992. "What Is Collaborative Learning? National Center on Postsecondary Teaching, Learning and Assessment at Pennsylvania State University."

Stoller, F. 2002. "Project Work: A Means to Promote Language and Content." *Methodology in Language Teaching: An Anthology of Current Practice* 10: 107–19.

Storch, Neomy, and Ali Aldosari. 2013. "Pairing Learners in Pair Work Activity." *Language Teaching Research* 17 (1): 31–48. https://doi.org/10.1177/1362168812457530.

Syarifah, Eva Fitriani. 2018. "The Implementation of Project Based Learning To Promote Students' Motivation in Efl Writing Class." *ELT in Focus* 1 (1): 40–44. https://doi.org/10.35706/eltinfc.v1i1.1318.

Thomas, G. 2017. *How to Do Your Research Project: A Guide for Students*. Sage.

Trianto. 2011. *Model Pembelajaran Terpadu : Konsep, Strategi, Dan Implementasinya Dalam Kurikulum Tingkat Satuan Pendidikan (KTSP)*. Edition 1. Jakarta: Jakarta : Bumi Aksara.

Tuckman, B. W. 1999. *Tuckman, B. W. (1999). Conducting Educational Research Fith Edition*. New York: Harcount Brace college Puplisher.

Weigle, S. C. 2002. *Assessing Writing*. Cambridge University Press.

Wolf, Victoria, Renata Dobrucka, Robert Przekop, and Stephan Haubold. 2021. "COOPERATIVE INNOVATION STRATEGIES – REVIEW AND ANALYSIS" 17 (4): 477–84.