



The Implementation of Game Pair Coupon Exchange (PCE) Towards the Results of Learning Reading and Writing Mandarin Course

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Abstract. The problems in the Reading and Writing courses in the Mandarin language study program at the Universitas Negeri Malang are the lack of variety of methods and learning resources provided by lecturers. The opportunity for students to exchange information with other students is still lacking, so does the enthusiasm, motivation, and active role of students in learning is still low. Students do not dare to ask questions and express opinions. The purpose of this study was to determine (1) the differences in group learning outcomes of students in the Mandarin Reading Writing Course in the group taught by the application of the paired coupon exchange game and the control group taught by multi-Source, (2) the effect of the application of the pair game. Pair Coupon Exchange on the learning outcomes of Reading and Writing Mandarin Course are used by students in the experimental group. Data were collected using a questionnaire, written test, observation, and portfolio methods and analyzed descriptively and quantitatively. The research sample was taken using a purposive sampling technique, the 2020 batch of mandarin as a group experiment and class V IIIH as group control. A study using a quasi-experimental design with a pretest-posttest control group design pattern. The results of the research are: (1) there are significant differences in learning outcomes of the Reading And Writing Mandarin Course between the experimental and control groups, where the learning outcomes of the experimental group are higher than those of the control group, and (2) there is a significant effect between the application of pair coupon exchange games and learning outcomes of Reading And Writing Mandarin Course in the experimental group were 31.5%, the effect of which could be predicted through the regression equation $Y = 63.722 + 0.312 X$.

Keywords: Game · pair coupon exchanges · technique exchange couple

1 Introduction

Learning is a lecturer activity programmed in instructional design, so students learn actively, emphasizing the “provision of learning resources”. The vision of the subject of Information and Communication Technology (Reading and Writing Mandarin) is that

students can use Reading and Writing Mandarin Course tools appropriately and optimally to obtain and process information in learning activities, work, and other activities so that students can able to be creative, develop an attitude of initiative, develop the ability to explore independently, and quickly adapt to new developments.

Theoretically, Reading And Writing Mandarin Course play a very extraordinary role in supporting the learning process that is (1) active, giving the opportunity student to play a role active in enjoyable, meaningful learning, and (2) constructive, allowing students to incorporate new ideas into the knowledge they already have, (3) collaborative, allowing students to exchange information, work together, and collaborate in groups, (4) intensive, enabling students to be enthusiastic and motivated to try to achieve goals, (5) conversion, the learning process allows students to benefit from the communication process inside and outside school, (6) contextual, directing process study meaning, (7) reflective, the possible student realizes and reflect on what they have just learned as part of the learning process itself [1].

The application of the learning model in the Reading and Writing course, especially the subject of making document processors that have influence the achievement of student learning outcomes so that lecturers must Read and Write Mandarin using Appropriate and varied learning models in the Reading and Writing course. The suitable learning model in the Reading and Writing course will allow students to take advantage of various learning resources, both printed and non-printed, and provide opportunities for students to work together and exchange information, increase enthusiasm, motivation, and role in learning. Active and fun for students to build and develop knowledge from various sources. This is contrary to the reality at the Universitas Negeri Malang. In addition to using less varied learning methods, the learning resources provided by the lecturers are also still limited. The opportunity for students to exchange information with other groups is still lacking. Enthusiasm, motivation, and the active role of students in learning are low, and students are less daring to ask questions and express opinions. Learning conditions like this can create a boring classroom atmosphere, and students experience learning difficulties, resulting in low learning outcomes, namely the results of the preparation of knowledge from concrete experiences, collaborative activities, reflection, and interpretation [2].

Based on the above problems, the application of the coupon exchange game is one of the learning models that is considered the most capable of overcoming these problems because the concept of implementation allows students to utilize various learning resources and provides opportunities for students to exchange information, collaborate in groups which can increase motivation, enthusiasm, and motivation, and the role of students in learning where active students are expected to influence student learning outcomes better [3].

This research aims to determine the differences in learning outcomes between the experimental group and the control group and to determine the effect of the application of the pair game coupon exchange on student learning outcomes in the experimental group. For this reason, in this study, we will first compare the results of students' Reading and Writing Mandarin Course between the experimental group and the application of the pair game. Is the difference significant in the coupon exchange and control group with the Multi-Source Learning method? Or not, then it is tested whether there is a significant



Picture 1. Design Study

effect between the application of the pair game coupon exchange with the learning outcomes of Reading and Writing Mandarin Course students in the experimental group and how significant the impact is [3].

2 Method

This research is used quantitative quasi-experimental research method with a pretest-posttest control group design pattern [4]. Before treatment, both the experimental and control groups will be given a pretest, followed by providing treatment to the experimental group with the application of the pair coupon game. Finally, the Multi-Source Learning method and the exchange and control groups will be given a posttest after treatment. The research design is shown in Fig. 1.

The research population was the entire 2020 batch of Mandarin at the Universitas Negeri Malang. The sample was determined using a purposive sampling technique, where the 2020 batch of Mandarin was the experimental group, and the class 2021 mandarin was the control group. The research instruments are syllabus, lesson plans, questionnaire sheets, written test questions, observation sheets, and a collection of student assignments, research data collection using questionnaires, tests, performance observations, and portfolios.

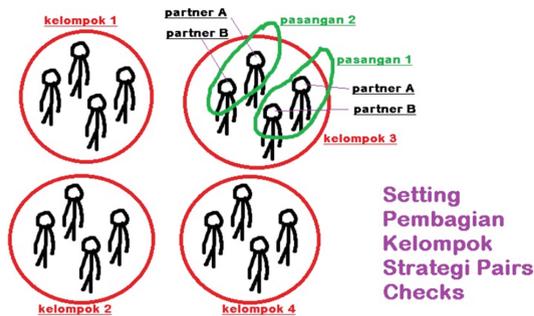
Pair game coupon exchange is a combined learning model of the free method and the technique of exchanging pairs [5], which is packaged attractively in the form of games using colored coupons in pairs by utilizing various printed and non-printed learning resources and providing opportunities for students to work together, exchange information, and collaborate in groups. An example of a coupon used in a pair game coupon exchange is shown in Fig. 2.

The Reading and Writing courses with a pair coupon exchange applied to the experimental group begin with the delivery of learning objectives and preparation of various learning resources by the lecturer, including textbooks, practical modules for Reading and Writing Mandarin, tutorial files, video tutorials, sample documents that have been adapted to the material, and the internet.

Then, students form groups with colored coupons in pairs and look for teams according to couples. A word that is on the coupon, which sits accordingly with the group, continued with the assignment. Next, the lecturer asks students to exchange pairs with the closest group and return to their original partner to continue the reading and writing



Picture 2. Pair Coupon Example



Picture 3. Illustration of Learning using by Pair Coupon Exchange Method

practice in Mandarin, followed by a presentation, the lecturer will say one word on the coupon, and the student holding the coupon comes forward. Represent the presentation group. An illustration of learning to Read and Write Mandarin with a pair coupon exchange is shown in Fig. 3.

Meanwhile, Reading and Writing Mandarin Course with the Multi-Source Learning method [6], which will be applied to the control group, begins with the delivery of learning objectives and preparation of various learning resources by the lecturer and the control group. Then, form groups without using coupons, students sit according to

their respective groups and continue with assignments by lecturers, presentations, and evaluations.

Data analysis is done to determine differences in learning outcomes between the experimental and control groups using the t-test formula, while to determine the effect of the application of pair games coupon exchange on the learning outcomes of the experimental group using a simple linear regression test formula where both are calculated with the SPSS application.

3 Findings and Discussion

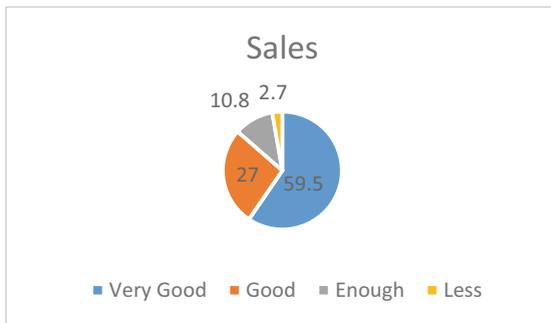
3.1 Test Difference Results

Student response data were obtained from the distribution of student response questionnaires to the application of the pair game coupon exchange the experimental group, then tabulated and calculated comparison percentage responses for each student. Description data response student showed on Picture 4.

Based on Fig. 4, it can be seen that as many as 22 students (59.5%) have an excellent response to the application of the pair game. In coupon exchange, ten students (27.0%) had a good answer, four students (10.8%) were sufficient, and only one student (2.7%) had a poor response to the application of the game—pair coupon exchange on learning to Read and Write Mandarin.

The final learning outcomes are taken from the sum of posttest scores, performance, and portfolios, while the descriptions of the respective learning outcomes are shown in Table 1.

Based on Table 1, it is known that the experimental group has an average that is always higher than the control group. At the time of the posttest, 91.9% of the experimental group students had achieved SKM (70), while only 81.6% of control group students had achieved SKM. The difference in learning outcomes is because the experimental group students are more active in learning the material by utilizing various learning resources, then immediately practice it, the opportunity to exchange information is more, so that the acquisition of knowledge is also more, students are also active in discussing and trying to complete assignments, dare to ask questions, express opinions. The enthusiasm and



Picture 4. Student's Response of the Questionnaires

Table 1. Description Score posttest, Show Work, and Portfolio

| Result | Average Experiment | Average Control |
|-----------|--------------------|-----------------|
| Posttest | 84.4 | 77.5 |
| Show Work | 93.6 | 87.6 |
| Portfolio | 89.4 | 84.1 |

motivation of the experimental group students were also higher. Reading and writing in Mandarin from the reading and writing assessment rubric Mandarin were 90% of the experimental group students were more prepared to take part in learning than the control group, which was only 60%.

3.2 Test Influence Method to Results Study

Based on the results of tests carried out with SPSS, it can be seen that the application of the pair game coupon exchange is exceptionally influential on the learning outcomes of Reading and Writing Mandarin Course in the experimental group of students by 31.5% and can be predicted through the regression equation $Y = 63.722 + 0.312 X$. Each increment of one score method study (X) tends to be followed by an increase in score learning outcomes for Reading and Writing Mandarin Course (Y) courses are 0.312 units. So, if it gets a higher score method study, the higher the score for learning to Read and Write Mandarin, the subject of making word processing documents.

The learning method score is the total score for each student, obtained from the tabulation of the student response questionnaire data on the implementation of the method. If the learning method applied improves, the student's response to the performance of the method will also be better or result in a higher total score. That is, with the application of these better learning methods, motivation, enthusiasm, active role, courage to ask questions, and students' opinions will also be better or increased, affecting the improvement of students' reading and writing learning outcomes.

From the explanation above, it can be concluded that applying the pair game coupon exchange improves students' reading and writing learning outcomes in MANDARIN. Due to the application of the pair game coupon exchange can make it easier for students to understand the material being taught, increase motivation, allow students to take advantage of learning resources, both printed and non-printed, and increase understanding, cooperation, and responsibility so that they can improve their performance. Therefore, be active and dare to take initiatives that can improve student learning outcomes.

4 Conclusion

This research had a significant difference in learning outcomes of Reading and Writing Mandarin Course between students taught by applying pair games. Coupon exchange and student, which led with method research Multiple Sources. There is an effect of 31.5% between the application of the pair game coupon limited exchange dap student

learning outcomes of the experimental group. Furthermore, the experimental group's student learning completeness on moment post-test (91.9%) was higher than the control group (81.6%).

References

1. D.A. Kolb, "Management and the learning process". *California Management Review*, Vol 18, no.3, pp, 21-31. April 1976.
2. E. M. Rosa, & R. P. Leow, "Awareness, Different Learning Conditions, and Second Language Development". *Applied psycholinguistics*, vol. 25, no. 2, pp. 269-292, May 2004.
3. S. Adam, "Using Learning Outcomes," United Kingdom Bol. Semin. 1–2 July 2004, Heriot-Watt Univ. (Edinburgh Conf. Centre), p. 30, July 2004.
4. D. Cramer, *Advanced Quantitative Data Analysis*. McGraw-Hill Education (UK), 2003.
5. M. F. Norman, *Markov Processes and Learning Models, Vol. 84 – 1st Edition*. New York: Academic Press, 2004.
6. H. A. Bukhori, Sunarti, and T. Widyatmoko, "Independent Learning Method Based on Virtual Reality to Improve Foreign Language Skills," Proceedings International Seminar on Language, Education, and Culture (ISoLEC 2021), pp. 141–147, 2022, doi: <https://doi.org/10.2991/asschr.k.211212.026>.

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