THE IMPACT OF THE ROTATING TRIO EXCHANGE LEARNING MODEL WITH COUPLE CARD MEDIA ON THE LEARNING ACHIEVEMENT OF CLASS XI STUDENTS IN ECONOMICS AT MADINATUNNAJAH HIGH SCHOOL

Musthofa Masyhur

Student in the Economic Education Study Program, Pamulang University,
South Tangerang City, Indonesia

ABSTRACT

This study intends to explore the influence of the Rotating Trio Exchange (RTE) learning model with couple card tool on learning achievement. This research was conducted in class XI of Madinatunnajah High School, with the population consisting of all class XI students, divided into two classes. The samples used in this research were class XI A as the experimental and class XI B as the control, selected using the saturated sampling technique. The means of data collection involved a learning outcomes test consisting of 29 questions, which were tested for validity, reliability, difficulty level, and differential power. The outcomes showed that the test was valid and reliable. The research findings show that the learning outcomes taught applying the RTE learning with couple card tool are higher than the minimum completeness criteria of 76.60. Based on the group statistics analysis, the experimental class had an average score of 76.60, whereas the control class achieved a mean score of 71.96. The statistical test results showed a sig value of 0.019, which is less than 0.05 (5%), indicating a significant effect of using the RTE learning model with couple card tool on learning achievement at Madinatunnajah High School.

Keywords: Learning Achievement, Rotating Trio Exchange Model, Economic Subject.

INTRODUCTION

Education is a deliberate and structured process aimed at fostering an environment that encourages active learning. It allows students to grow and develop their abilities, including religious values, self-discipline, personality, intellect, moral integrity, and the skills necessary to contribute to themselves, society, the nation, and the state (Government Regulation, 2021). Education plays a vital role in a country's development, as it is essential for the nation's advancement. To ensure a nation's progress, the importance of education cannot be overstated. Especially in formal education, success in education can produce output that can be achieved by enhancing educational performance.

In the context of the fourth industrial revolution, the role of teachers as educators is to equip students with skills, namely strong communication skill, critical thinking, creative skill, problem-solving ability, and innovative thinking. Therefore, curriculum development is also expected to complement pedagogical dimensions, life skills, the ability to live together (collaborate), critical thinking, and creativity (Lase, 2019). By using the right learning model, teachers should design a series of learning activities to support students' problem-solving abilities. Problem-based learning is a teaching approach that characterized by the presence of real problems as the condition for learning, allowing students to develop logical reasoning skills and enhance their conflict resolution abilities while acquiring knowledge (Duch in Shoimin, 2017:130).

According to Nursita (2014), innovation is needed in the field of education to improve students' problem-solving abilities. This innovation encourages students to develop thinking, analysis, and problem-solving skills by providing students with problems that are closely related to everyday life. The learning model used is the RTE (Rotating Trio Exchange) model. This is confirmed by research from Ratilia, et. al (2019:4), which explains that the use of learning models that allow students to explore their abilities is an effective learning model, specifically the RTE type.

Economics is one of the subjects has a significant impact in developing students' social knowledge and can significantly impact their critical thinking patterns. Therefore, economics is one of the best subjects that should be taken by students at school. During the learning process, teachers link economics lessons to students' experiences with the surrounding environment and use learning media that suit the material being taught.

Learning resources used in education can be obtained from tools, materials, and phenomena present in the surrounding environment. The Rotating Trio Exchange learning model is considered suitable because it emphasizes real-life problems that are meaningful to students and can be solved with real evidence from their environment.

Given the importance of economics, educators should be capable of instructing students the best ways to achieve the learning objectives at school. If the learning objectives are achieved, economics learning in school will yield good results. One of the learning objectives of economics is students' progress in studying the subject, which is reflected in the students' learning achievements.

In practice, the 2013 curriculum still faces challenges, such as teachers still using traditional learning models like lectures and question-and-answer sessions. The limitations of

teachers in using media also become obstacles in the learning experience, especially with the increasing technology growth over the years, which requires us to be more alert in addressing it.

Educational technology is an effort to improve teaching methods by using scientific principles that have been proven successful in other fields. As such, educators can develop learning tools with innovative models and learning media to elevate the level of education. A learning strategy that has the potential to be developed is Rotating Trio Exchange. This seeks to mitigate the difficulties with the less-than-optimal educational processes currently being implemented.

Conventional teaching methods applied by teachers make students less likely to gain direct experience because the conventional model leads to a lack of creativity and initiative in teaching and learning activities. Students only hear information from the teacher but fail to understand and become passive. Many students are unable to express their thoughts and ideas because they have difficulty identifying the concepts of the tasks they are given when solving problems. Similarly, teachers use fewer media variations, which fail to engage students' interest and motivation in learning, as it tends to be monotonous when students only listen to the teacher's explanations. The one-way relationship between teacher and students often leads students to only listen to what the teacher says. As a result, students can easily forget what they have learned previously. This leads to the problem of unsatisfactory learning outcomes. This problem often occurs in several schools, including Madinatunnajah High School.

Based on interviews with the Economics teacher of class XI at Madinatunnajah High School, it is known that: 1) There are still issues with students' learning outcomes; 2) The strategies used have been varied, but they are still dominated by lecture methods. The discussion method applied by the Economics teacher is not running well. According to the teacher, during discussions, many students ask for permission to leave, only a few students are active, and group members rely on the smarter students in the group; 3) There is a lack of active student involvement during the instructional process; and 4) Students are less focused when receiving lessons because of monotonous lessons. If this continues, the learning achievement of class XI students in economics will not be good, considering how important economics is for students' future lives.

Relevant research includes a study by Kholilah (2010:5), which found that students taught using the RTE cooperative learning model exhibit a greater interest in mathematics compared to those instructed through traditional teaching methods. This is supported by Sahril

(2018:143), who state that the RTE learning model demonstrates greater effectiveness than traditional direct instruction approaches in terms of advanced thinking skills in class X students of ISFI Vocational School Banjarmasin.

METHODS

The study employs a quantitative research approach with a quasi-experimental methodology, utilizing a non-equivalent control group design. This analysis was implemented at Madinatunnajah Cirebon High School, a school placed in a rural area with a green and comfortable atmosphere. In this place, students are educated using a modern pesantren education system, which combines religious education and general education. The program aims to equip students with the ability to speak Arabic and English as a competitive advantage.

RESULTS AND DISCUSSION

Results

Table 1. The One Sample T Test Results

One-Sample Statistics				
	N	Mean	Std. Deviation	Std. Error Mean
Experiment	25	76,60	7,176	1,435

One-Sample Test						
	Test Value = 75					
	t	Df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
Experiment	4,598	24	,276	6,600	3,64	9,56

Based on the sample analysis results in the table above, the one sample statistic output shows a learning achievement of 76.60 for the experimental class. In the One Sample t Test output, the hypothesis acceptance guide is as follows: if the sig value on the One Sample t Test output is > 0.05, then H_0 is accepted; otherwise, H_0 is rejected. The sig value of 0.276 > 0.05 (5%) in the One Sample t Test output indicates that H_1 is rejected and H_0 is accepted. It can be concluded that the sample analysis results show that the learning achievement of the experimental class is not the same as the minimum competency criteria but exceeds.

Table 2. One Sample Binomial Test Results

Binomial Test						
		Category	N	Observed Prop.	Test Prop.	Exact Sig. (2-tailed)
Completeness	Group 1	<= 75	13	,52	,50	1,000
	Group 2	> 75	12	,48		
	Total		25	1,00		

Based on the results of the binomial test above, the exact sig (1-tailed) value of 1.000 > 0.05 indicates that H_1 is accepted. This means that the classical completeness for the XI grade is achieved, as the learning success of students in the economics subject exceeds 75%. Meanwhile, the observed proportion for Minimum Completeness Criteria (MCC) is 0.52, and for non-MCC it is 0.48. Therefore, for grade XI, the classical completeness of students' learning achievement in economics exceeds 75%.

Table 3. Independent Sample Test Results T Test

Group Statistics					
	GROUP	N	Mean	Std. Deviation	Std. Error Mean
PERFORMANCE	Control Class	28	71.96	6.714	1.269
	Experimental Class	25	76.60	7.176	1.435

Independent Samples Test				
		t-test for Equality of Means		
		Sig. (2-tailed)	Mean Difference	Std. Error Difference
PERFORMANCE	Equal variances assumed	.019	-4.636	1.908
	Equal variances not assumed	.019	-4.636	1.916

Based on the output of the group statistics, the learning achievement of the Control class is 71.95, while the Experimental class is 76.60. The sig. (2-tailed) value is 0.019 < 0.05, which means that H_0 is rejected and H_1 is accepted. Therefore, it can be concluded that there is a significant difference between the Experimental and Control classes. Additionally, since the sig. (2-tailed) value is 0.019 < 0.05, this indicates that H_1 is accepted and H_0 is rejected. Thus, it can be confirmed that there is a significant difference between the experimental and control classes.

Discussion

The Achievement of the Mean Learning Performance of Economics Students in Class XI Experiment at Madinatunnajah Cirebon High School After Being Taught Applying the Rotating Trio Exchange Learning Model with Couple Card Tool

The data suggests that the One Sample T-Test yielded a statistical value of 76.60. According to the One Sample Test output, if the significance (sig) value is greater than 0.05, H_0 is accepted, and if it is lower, H_1 is accepted. The analysis reveals a sig value of $0.276 > 0.05$ (5%), showing that H_1 fails to be supported, whereas H_0 is upheld. Thus, it follows that the learning achievement of the experimental class exceeds the minimum competency criteria, rather than being equal to it.

The perspective outlined by Bhawanayani, et. al (2018) supports this finding: "Learning models can occupy a significant position as one of the components of the learning system." Communication in learning cannot occur without a learning model, so learning tools are a fundamental aspect of the instructional system.

Achievement of Classical Completion in Learning Achievement of Economics for Grade XI Experimental Class

Referring to the data obtained from the One Sample Binomial test, the exact sig (1-tailed) value of 1.000 indicates that the classical completeness of learning achievement in Economics for grade XI students at Madinatunnajah High School exceeds 75%. Learning completion influences learning achievement, with an exact sig (1-tailed) value of $1.000 > 0.05$, so H_1 is validated.

This study's conclusions are in line with past research from Ihsan (2018), which examined the impact of learning media on student achievement in Office Computer Science for grade X students at State Vocational School 8 Makassar. The study showed a significant impact of learning media on learning performance, with a result of 79.41%.

According to Djamarah (2011:12), learning is an activity that involves both body and soul to achieve change, not just physically but also psychologically. Thus, the learning process consists of steps designed at achieving changes in behavior in cognitive (knowledge), affective (attitude), and psychomotor (skills) aspects. Strengthening the learning experience and results is crucial to produce quality human resources, so the goal of educating the nation's life can be achieved. In this regard, teachers play an important role in guiding students effectively.

Notable Variation Among the Learning Performance of Economics for Grade XI Experimental Class and Grade XI Control Class

To ensure the effectiveness of this study, the researcher applied the Rotating Trio Exchange (RTE) learning model with couple card tool for one month, from July 15, 2022, to August 15, 2022, with a total of 53 respondents from Class XI A and XI B. Following the application of the learning approach, there was an improvement in student learning outcomes, although not highly significant. The average score of the experimental class, based on the Group Statistics analysis, was 76.60, whereas the control class recorded an average score of 71.96. The group statistics output showed a sig value of $0.019 < 0.05$ (5%), meaning that H_1 is validated.

These findings align with previous research by Oktaviani and Fitri (2018), which found that the RTE learning model with couple card media had a advantageous and significant impact on students' learning competencies. Overall, this study indicates that the use of the learning model assisted by couple card media enhances student activity in understanding the material. This model allows students to be more active in the learning system through engaging games, simplifying the content for better clarity and improving the effectiveness of teaching and learning for both students and teachers.

CONCLUSION

The results suggest that the average economics learning achievement of the experimental class students in Madinatunnajah High School, who used the rotating trio exchange learning model with couple card tool, is higher than the minimum completeness criteria. This indicates an improvement in the quality of economics learning at the school. Moreover, the collective proficiency in economics education achievement of the experimental class exceeds 75%, as proven by the One Sample Binomial test with an exact sig. (1-tailed) coefficient value of 1.000, which implies the alternative hypothesis (H_1) is accepted.

The analysis of the Independent Group Statistics also shows a marked difference in economics learning success between students in the experimental and control classes, with the average learning achievement in the control class being 71.95 and in the experimental class being 76.60. The sig. (2-tailed) value of 0.019, which is less than 0.05, indicates that the alternative hypothesis (H_1) is accepted, meaning a substantial variance is evident among the two groups.

REFERENCES

Bhawanayani, L. P., Rati, N. W., & Mahadewi, L. P. P. (2018). Pengaruh Model Project-Based Learning Bermediakan Couple Card terhadap Hasil Belajar IPA. *Jurnal Pendidikan dan Pembelajaran IPA Indonesia, 8*(2).

Djamarah, S. B. (2020). *Psikologi Belajar*. Jakarta: Rineka Cipta.

Ihsan, I. (2018). *Pengaruh Penggunaan Media Pembelajaran terhadap Prestasi Belajar Siswa (Studi pada Mata Pelajaran Otomatisasi Perkantoran Kelas X Administrasi Perkantoran SMK Negeri 8 Makassar)* [Skripsi, Universitas Negeri Makassar].

Kholillah, S. (2010). *Pengaruh Model Pembelajaran Kooperatif Tipe Rotating Trio Exchange (RTE) terhadap Minat Belajar Matematika Siswa* [Skripsi, UIN Syarif Hidayatullah Jakarta].

Nurul, O., & Fitri, R. (2020). Pengaruh Penerapan Model Rotating Trio Exchange (RTE) Berbantuan Media Couple Card terhadap Kompetensi Belajar Peserta Didik. *Pedagogi Hayati, 4*(1).

Ratilia, S., Deskoni, D., & Barlian, I. (2019). *Pengaruh Model Pembelajaran Kooperatif Tipe Rotating Trio Exchange terhadap Hasil Belajar Peserta Didik pada Mata Pelajaran Ekonomi Kelas X IPS di SMA Negeri 1 Tanjung Raja* [Skripsi, Universitas Sriwijaya].

Shoimin, A. (2017). *68 Model Pembelajaran Inovatif dalam Kurikulum 2013*. Yogyakarta: Ar-Ruzz Media.