Cooperative Learning Model of Group Investigation Technique in Economic Learning

Nofriansyah1, Sri Rahayu2, Jery Wardiman3

1,2Doktoral Pendidikan Ekonomi, Universitas Pendidikan Indonesia, Bandung
3Magister Pendidikan Ekonomi, Universitas Negeri Padang, Padang
nofriansyah10@upi.edu, srirahayu90@upi.edu1, jery.wardiman@student.unp.ac.id3

Abstract

This study aims to analyze the effect of cooperative learning models with Group Investigation techniques in learning economics. The research method used is a literature study by analyzing various relevant previous studies. The results showed that the Cooperative Learning Model of Group Investigation technique can improve student learning outcomes in economic learning. The conclusion of this study suggests the application of the Group Investigation technique in learning economics to improve the quality of education.

Keywords: Group Investigation Technique, Learning Outcomes.

INTRODUCTION

Teaching and learning is an important activity at all levels of education, and teachers and students are the most active parties in the learning process. According to a study conducted by Nofriansyah et al., (2022) the purpose of learning is to obtain knowledge that arises from experience and is based on experience, and then seek students' experiences and seek new knowledge to become new knowledge. To increase student activity, a teacher must have varied learning, so that students are directly involved in the learning process applied by the teacher, so the teacher must choose the right learning model so that student activity in the classroom increases and learning objectives are achieved according to the teacher's wishes (Nofriansyah et al., 2018).

The learning model is a plan that can be used by teachers to guide every lesson. Thus, learning goals can be achieved successfully. The use of learning models in the learning and learning process aims to help students understand each teaching material appropriately and correctly (Nurul Hikmah, 2024). Meanwhile, according to Joyce (2019) Learning model, book, movie, computer, curriculum, etc. It is the guidance of the teacher in the teaching and learning process in the preparation of lessons or courses that include Learning methods are often organized according to different principles or principles as stages of development. The learning model, which is generally based on the learning process, is divided into four learning types.

According to Joyce (2019), there are four families of learning models that can be used by educators in the learning and learning process, including: (1) information processing model; (2) personal model; (3) social interaction model; and (4) behavioral model. Economic learning in schools is integral in preparing students to understand basic economic concepts and develop the skills necessary to participate in an increasingly economically complex society. However, the fundamental challenge in the conventional approach lies in the tendency of teacher-centered learning and Lack of active participation of students in the learning process. Traditional passive learning models are often unable to stimulate students' interest optimally, thus affecting their understanding of the economic concepts taught.

The problem that arises is the lack of active participation of students in discussions and learning activities; This will result in a complete understanding of economic instruments and hence the results of the students will not be good. The reason for this is the lack of student activities in schools. Learning activities are activities that students engage in while participating in learning in the classroom. This process can be applied as a learning process. When students are not active in learning, their energy decreases, their attention to the learning process decreases and they tend to change (Vhalery & Nofriansyah, 2018). Non-interactive learning approaches tend to make students...
spectators in the educational process, rather than active actors in constructing knowledge. Although many studies have investigated various active learning methods, there is a lack of literature examining the use of group work techniques, particularly in the field of economic learning. Primary research has often focused on specific methods or cooperatives in general, without examining in depth how group research techniques can be used to improve economic understanding and student engagement. This research focuses on one type of social learning process, namely group learning. The group learning model is a learning model that aims to improve students' understanding, critical thinking skills and cooperation skills in learning, and emphasizes student participation, active participation, and the development of social and interpersonal skills (Rizki et al., 2022). Meanwhile, according to the survey results by Santyasa et al., (2019) the cooperative learning model of group investigation technique is a learning model that involves collaborative learning activities where students work in groups to investigate and discuss problems related to the topic being studied so as to enable students to be actively involved in the learning process through investigation and discussion.

This study aims to close the knowledge gap by using group research techniques to improve students' understanding of economics. This research, with a specific focus on financial economics, is expected to provide empirical evidence on how this approach can be effectively used to improve student learning. The uniqueness of this work is its contribution to the development of modern and useful strategies for solving problems in the study of economics in schools. It is expected that this research will not only bring new information to the teaching methods literature, but also provide practical suggestions to teachers on choosing the best teaching techniques for the quality of economics education. Therefore, this study is expected to form the basis for the development of curricula and learning strategies and skills that meet and respond to students' needs in understanding economics and applying it to their lives.

RESEARCH METHODOLOGY

The research method used in this study is literature review. Data were collected from various sources such as scientific journals, books and articles on cooperative learning and group work techniques. The analysis was conducted to identify major themes, key findings, and conclusions across a variety of published studies.

RESEARCH FINDINGS AND DISCUSSION

Cooperative Learning Model of Group Investigation (GI) Technique

The idea of the group research model comes from a philosophical perspective on learning theory. You need to have a friend (helper) to learn. In 1916, John Dewey wrote the book 'Democracy and Education'. In this book, Dewey introduced the idea of education that the classroom should be a mirror to society and useful as a laboratory for learning about real life. Dewey's theory was put into practice through the research method developed by Herbert Thelen's team.

The cooperative learning model of group investigation (GI) technique is one of the collaborative learning approaches where students work in small groups to investigate and explore a particular topic in depth. In this model, students are not only recipients of information from the teacher, but also creators of knowledge through discussion, experimentation, and discovery together with their group members. According to a study conducted by Handayani et al., (2021) the group investigation learning model is interpreted as a learning approach that involves students in a group investigation process to understand certain concepts or problems in depth. In this model, students are actively involved in planning, carrying out, and evaluating their own investigations with the guidance of a teacher or facilitator.
According to a study conducted by Anggraini & Nazip, (2023) the group investigation learning model is a group learning model in which students work together in small groups to answer questions together, lead group discussions, plan and carry out cooperative projects. Students are directly involved in planning what to investigate and how the investigation will proceed. Meanwhile, according to Khairalina, (2022) the group learning model is a collaborative learning method in the group inquiry type, which is one of the ways for students to work together in groups or groups. In this learning style, students are expected to be more active in the classroom, talking to group members and searching or researching for materials or questions from the teacher.

The study according to Abdul (2023) regarding the group investigation learning model is one type of model that emphasizes the participation and activeness of students in finding their own subject matter through various available sources, such as textbooks or the internet. This approach helps students to develop independent thinking and communication skills. Meanwhile, according to a study conducted by Indrianingsih (2017) it is said that group investigation learning offers a comprehensive approach in active, collaborative, and problem-based learning, which not only improves students' understanding of the subject matter, but also develops relevant skills for life outside the classroom. Collaborative group research requires students to have good communication skills and group management skills. A body of research on types of collaborative learning can train students to develop independent skills (Khairalina, 2022).

Based on some of the ideas above, we can conclude that the group learning method is shown as a learning method that prioritizes student participation, because students not only receive information from the teacher, but also act as producers of knowledge through research and discussion in education small groups. This means that group work is not a traditional learning method, but a model that encourages the creation of a modern environment of people, gives students the ability to be independent and empowers the learner.

Characteristics of the Group Investigation

According to Slavin (2010), the characteristics of group learning (group learning) are as follows:

a. Determine topics and organize students into groups:
   1. Students research multiple sources, create multiple points, and classify suggestions.
   2. Students work in groups on a topic of their choice.
   3. The teacher assists in gathering news and provides knowledge.

b. Task Planning:
   Student plan together about:
   ➢ What will be learned?
   ➢ How will it be learned?
   ➢ Who will do what?
   ➢ For what purpose are they investigating this topic?

c. Preparing the Final Report:
   1. Each group decides on the key messages of their topic.
   2. Each member prepares what will be reported and how they will organize their presentation.
   3. The group's vice-chair organizes an event committee for presentation planning.

d. Presentation:
   1. Lessons are taught in different ways in all courses.
   2. The end of the speech should captivate the audience.
   3. The listener evaluates and delivers the presentation based on the agreed points.

e. Evaluation:
   1. Each student contributes their thoughts on the topic discussed.
2. Teachers and students work together to evaluate the learning process.
3. Learning assessments must evaluate the highest levels of thinking.

Syntax/Steps of the Group Investigation

The syntax of the group investigation learning model is as follows:

<table>
<thead>
<tr>
<th>Stages</th>
<th>Activities</th>
</tr>
</thead>
</table>
| 1: Identifying the Topic and Organizing Students into Groups | a. Students research several sources, propose a number of topics, and categorize the suggestions.  
   b. Students join groups to study a topic of their choice.  
   c. Team members are formed and should be divided according to students' interests.  
   d. The teacher helps gather information and facilitates organization.  
| 2: Cooperation Planning | The teacher plans the study, the students plan together: What are we learning? How will we learn? who does what? (division of labor) for what purpose or purposes are we investigating this issue?  
| 3: Conducting The Investigation | a. Students collect data, analyze the data, and draw conclusions.  
   b. Each member of the group contributes to the group's efforts.  
   c. Students share, discuss, explain and coordinate all ideas.  
| 4: Analysis and Synthesis | a. Team members determine the core message of their project.  
   b. Born team members plan what they will report and how they will present their presentations.  
   c. Group representatives form an action committee to coordinate the demonstration.  
| 5: Presenting the Final Report | a. Interviews are conducted in different ways in all classes.  
   b. Born in the presentation must attract the audience.  
   c. The audience evaluates performance and achievements based on criteria set by all students.  
| 6: Evaluation | a. Students comment on each other's topics, assignments, and experiences.  
   b. Born in teachers and students work together to assess student learning.  
   c. Learning assessment should assess higher order thinking.  

(Source: Joyce, 2019)

Strengths and Weaknesses Group Investigation Technique Learning Model.

The strength of the group investigation (GI) learning model is as follows:
1. Stimulation of Active Involvement: Group research encourages students to actively participate in the learning process. Through small group work, students can be directly
involved in investigation, discussion, and decision-making, which has the potential to increase learning motivation and understanding of the concepts learned (Rohenan, 2023).

2. Collaborative Skills Development: The group investigation learning model encourages students to work together and collaborate. In a group context, students learn to share ideas, work together in problem solving, and respect diverse opinions, which can develop social and collaborative skills essential for social life in society (Khairalina, 2022).

3. Problem-based Learning: The group investigation learning model encourages students to overcome challenges and answer complex questions through a process of inquiry. This allows students to link theory with practical applications in everyday life, thus increasing the relevance of learning and knowledge transfer ability (Illyan dan Basuki, 2018).

4. Improved Critical Thinking Skills: By asking questions, analyzing evidence, and reaching conclusions based on data, students engage in a deep critical thinking process (Ainiyah et al., 2022). This process helps them to critically assess information and develop the ability to make rational decisions.

5. Strengthening Social Connectedness: Cooperation in groups can improve social relationships between students. They learn to support, respect, and value diversity, creating an inclusive and supportive learning environment (Eviyanti et al., 2021).

6. Giving Personal Responsibility: In group learning, each group is responsible for the success of the group. This encourages students to take personal responsibility for their contribution to the group as well as the final outcome of the investigation process (Supiandi & Ege, 2019).

While the weaknesses of the group investigation learning model are as follows:

1. Dependence on Group Work: Not all students may have good collaborative skills or be able to work effectively in groups. Some students may tend to be passive or rely on more active group members, resulting in an imbalance in the contribution of group members (Siew & Chai, 2024).

2. Group Management Difficulties: Group management is a challenge for educators. Managing group dynamics, resolving conflicts between members, and ensuring every group member is equally involved can be a complicated and time-consuming task (Made et al., 2015).

3. Potential for Student Neglect: In large groups, there is a risk that some students may be overlooked or less engaged in the learning process. This can lead to gaps in achievement between students.

4. Time Required: The implementation of the group investigation learning model may require more time than traditional learning methods, especially in terms of planning, investigation, and group presentation (Belmekki & Baghzou, 2022). This can be an obstacle in time-constrained learning contexts.

5. Lack of Student Independence: In some cases, students may be used to more directive learning approaches, such as lectures, and may face difficulties in taking their own initiative in exploring topics and solving problems independently.

6. Ineffective Grouping: Inappropriate group formation or lack of diversity in group composition can hinder the effectiveness of the group investigation learning model (Zorlu & Sezek, 2019). Groups that are unbalanced in terms of ability, interest, or background may have difficulty in achieving learning objectives.

Discussion
The Effect of Cooperative Learning Model Group Investigation Technique on Economic Learning Outcomes

Research conducted by Darmian (2021), he said the analyzed data describing students'
academic performance was collected in final examinations in both the first and second cycles. The results showed that the low score varied from 25 to 60, the high score varied from 80 to 90, and the average score varied from 65.63 to 82.29. From a theoretical perspective, this study has benefits in expanding the existing theoretical framework by observing the impact of the group investigation method on student learning outcomes in economics subjects, which has the potential to improve the achievement of minimum completion criteria. From a practical perspective, this study provides benefits for students in improving evaluation results to achieve KKM, developing an attitude of respect for the opinions of others, increasing understanding of subject matter, and increasing students' active participation in the learning process. For teachers, this research can enhance their performance, deepen their understanding and experience in the teaching process, and improve their knowledge of learning management.

Research conducted by Handayani Et Al., (2021) with the title "differences in student learning outcomes using a cooperative learning model of group investigation type with a conventional learning model" shows that: The research findings indicate the following:

1. Group Investigation Model (Experimental Class): there is a significant improvement in student learning achievement between the initial measurement (pretest) and the final measurement (posttest). the average pretest score increased from 38.81 to 85.79, with an n-gain of 0.75, indicating a high level of improvement;
2. conventional learning model (control class): there is also an improvement in student learning outcomes between the pretest and posttest. the average pretest score increased from 37.86 to 70.72, with an n-gain of 0.52, indicating a moderate level of improvement;
3. comparison of models: at the final measurement (posttest), students using the group investigation model (experimental class) had an average score of 85.79, while those using the conventional learning model (control class) had an average score of 70.72, indicating a greater improvement with the group investigation model.

Research by Latuputty (2021) titled "Applying the Group Investigation Learning Model to Improve Economic Learning Outcomes for Class X SMA" shows that the group investigation model positively impacts students by fostering creativity, although not all students are actively involved due to shyness. Overall, the application of the group investigation model was observed to be very effective, particularly in the context of Economics.

Research by Sumi’at, (2021) titled "Improving Economic Learning Outcomes through the Group Investigation Learning Model for Distant Class Students" shows that there was an increase in the learning outcomes of economic subjects for class XII IPS.5 in the odd semester at SMA Negeri 1 Gebog Kudus Regency in the 2018/2019 academic year. All 26 students managed to reach or exceed the Minimum Completion Criteria (KKM) value of 65 through the application of the group investigation learning model. This indicates that the use of the group investigation learning model has a positive impact on the learning process, learning outcomes, and assessment.

CONCLUSIONS

In the ever-expanding world of education, the learning model is becoming one of the most important keys that determine the efficiency and performance of working methods. Group investigation (GI) has emerged as one of the most attractive ways to improve the quality of learning in various fields of education. From the research and analysis presented, we can confirm that group investigation (GI) learning offers many benefits. GI gives students the opportunity to do this actively participate in the learning process, increases collaboration between students, encourages problem solving, and develops social and emotional skills.

Additionally, the group learning method allows students to actively participate in scientific research through questioning and discussion in small groups. Based on the results of the literature review, we can conclude that the cooperative learning method and group research techniques have
a positive impact on improving the quality of economics education, especially on improving learning outcomes in 'economics' subjects. The above results underscore the importance of group research-based approach to education, as well as the challenges and opportunities associated with its implementation.

REFERENCES
1%0Ahttp://dx.doi.org/10.1016/B978-0-12-420070-8.00002-7%0Ahttp://dx.doi.org/10.1016/j.jab.2015.03.024%0Ahttps://doi.org/10.1080/07352689.2018.1441103%0Ahttp://www.chile.bmw-motorrad.cl/sync/showroom/lam/es/


