

## Development of Learning Models in Madrasah in Minority Islamic Area

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### ABSTRACT

*This research was conducted in three areas that are included as Muslim minorities in North Sumatra, namely: Kabanjahe, Sidikalang, and Central Tapanuli. This study aims to determine: (1) the learning process that took place in the madrasa before using the group investigation (GI) model. (2) Knowing the learning process in the madrasa after using the group investigation model. (3) Knowing whether there is an increase in student engagement and learning outcomes after using the group investigation model. The results of the application of the group investigation model in learning are known to increase student engagement and overall learning outcomes. This is due to the fact that learning is dominated by student activities (student dominated class). Meanwhile, before the group investigation model was applied, the learning process was dominated by teacher activities (teacher dominated class).*

**Keywords:** Development, Learning Model, Group Investigation.

### ABSTRAK

Penelitian ini dilaksanakan pada tiga daerah yang termasuk ke dalam Muslim minoritas di Sumatera Utara, yaitu: Kabanjahe, Sidikalang, dan Tapanuli Tengah. Penelitian ini bertujuan untuk mengetahui: (1) Proses pembelajaran yang berlangsung di madrasah sebelum menggunakan model *group investigation* (GI). (2) Mengetahui proses pembelajaran di madrasah setelah menggunakan model *group investigation*. (3) Mengetahui apakah terjadi peningkatan keterlibatan dan hasil belajar siswa setelah menggunakan model *group investigation*. Hasil penerapan model *group investigation* dalam pembelajaran diketahui dapat meningkatkan keterlibatan dan hasil belajar siswa secara keseluruhan. Hal ini disebabkan dalam pembelajaran lebih didominasi pada aktivitas siswa (*student dominated class*). Sedangkan sebelum diterapkan model *group investigation*, proses pembelajaran lebih dididominasi pada aktivitas guru (*teacher dominated class*).

**Kata Kunci:** Pengembangan, Model Pembelajaran, *Group Investigation*.

### A. INTRODUCTION

Learning problems (PAI) are still something that needs to be considered, even in madrasah. Factually, madrasahs are Islamic educational institutions that are subject to religious institutions (Syafaruddin, *et.al.*, 2020). However, until now the process of transference and internalization of religious education values in madrasahs has not occurred optimally. The learning process is an

indicator to measure the quality of student learning (Alfiansyah, *et.al.*, 2020). Effective PAI learning does not only fulfill cognitive aspects (knowledge), but also how to strengthen affective aspects (attitudes) and virtues and psychomotor (skills) in practicing religious values in students' daily lives.

Based on the author's initial observations in May 2019 it shows that the learning process is too dominated by

teacher activities. This means that the teacher conveys more learning material while students tend to accept it as a truth that does not need to be criticized anymore, so that the opportunity for students to participate actively, construct knowledge and gain direct experience from what they learn they cannot feel.

The researcher's interview with several students showed that the level of students' understanding of the PAI material was low. One of the PAI teachers revealed that in the learning process there was not enough room for students to learn. The performance of teachers in madrasas with minority Islam in implementing PAI learning can be very sub-optimal. This is based on facts on the ground which show that. First, PAI teachers who are generally not civil servants lack references to innovative learning models, so they often use the lecture model when delivering material. Second, PAI teachers lack confidence. This affects the mastery of the class. Class dynamics have not been fully explored. The teacher still seems to master the material and is not able to manage the class well. Third, the lack of direction and guidance from education supervisors in guiding PAI teachers to prepare, select, plan and implement learning. Many PAI teachers have difficulty in realizing various innovative learning models in the lesson plans, and fourth, the environment

is not supportive, including learning facilities and infrastructure.

Such learning conditions are thought to be due to the teacher's lack of understanding and mastery of innovative learning models. In contrast, the learning process carried out by the teacher is without clear patterns and models and tends to be teacher-dominated class. The teacher's lack of understanding and mastery of innovative learning models will greatly affect the low quality of learning and PAI learning outcomes for students in minority Islamic areas (Dairi, Karo, and Tapteng districts).

One of the appropriate innovative learning models in PAI learning is Group Investigation (GI), because it can increase cooperation, participation, and grow students' social competence, especially in terms of student involvement, activeness, togetherness and responsibility. GI is a learning model that can encourage and provide opportunities for students physically, mentally, and emotionally to be actively involved in the learning process. Various efforts to eliminate problems related to the PAI learning process in madrasas in minority areas above need to be carried out continuously. On that basis, it is deemed necessary to improve and renew the PAI learning process, in order to increase the effectiveness and quality of the learning process.

Based on the explanations above, it can be stated that PAI learning is still not effective. Therefore, in this study, an effective PAI learning model will be designed to improve student learning outcomes.

## B. STUDY ON THEORY

The theories that underlie Group Investigation (GI) learning include: Joyce, Weil & Calhoun (2000), Johnson & Johnson (1994), Nurhadi (2004), Slavin (1994), Elliot (2003), Soekamto (1997), Prawiradilaga (2008), Sardiman (2007), Kemp (1977), Gunter, *et.al.* (1990), dan Burden & Byrd (1999). Joyce, Weil & Calhoun, (2000) further suggest, *that a model of 'teaching is a plan or pattern that we can use to design face to face teaching in rooms or tutorial settings and to shape instructional materials and curricula.*

Based on the opinion above, it can be understood that the learning model is a guide for teachers in planning learning in the classroom starting from preparing learning tools, media and aids to evaluation tools that lead to efforts to achieve learning objectives. Joyce suggests that there are five important elements as a description of a learning model, namely: (1) syntax, (2) social system, (3) reaction principles, (4) support system, and (5) instructional impact and accompaniment impact (Joyce, Weil & Calhoun., 2000).

Gunter, *et.al.* (1990) defines an instructional model is a step-by-step procedure that leads to specific learning outcomes. The same thing is also expressed by Burden & Byrd (1999) that an instructional strategy is a method for delivering instruction that is intended to help students achieve a learning objective. Thus, the learning model is a conceptual framework that describes a systematic procedure in organizing learning experiences to achieve learning objectives.

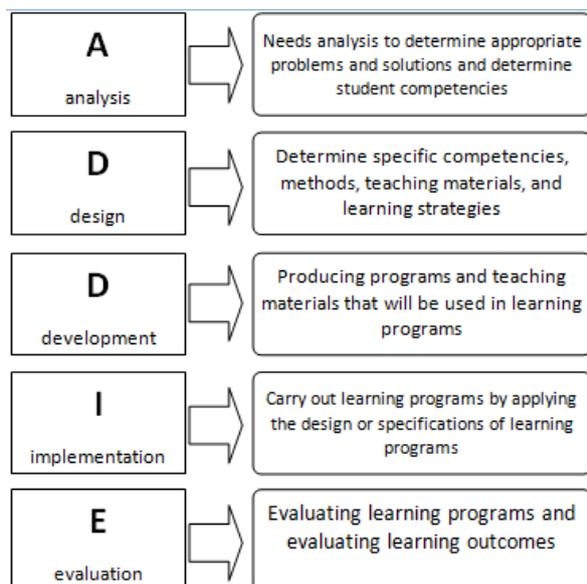
## C. METHOD

This study aims to produce a modification of the GI learning model that is applicable and acceptable (according to the learning needs and characteristics of students). In detail, the development objectives in the research are: (1) Describe the implementation of learning, (2) Design an appropriate GI model, (3) Develop an appropriate GI model, (4) Test the effectiveness of the GI model implementation in fostering student collaboration and participation, and (5) Evaluating the implementation of GI model learning.

### 1. Model Development

This study using RnD aims to develop a GI model that is suitable for learning needs in madrasahs. The development model using ADDIE is:

Analysis, Design, Development, Implementation, and Evaluation (Mollenda., 2003).



## 2. Research design

The implementation stage of the GI model development in PAI subjects based on the ADDIE model, namely: *analysis, design model group investigation, development, implementation model, and evaluation model.*

## 3. Product Trial

Product trials are carried out to see the applicability, practicality, and feasibility of a model so that it can be developed in learning. Product testing is focused on implementing the model in order to observe possible obstacles in its development. To obtain accurate data about applicability, the practicality of the model developed by the researcher asked 2 observers.

## 4. Model Criteria

This model was developed based on theories, concepts and field findings. The model is built based on theoretical studies, field information, and taking into account the expected criteria. The criteria for the model are: a) clear objectives, b) realistic, c) in accordance with the functions of existing components, d) easy to follow, and e) flexible.

## 5. Model Test Subject

The test subjects of this model were conducted on madrasa students.

## 6. Data Types and Data Sources

The data in this study are qualitative data which is related to the application of GI in learning. While quantitative data to determine the level of achievement of learning outcomes from the development of the GI model by looking at the differences in the results of the original model application test and the modified model application test results with statistical tests (t test) on learning outcomes before and after application.

## 7. Data Collection Instruments

To collect data that is quite varied in this research and development, observation techniques, interviews and document analysis, and tests are used.

## 8. Data analysis technique

This study uses qualitative and quantitative analysis. Qualitative data analysis is defined as the process of systematically searching for and arranging

interview transcripts, field notes, and other materials to increase understanding and report to other parties about the data that has been found (Bogdan & Biklen., 1982). Quantitative analysis is focused on knowing the level of effectiveness in achieving learning outcomes from the development of the applied model.

### 9. Data Validity Check

Efforts to check the validity of the data in this research and development by increasing a high degree of confidence in the data, these efforts are carried out through extended participation, and persistence of observations.

## D. RESULTS AND DISCUSSION

### 1. Implementation of the Learning Process

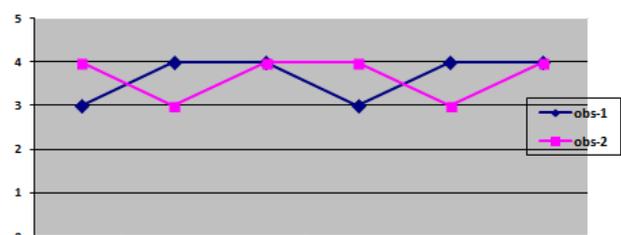
As one of the subjects that equip students with the knowledge, attitudes and skills that must be followed by students in madrasas, of course it has goals to be achieved.

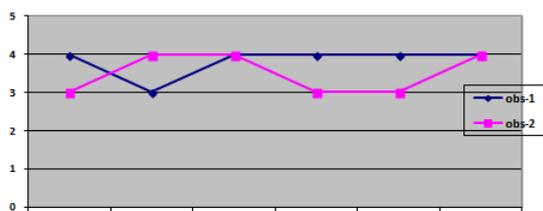
Based on student study reports, it is also known that some of the problems faced. One of the problems is that the learning process is not yet optimal so that the quality of learning outcomes is also relatively low (there are students with scores/points of 63 and there are even many who get below the required completeness), and the low level of service to students, even though the

implementation of learning is carried out. teachers reach 90% to 100% attendance, but the quality of service to students is relatively lacking.

The results of the interview found that PAI teachers had carried out the learning process in accordance with the specified teaching stages. The stages of implementing PAI learning include preparation, introduction, core activities, and closing activities. In the preparation activities, the analysis process is focused on the preparation of SAP. In the preliminary activity, the analysis focuses on the teacher's initial activities before starting the lesson, it is necessary to connect the learning material with the previous material, it is necessary to convey the learning objectives. In the core activity, the analysis process is focused on learning activities. While in the closing activity, the analysis is focused on the assessment activity.

Meanwhile, based on the results of the researchers' observations on the application of the original GI learning model with material practicing honest, responsible and caring behavior, it can be seen in the following figure:



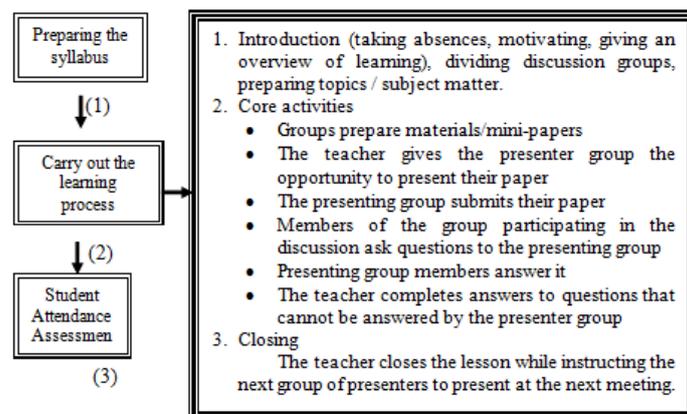


Based on the diagram, it appears that the implementation of the original GI model learning process with the material of practicing honest, responsible and caring behavior at the first and second meetings has not been carried out optimally, and overall each component and steps have not been implemented properly. The two observers at each meeting gave a score of 3 to 4 from a score range of 1 to 5 in each stage and step of learning.

Based on the findings above, it can be concluded that the teacher has implemented the GI model learning, but the process has not been running optimally, so it has not involved many students actively even though students seem enthusiastic in participating in learning. This proves that the learning process has not been optimally carried out.

Furthermore, it is necessary to design a model that can involve all students actively participating in the learning process in the madrasa with a pleasant atmosphere and motivating students to learn. From the findings that the researchers did, it can be illustrated that the learning model applied by the

teacher can be seen in the following picture.



## 2. Designing the Group Investigation learning model

In the learning process, it should not only prioritize aspects of learning outcomes, but also process aspects, such as activeness, involvement, cooperation, responsibility, and students' critical/reasoning power. The implementation of learning that takes place in madrasas is currently more dominated by teacher activities where students only act as learners who do not have the opportunity to do activities (learning to do).

The initial draft developed by the researcher relates to the steps in developing the GI learning model that will be applied, including: learning program units and teaching materials/materials.

### a. SAP Development

#### 1) Learning objectives

Learning objectives are the direction in which students will be

taken through the learning process carried out. In this study, learning objectives are formulated based on the basic competencies and indicators that have been set.

## 2) *Teaching materials*

Teaching materials are used as materials to achieve the goals that have been set. Therefore, in compiling the unit of learning events, materials that are relevant to the objectives and indicators that have been set must be determined. The material chosen is the material contained in the syllabus, namely: practicing honest, responsible and caring behavior. This material was chosen according to the syllabus used in the madrasa.

## 3) *Learning methods and models*

Learning practices that have taken place so far can be said to be not optimal, meaning that learning where the dominance of student activities has not been seen optimally and on the contrary the teacher's activities are too dominant and even decisive. Therefore, to increase student learning activities and reduce teacher dominance, this study used a group investigation model.

## 4) *Determine the learning steps*

### a) *Choose a topic*

The activity of choosing a topic is included in the introductory part of a lesson. The teacher prepares

four main topics and teaching materials to be used as investigation material.

### b) *Cooperative planning*

After each group has chosen a topic, the next step is cooperative planning. This activity is included in the initial part of the learning activity. In this activity, each group determines the sub-topics to be investigated.

### c) *Implementation (investigation)*

This stage is a continuation of the previous stage (stage 2) contained in the core activities of a learning. At this stage, students conduct investigations and collect information from the tasks given by conducting discussions.

### d) *Analysis and synthesis*

This stage is still included in the core activities of learning. At this stage students analyze the information and investigation results that have been collected during stage 3 and plan how the results of the investigation and discussion can be presented in the form of group reports as presentation material.

### e) *Final product presentation*

This stage is the final part of the core activity in learning. Each group was asked to present their group report based on a

predetermined schedule. Other groups are asked to provide feedback on the presentations of the presenter group, or ask questions to the presenter group, and the problems that develop are discussed further through class discussions.

#### f) Evaluation

This stage is the last stage of the group investigation learning model and in the closing part of a lesson, the teacher evaluates in the form of an assessment of the final investigative report.

#### 5) Media and Learning Resources

Media and learning resources in the form of laptops, text books, textbooks, the surrounding environment, or anything that can contribute to students to achieve the competencies that have been set.

#### 6) Learning evaluation

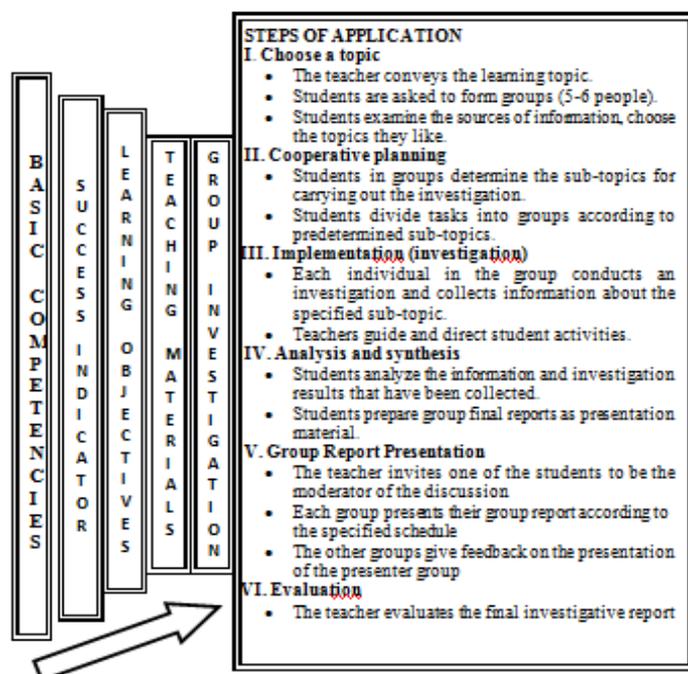
Learning evaluation is one component that must be carefully designed so that it is relevant to the competencies that have been determined.

### b. Teaching Material Design

In accordance with the learning model used, namely group investigation, in this study teaching materials were prepared in the form of open-ended questions and in accordance with the competencies to be achieved. Teaching

materials are prepared with the intention of facilitating learning activities according to the model used, namely group investigation.

Based on the results of the analysis of the implementation of learning, the design of the Group Investigation learning model that is feasible and suitable to be applied is as follows:



### 3. Developing a GI Model

In the step of developing the GI learning model, there are several activities that must be carried out, namely developing an existing model design by compiling steps and techniques that are appropriate and relevant to learning needs, characteristics and needs of students and materials. As a reference in developing this GI learning model, the researcher put forward the original model before the development was carried out.

Table 4.3. Original Group Investigation Model before Development

Step 1	Step 2
Students analyze situations that are not clear	Students react to the situation
Step 3	Step 4
Students formulate and organize tasks to be investigated	Conduct independent or group studies
Step 5	Step 6
The group analyzes the progress and process of the presentation report	Evaluating the final investigative report

Source: Joyce, Weil & Calhoun (2000)

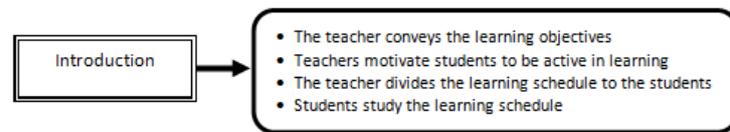
Based on the original GI learning model above, the model was developed and adapted to the learning needs, characteristics and needs of students as well as the characteristics of the material. This development includes the steps of the learning model that must be implemented by the teacher in the learning process. The development of the model in this study follows the systematics: basic competencies, indicators of success, learning objectives, teaching materials, learning activities with GI implementation steps, evaluation of the final report.

#### 4. Implementing the GI Model

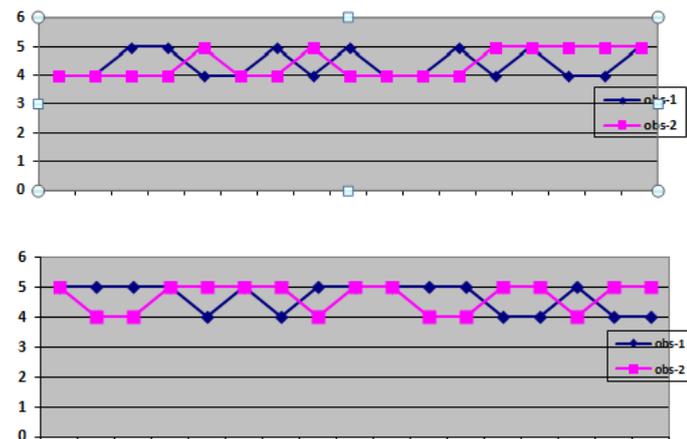
After the model is developed, then it is implemented in the classroom with the aim of seeing the applicability of the model in learning and the effectiveness of the developed model. The process of applying the GI model follows 7 steps and is accompanied by the following learning scenarios:

##### *Preliminary stage*

In the preliminary stages of learning activities include:



The results of observations and data collection can be presented below



In addition, the model applied was also well received by students as a good model developed to improve the quality of learning, this model is also recognized by students providing a lot of knowledge, experience, responsibility, ability to express opinions, also practical in the sense that the costs incurred are balanced. with the results achieved compared to the usual discussion activities. Based on the descriptions above, through interviews with researchers, it is known that the application of the GI model can: (a) encourage students to follow a more active process, (b) increase knowledge, understanding in achieving maximum student learning outcomes (c) foster social attitudes and responsibility for students.

## 5. Evaluating GI Model Learning

The data on the achievement of student learning outcomes obtained were analyzed by conducting a t-test to see differences in learning outcomes after the original model was applied and after the development model was applied. This analysis uses the SPSS.11.5 program. Based on the results of the analysis, there is a significant difference between the results of applying the original model and the results of applying the modified model, where the results of the modified model application test ( $M=85.67$ ) are higher than the results application test with the original model ( $M = 67.00$ ),  $t(20) = 72.774$ ,  $p = .000$ ). This means that there is a significant difference between learning outcomes before the development model is applied and after the development model is applied during the trial.

## Discussion

### 1. Analysis of Learning Implementation

The results showed that the teacher had implemented the GI model learning, however, the process was not running optimally, so it had not been able to actively involve students during the process, even though the students looked enthusiastic. This proves that the learning process has not been optimally carried out. Among the factors that cause the learning process to be not optimal are firstly the

lack of teacher mastery of learning models and strategies that are able to activate students both individually and in groups, secondly the teacher's reluctance to change teaching behavior that they are used to practicing, thirdly the lack of students taking advantage of available opportunities. to be active in the learning process.

In preparation for learning, teachers seem to have not prepared SAP in accordance with process standards as mandated by Permendiknas No 41 of 2007. However, they only use the syllabus as a guide for implementing learning. Then, in classroom management, teachers still use the traditional model. Classroom management, including the arrangement of student seats, which should be adjusted to the learning objectives and learning models used, has not been implemented. In group discussions, the management of student seats contributes greatly to the achievement of student learning outcomes.

In the implementation of learning, besides teachers have not played an effective role in improving the quality of Islamic Religious Education learning, they have also not made students actively involved through group activities and collaboration as mandated by the Minister of National Education Regulation No. 22 of 2006 concerning active, creative, effective, and fun learning and Ministerial

Regulation No. 41 of 2007 concerning Standards for the Learning Process, that the learning process carried out by educators must be seen as a learning process that empowers and explores the potential of students. For this reason, the new paradigm of education in the field of the learning process is no longer centered on the teacher (teacher dominated class) but centered on students (student dominated class).

In the view of Tsoi, Goh, & Chia (2001: 1), the GI model philosophically departs from the constructivist paradigm, namely there is a situation in which students interact and communicate with each other with various information and work collaboratively to investigate a problem, plan, present and evaluate their activities. Therefore, the ideal form of learning is learning that provides opportunities for students to actively carry out learning activities. The learning model that is considered good in the view of constructivism theory is a democratic and dialogical learning model (Suparno, *et.al.*, 2002: 17). In this connection, student-based learning models include the GI model learning.

In addition, the implementation of learning evaluation has not been carried out optimally. This is illustrated by the findings of researchers in the field that the aspects that teachers emphasize in

conducting evaluations include student attendance, formative exams, semester exams. These data indicate that the implementation of the learning evaluation is only focused on achieving learning outcomes, and the teacher does not evaluate the effectiveness of the learning process, and the quality of the final investigative report. Mulyasa (2005: 131), the evaluation of learning can be seen in terms of the process and in terms of results. In terms of the process, learning is said to be of high quality and successful if all or at least the majority of students (75%) are actively involved, both physically, mentally and socially in the learning process. In addition, a quality learning process also shows a high enthusiasm for learning, a great enthusiasm for learning, and a sense of self-confidence in students. Meanwhile, in terms of results, learning is said to be of high quality and successful if there is a positive change in behavior in all students or at least most of them (75%).

Thus, it can be concluded that teachers in madrasas have not fully implemented and developed a learning process that is able to increase understanding and involve students actively in accordance with the demands of the national and current curriculum and more specifically in chapter IV article 19 paragraph (1) of the Government of the

Republic of Indonesia regulation number 19 of 2005 concerning National Education Standards that the learning process carried out by educators must be seen as a learning process that empowers and explores the potential of students.

Based on the results of research that has been done, it is necessary to design a modified model in the form of procedures or steps for implementing learning in accordance with learning needs. This is done to increase student activity to the maximum. Through the implementation of learning, it is necessary to improve as well as introduce a model that is in accordance with the competence of the subject, learning needs, and student characteristics. One of the models developed is the GI model.

## **2. Designing GI Models**

Based on the results of the analysis of the learning process in madrasas, it is illustrated that the current learning model has not provided space and opportunities for students to be more actively involved in developing their knowledge and understanding (learning opportunities). Under these conditions, the optimal learning process as expected is difficult to implement. To develop these abilities, the implementation of learning should be constructivist oriented which gives a large portion to students to actively construct their knowledge (student centered).

according to Vygotsky (1978), that knowledge is built by students through social interaction in the form of group involvement and cooperation. According to constructivism, knowledge is formed as a result of social interaction through a process of collaboration and group learning (Suparno, *et.al.*, 2002: 16).

Thus, the teacher must provide the widest opportunity for students to experience and discover, both individually and in groups in a dynamic and dialogical atmosphere. Brandl (2003: 15) revealed that the group investigation model of cooperative learning is oriented to the teacher's activities in designing group activities for students to replace the learning model that focuses on the lecture system (oral lectures). One of the learning models offered is through the GI model.

Therefore, it is necessary to design the GI learning model as an improvement to the learning model that has been applied by teachers so far which is more dominated by the role and activities of the teacher as the main source and person in charge of learning. As an effort to renew learning, the GI model must be arranged procedurally, systematically and practically by containing the main components of learning so that it can be easily guided and implemented in learning.

The results of this study illustrate that the design of the model developed by

the researcher is related to the development of the GI learning model that will be applied including: the main components of SAP which consist of KD, success indicators, learning objectives, teaching materials, and steps for implementing the model. This is because the curriculum that applies in madrasahs uses a science-based curriculum that educates students to be able to change their potential into meaningful competencies for their lives, these competencies must be possessed by students through optimizing the learning process with the Group Investigation model.

### **3. Developing a GI Model**

Based on the results of this research and developer illustrates that the GI learning model that has been designed must contain various main components of the learning process which include; KD, success indicators, learning objectives, teaching materials consisting of topics investigated by students, learning activities including models and learning steps, evaluation of learning outcomes. All the main learning components above can be further developed in the development of the GI learning model on the material. The development of this GI learning model is only carried out on teaching materials to practice honest and responsible behavior through the media. By referring to the main components of the learning process

mentioned above, the GI learning model can be developed to improve the quality and effectiveness of learning.

The development of this GI model contains stages and steps or phases that must be carried out by teachers and students in the learning process. These stages and steps include initial activities consisting of introduction, choosing a topic, cooperative planning. The core activities consist of implementation (investigation), analysis and synthesis, presentation of group reports. The final activity evaluates learning. These steps refer to the opinion of Sharan & Sharan (1992: 72), suggesting several steps for implementing Group Investigation as a learning model must begin with, first forming a group which includes topic presentation activities, clarifying topics to be investigated, identifying sub-subjects. topics and forming investigation groups, second planning which includes activities to clarify the tasks to be carried out and develop activity plans, third investigation implementation which includes activities to prepare daily activities, conduct research on predetermined topics, analyze, evaluate data and present data , the four organizing activities which include the steps of selecting the form of the report, planning and compiling reports, the five presentations covering presenting and responding to reports, the sixth evaluation,

covering the activities of determining criteria, clarifying the components being evaluated, checking against understandings obtained.

The steps in developing the model above are also in line with the views of Joyce, Weil & Calhoun (2000: 50) describing six interrelated steps of GI implementation as follows: firstly determining the topic and organizing students into research groups, the second group planning the investigation carried out, third the group conducted an investigation, the four groups planned and prepared the final report, the five groups presented the final report, the six teachers and students evaluated the final report.

The step of developing the model is applied in the form of learning activities that reflect student involvement and activity. In the preliminary stage, learning activities include; the teacher conveys the learning objectives, the teacher motivates students to be active in learning, the teacher divides the learning schedule, the students study the learning schedule. At the stage of choosing a topic, learning activities include; the teacher conveys the topic of learning, students are asked to form groups (5-6 people), students choose topics they like, students examine sources of information. At the cooperative planning stage, learning activities include; Students in groups determine the sub-

topics for carrying out the investigation, students divide tasks into groups according to the sub-topics that have been determined.

At the implementation (investigation) stage, learning activities include; each individual in the group conducts investigations and collects information about the specified sub-topic, the teacher guides and directs student activities. At the stage of analysis and synthesis, learning activities include; students analyze the information and investigation results that have been collected, students prepare group final reports as presentation material. At the stage of group report presentation, learning activities take the form of; the teacher invites one of the students to be the moderator of the discussion, each group presents the group's report according to the specified schedule, the other groups respond to the presentation of the presenter group. To determine the effectiveness of the achievement of student learning outcomes, the evaluation stage is carried out, learning activities include; the teacher evaluates the final investigative report.

Based on the explanation of the development of the GI model above, it can be concluded that the learning model that has been designed with learning components and systematic steps is generally easy to guide and implement by

teachers and students in increasing student activity and involvement in the learning process. Killen (1998: 143) uses the term group investigation with small-group work and student research as a learning strategy that emphasizes student involvement in a group to complete joint tasks, including collecting and analyzing data or various events that occur inside and outside the classroom.

The development of the group investigation learning model with the material of practicing honest and responsible behavior through the media was carried out to determine student involvement and the effectiveness of the application of the model to improving the quality of learning. In line with the above, Suparman (2001: 30) suggests that the development of learning models is more focused on the objectives of solving learning problems, improving the quality of learning activities, or creating conditions and situations that allow students to interact so that behavior change occurs through a process that includes design, production, and evaluation.

The results of the validation of the models and tools developed in the above teaching materials illustrate that the GI model and the tools used in the development of this model are declared valid by the validator and suitable for use. Because the development of this model is

designed systematically and in accordance with learning needs, student characteristics, characteristics of teaching materials and curriculum demands applied in madrasas that use a science-based curriculum. The teaching materials used in learning are prepared by the teacher, but are not presented in detail (complete), with the intention that students can discuss them with their group friends and look for them from various sources (other textbooks or the internet). This is in line with the concept of group investigation in which a “process of academic inquiry” occurs (Sharan & Sharan, 1992: 9).

Thus, based on the above development, it can be concluded that the group investigation learning model in PAI subjects can be implemented in the learning process.

#### **4. Implementing the GI Model**

Based on the results of the study, that the implementation of the GI learning model went well, this was evident from the results of observations of the learning implementation. Both observers gave a score of 4 to 5 from a score range of 1 to 5 for each of the learning steps that were applied. The results of the research above also illustrate that, a) The implementation of the group investigation learning model takes place according to the steps of model development. b) The application of the group investigation learning model has

been able to involve and activate students at every stage carried out. c) Implementation of the group investigation learning model can improve the quality of the learning process.

At the time of the implementation of the teaching material model, it was not presented in full and directly by the PAI subject supervisor, but the students had to look for it themselves, so that students became more active, busy looking for the information needed in source books or via the internet, cooperate with each other, and provide ideas. to complete group assignments. The Network Scientific Inquiry Resources and Connections (2003: 1) through its discussion revealed that:

*Group Investigation is a vehicle to encourage and guide students to be involved in learning. Students actively experience events that occur in class and communicate freely and cooperate in planning and carrying out investigations on the chosen topic, the success of a group is the contribution of each group member, even intellectually the results obtained are richer than the work done individually.*

The teacher goes around monitoring the groups discussing the assigned task while giving the little needed direction. The teacher's role in this constructivism theory is as a facilitator. Its task is to stimulate, help students to want to learn, evaluate whether students' ideas are in accordance with the ideas of experts or not (Suparno, *et.al.*, 2002: 17).

It is known that the implementation of the GI model that has been carried out by the teacher at the first and second meetings is generally well carried out, this can be seen from the increased understanding of students towards learning materials, increased cooperation, involvement, activeness and seriousness of students during the learning process. These indications of achievement are a form of superiority and comprehensiveness of the group investigation learning model that combines academic research, social integration, and social learning processes (Joyce, Weil & Calhoun, 2000: 53). This view is also confirmed by the results of research by Samaha & Del (2000) and Slavin (1983), that cooperative learning strategies broadly influence academic achievement and good socialization processes for students. However, in the implementation of this model the available time allocation is still lacking, so it needs to be added so that the results obtained are more optimal.

In addition, the model applied was also well received by students as a good model developed to improve the quality of learning, this model is also recognized by students who provide a lot of experience, knowledge, responsibility, ability to express opinions. As a constructivist-based learning model, the GI model strongly encourages students through their

investigative experiences to form new knowledge supported by a sense of mutual responsibility during the learning process. According to Vygotsky (1978: 9), that knowledge is built by students through social interaction in the form of group cooperation.

In line with the above opinion, constructivists argue, "knowledge is formed as a result of social interaction through a process of collaboration and group learning" (Suparno, *et.al.*, 2002: 16). The emergence of collaboration between students also by arguing between students can foster cognitive conflicts in students, thus encouraging them to actively form students' new knowledge, provide explanations, explanations and arguments with sentences that are easy to understand, especially when students defend their group's final report.

Based on the description above, through interviews with researchers, it is known that the application of the GI model can: (a) increase knowledge, understanding in achieving maximum student learning outcomes, (b) encourage students to participate in the learning process more actively, (c) foster a cooperative attitude and responsibility for students.

## 5. Evaluating GI Model Learning

Based on the results of the evaluation of the implementation of the

group investigation learning model that has been carried out, it shows that the achievement of student learning outcomes with the learning model developed in teaching materials to practice honest and responsible behavior through the media there are significant differences compared to the achievement of student learning outcomes with the GI model before the development of caring and caring material. mutual cooperation, both seen from the increased involvement and activity of students as well as the achievement of learning outcomes.

Improving student learning outcomes is a significant instructional impact of the application of the GI model that has been developed. This is due to an increase in the learning process in the form of student involvement, activity, and collaboration as an accompaniment impact that is manifested at each stage of model development during the learning process. As in the discussion of Djahiri (2004: 3) that simply cooperative learning is formulated as a group learning activity that is directed, integrated, effective and efficient, in the direction of searching/investigating/inquiring activities or studying something through involvement, cooperation processes and mutual assistance (sharing). so that productive/survive learning processes and outcomes are developed/achieved. In line

with the above view, Sukmadinata (2004: 21) reveals that quality learning can be seen from how far the learning interaction process is able to activate students. Learning no longer places students in a passive position as recipients of teaching materials given by the teacher, but as active subjects which are manifested in the form of investigations, brainstorming, discussions, arguments and ideas, both individually and in groups during the learning process.

## E. CONCLUSION

Based on the description of the findings and discussion above, it is concluded that (1) the learning process has been carried out in the madrasa well, but has not been optimal in the aspect of actively involving students during the learning process; (2) the design of the GI learning mode is used to provide opportunities for students to actively investigate in groups; (3) the development of the GI model is adjusted to the standard of the learning process, starting from the stages (initial activities), core activities to final activities.

## BIBLIOGRAPHY

Alfiansyah, M., et.al. (2020). "Kebijakan Internal Madrasah dalam Meningkatkan Mutu Pendidikan di MI Nurul Ummah Kotagede

Yogyakarta" *MAGISTRA: Media Pengembangan Ilmu Pendidikan Dasar dan Keislaman*, 11(1).  
<https://www.publikasiilmiah.unwahas.ac.id/index.php/MAGISTRA/article/viewFile/3460/3192>.

Bogdan, R.C., & Taylor, S. (2003). *Kualitatif Dasar-dasar Penelitian*. (A. Khozin Afandi, penerjemah). Surabaya: Usaha Nasional.

Bogdan, RC.,. Biklen, SK. (1982). *Qualitative Research for Education: an Introduction to Theory and methods*. Boston: Allyn and Bacon, Inc.

Borg, Walter, R & Gall, Meredith, D. (2003). *Educational Research: An Introduction*. New York: Longman Inc.

Borman, M, Kathryn. (2000). *Foundations of Education in Teacher Education"* dalam Handbook of Research on Teacher Education, a Project of the Association of Teacher Educators 1990. New York: Macmillan Publishing Company.

Brady, L. (2005). *Models and Methods of Teaching*. Australia: Prentice-Hall Pty. Ltd.

Branen, J. (1993). *Mixing Methods: Qualitative and Quantitative Research*. England: Avebury Ashagate Publishing Limited.

- Burden, P. R., & Byrd, D. M. (2009). *Method for Effective Teaching*, second edition. Boston: Allyn and Bacon.
- Burron, B. M. Lynn J. Ambrosio, A.L. (2003). The Effects of Cooperative Learning in a Physical Science Course for Elementary/Middle level Preservice Teachers. *Dalam Journal of Research in Science Teaching - the Official Journal of the National Association for Research in Science Teaching*, 30 (7), 697-707.
- Creswell, J. W. (2009). *Research Design Qualitative and Quantitative Approaches*. London, New Delhi: Sage Publications International Educational and Professional Publisher.
- \_\_\_\_\_. 1998. *Qualitative Inquiry and Research Design Choosing Among Five Traditions*. London, New Delhi: Sage Publications International Educational and Professional Publisher.
- Dahlan, M.D. (Eds). (2004). *Model-model Mengajar (Beberapa Alternatif Interaksi Belajar Mengajar)*. Cetakan Pertama. Bandung: Diponegoro.
- Gall, M.D., Gall, J.P and Borg, W.R. (2003). *Educational Research an Introduction*. Seventh Edition. Boston: Library of Congress Catalog-in Publication Data.
- Gay, L. R. (1976). *Educational Research; Competencies for Analysis and Application*. Columbus, Ohio: Charles E. Merrill Publishing Company.
- Gilles, Robyn M. (2007). *Cooperative Learning, Integrating Theory and Practice*. London: SAGE Publications.
- Grant, C.A. Walter, G.S. (2000). *Preparing Teachers for Diversity*. dalam Handbook of Research on Teacher Education, a Project of the Association of Teacher Educators (1990). New York: Macmillan Publishing Company.
- Gunter, M. A., Estes, T. H., & Schwab, J. H. (2000). *Instruction: a Models Approach*. Boston: Allyn and Bacon.
- Hurlock, E.B. (1974). *Personality Development*. New Delhi: Tata McGraw-Hill Publishing Company LTD.
- Johnson, D.W., Johnson, R.T., Holubec, E. J. (2004). *Cooperatif Learning in the Classroom*. USA: Association for Supervision and Curriculum.
- Joyce B., Calhoun E., Hopkins D. (2009). *Models of Learning, Tool for Teaching*. New York: Mc Graw Hill.

- Joyce B., Marshal W. Calhoun, E. (2000). *Models of Teaching* (sixth Ed.). USA: Allyn and Bacon.
- Kemp. Jerrold E. (1989). *Design effective Instructional*. Harper& Row, Publisher Inc.
- Kerlinger, F. (1986). *Foundations of Behavioral Research* (Third-Edtion). New York: Holt, Rinehart and Winston.
- McMillan J.H, Schumacher S. (2001). *Research in Education, Fith Education A Conceptual Introduction*. United State: Addison Wesley Longman, Inc.
- Miles, M.B, & Huberman, M.A. (1992). *Analisis Data Kualitatif*. Jakarta: Universitas Indonesia (UI-Press).
- Molenda, Michael. (2003). *In Search of Elusive ADDIE Model*. Indiana University.
- Moore, Gary W. (2003). *Developing and Evaluating Educational Research*. Boston: Litle Brown Company.
- Moore, Kenneth D. (2005). *Effective Instructional Strategies, From teori and Practie*. London: SAGE Publications.
- Prawiradilaga, Dewi Salma. (2008). *Prinsip Desain Pembelajaran*. Jakarta: Universitas Negeri Jakarta.
- Richey, R.C; Klein, James D & Nelson, W.A (2007). *Develomental Research: Studies of Instructional Design and Development*. Handbook of Research for Educational Communication and Technology. New York: MacMillan Simon & Schuster.
- Richey, I. & Walker, S. (2004). *Teaching training and learning A Practical Guide* (Third Edition). Great Britain: Biusiness Education Publisher Limited.
- Sanjaya, W. (2008). *Strategi Pembelajaran Berorientasi Standar Proses Pendidikan*. Jakarta: Kencana.
- Sharan, Y & Sharan, S. (2002). *Expanding Cooperative Learning Through Group Investigation*. New York: Teacher College Press.
- Slavin, R. (1994). *Educational Pshicology: Teory into Practice*. Prantice Hall: Englewood.
- Slavin, R.E. (2005). *Cooperative Learning: Theory, Research and Practice* (second edition). Boston: Allyn and Bacon.
- Spradley, J.P., (1980). *Participant Observation*. New York: Holt Rinehart and Winston.
- Sugiyono. (2007). *Metode Penelitian Pendidikan, Pendekatan Kuantitatif, Kualitatif, R & D*. Bandung: Alfabeta.
- Syafaruddin, *et.al*. (2020). "Manajemen Pembelajaran Pendidikan Agama Islam di SDIT Bunayya Pandan

Kabupaten Tapanuli Tengah"

*AULADUNA: Jurnal Pendidikan*

*Dasar Islam*, 7(1).

<http://repository.uinsu.ac.id/id/eprint/>

[8966](http://repository.uinsu.ac.id/id/eprint/8966).

