



IMPLEMENTATION OF DISCOVERY LEARNING MODELS ON LEARNING OUTCOMES OF ISLAMIC RELIGIOUS EDUCATION AT SMA NEGERI 4 BEKASI CITY

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Abstracts

The he quality and success of learning is influenced by the competency and accuracy of the teacher in choosing and using the learning model. The learning model is a plan or a pattern that is used as a guide in planning teaching and learning activities. The teacher can choose a learning model that suits the characteristics of the students. This study aims to determine the implementation of PAI lessons using the Discovery Learning learning model at SMA Negeri 4 Bekasi City, and to explain the constraints and supports for implementing the discovery learning model in improving student learning outcomes at SMA Negeri 4 Bekasi and how the PAI learning outcomes after using the discovery learning model. The research method used is a qualitative method with a descriptive approach by conducting interviews to gather information. The subjects of this study were high school level students. The results of the study explain that when the learning process in class takes place the teacher's role is as a guide and then assesses student learning outcomes. The discovery learning model is a form of various models that are widely used by educators in the teaching and learning process so that learning objectives are achieved in accordance with learning objectives.

Keyword:

Discovery Learning, Islamic Religious Education

Introduction

Education is essentially an effort to pass on auxiliary and guiding values in living life and at the same time to improve human destiny and civilization. Education is the pillars for forming an intelligent generation, a generation that is knowledgeable and a generation that has broad insight. Education is a guide to improve the degree, dignity and fate of humans. According to the Big Indonesian Dictionary, education is the process of changing the attitudes and behavior of a person or group of people in an effort to mature humans through education and training efforts (Dalyon, 2021).

During the educational process, there exists a close and vital interaction between educators and students. These interactions hold educational significance as they are geared towards attaining predefined objectives. In the realm of education, educators are tasked not only with imparting their knowledge to students but also with empowering students to construct their own knowledge. This involves stimulating students' ability to think critically, thereby fostering intelligence and problem-solving skills that will enable them to respond to future challenges.

The quality and success of the learning experience are also contingent on the competency of educators in selecting and utilizing appropriate teaching models. A teaching model serves as a framework for planning instructional activities. Educators must make thoughtful decisions when choosing a model, considering the unique characteristics of their students, the nature of the subject matter, and the available resources. Each learning model possesses its own strengths and weaknesses, necessitating educators to exhibit creativity in selecting and applying models that align with the students' context and the desired learning outcomes.

The effectiveness of the learning process is further shaped by students' mastery of the subject matter, as reflected in their learning outcomes, often quantified as numerical grades and reports that are communicated to parents. In this regard, the success of the learning process hinges on various factors, including the engagement of students, the effectiveness of educators, the quality of facilities and resources, and the appropriateness of the selected teaching models and methods. To achieve lesson objectives, it is imperative that educators facilitate interactive and engaging learning activities that enable students to easily comprehend and engage with the material being taught.

The reality is that there are still educators who have not been able to choose and use appropriate and effective learning models. Most of the learning models used by educators are conventional learning models with lecture models. There is nothing wrong with this model and learning, it's just that with this model students don't show active activity during the learning process.

The effectiveness of the learning process is also contingent on how well students grasp the subject matter presented by the educator. The level of success in mastering the lesson is evident through learning outcomes, which represent the results students demonstrate after engaging in the teaching and learning activities. Typically, these outcomes are quantified by numerical grades and are communicated to parents as reports on students' academic achievements.

In order to attain the desired learning outcomes, active student participation is crucial within the learning process. In essence, learning is an active process, requiring engagement in various conscious, functional, positive, and purposeful activities that encompass all aspects of behavior. The extent of student activity during learning becomes more prominent when students play an active role in the educational process, a role significantly influenced by the teaching models employed by educators. Success in a learning process is deemed achievable when educators effectively utilize appropriate teaching models. Learning outcomes essentially represent the final achievements of students following their participation in learning activities. These outcomes can be described as "the results of activities, whether carried out individually or collectively."

Learning outcomes play a pivotal role as they reflect the level of success attained by students in the learning process. Unfortunately, situations where student engagement is lacking and active interactions between educators, students, and among students themselves are infrequent, tend to result in suboptimal learning outcomes. To enhance student learning achievements, educators must engage in continuous evaluation, foster creativity, and persist in innovating their teaching models. Such innovations and enhancements are expected to shift students' mindsets, thereby improving their thinking abilities based on the learning experiences gained during the educational process.

The classroom environment during the learning process often remains passive, and active interactions are challenging to foster, both among students and between students and educators. Not all students pay full attention when the teacher presents information at the front of the class. Some students are engaged in distractions, such as chatting with their peers, napping, using their cellphones, or working on assignments for other subjects. This situation arises because educators frequently rely on traditional lecture-based teaching methods, resulting in less effective and monotonous learning experiences. Few students feel confident enough to respond to questions posed by the teacher, and they rarely ask questions during the learning activities. Moreover, students may hesitate to engage in discussions and propose solutions to problems, resulting in an absence of conclusive learning outcomes. To address these challenges and achieve the desired outcomes in the context of PAI learning, an appropriate teaching model is required. The discovery learning model is one such approach that can enhance critical thinking and improve student learning outcomes using a scientific method. The scientific approach emphasizes active construction of concepts, laws, or principles by students through stages like observation, problem formulation, hypothesis generation and testing, data collection using various techniques, data analysis, drawing conclusions, and communicating their findings. This approach encourages students to seek information from various sources through observation, rather than solely relying on educators for information dissemination. The Discovery Learning Model comprises a series of activities that fully engage students in systematic, critical, logical, and analytical investigation, enabling them to formulate their own discoveries. Knowledge acquired through discovery learning offers several advantages, including enhanced retention and transfer effects, as well as improved reasoning and critical thinking skills. Some perspectives also regard the discovery learning model as an effective method for instilling positive habits, promoting skill development, and fostering accuracy and dexterity (Syaiful Bahri Djamarah, 2010).

Methods

This research model falls into the category of qualitative research, involving the direct examination of objects and research activities conducted in the field. The objective is to scrutinize learning activities at SMA Negeri 4 Bekasi, particularly focusing on the utilization of discovery learning models to enhance engagement and improve learning outcomes in Islamic religious education.

Steven Dukeshire & Jennifer Thurlow stated that "research is the systematic collection and presentation of information". Research is a systematic way of collecting data and presenting the results. Hillway in a book with the title *Introduction to Research* suggests that research is a study model that is carried out by someone through careful and perfect investigation of a problem so that the right solution is obtained.

Results and Discussion

Results

1. Lesson plan PAI using the discovery learning method at SMA Negeri 4 Bekasi

Islamic Religious Education instructors undertake lesson planning ahead of introducing the discovery learning model into PAI (Islamic religious education) classes. Additionally, the school principal reviews the PAI learning materials, including the teaching module, that will be used during the instructional process. At the same time the researcher also observed several RPPs for Islamic Religious Education educators that had been completed and submitted to the school principal and had been signed by the school principal. Researchers made observations of teaching modules prepared by educators. This observation was carried out by marking a checklist in the column listed on the observation sheet.

The observation sheet made by the researcher contains several teaching module components as follows: 1) general information, consisting of teaching module titles, selection of educational units and levels, selection of phases and classes, selection of subjects, general descriptions of teaching modules, and identity of the module author; 2) learning outcomes and objectives consist of learning outcomes, learning objectives of all teaching modules, learning objectives flow, and dimensions of Pancasila student profiles; 3) details of the use plan, consisting of the total allocation of learning hours and the number of meetings, determining the learning model (online, offline, mixed), infrastructure and competency requirements; 4) meeting details, including the allocation of learning hours per meeting; 5) details of learning activities, which are suggested to consist of learning objectives, indicators of success, trigger questions, list of teaching equipment, list of attachments of supporting material, learning steps, assessment plan, and differentiation plan; and 6) attachments or supporting materials can consist of reference materials or learning media, worksheets/ exercises/ assessments; and/or reflection instruments.

The results of observing the teaching modules in learning using the discovery learning model in PAI subjects at SMA Negeri 4 Bekasi are as follows:

Table 4.4
Teaching Module Observation Results

Component	Sub component	Teaching Module								Amount
		1	2	3	4	5	6	7	8	
General information	The title of the teaching module	√	√	√	√	√	√	√	√	8
	Selection of educational units and levels	√	√	√	√	√	√	√	√	8
	Phase and class selection	√	√	√	√	√	√	√	√	8
	selection of subjects,	√	√	√	√	√	√	√	√	8
	General description of teaching modules	√	√	√	√	√	√	√	√	8
	Module author identity	√	√	√	√	√	√	√	√	8
Achievements and learning objectives	Learning achievement	√	√	√	√	√	√	√	√	8
	The learning objectives of the entire teaching module	√	√	√	√	√	√	√	√	8
	Flow of learning goals	√	√	√	√	√	√	√	√	8
	Dimensions of Pancasila student profiles	√	√	√	√	√	√	√	√	8
Usage plan details	Total allocation of learning hours and number of meetings	√	√	√	√	√	√	√	√	8
	Determination of learning models (online, offline, mixed)	√	√	√	√	√	√	√	√	8
	Prasana facilities	√	√	√	√	√	√	√	√	8
	Competency prerequisites	√	√	√	√	√	√	√	√	8
Meeting details	allocation of learning hours per meeting	√	√	√	√	√	√	√	√	8
Details of learning activities, suggested	Learning objectives	√	√	√	√	√	√	√	√	8
	success indicator	√	√	√	√	√	√	√	√	8
	Trigger question		√		√	√	√	√	√	6
	List of teaching equipment	√	√	√	√	√	√	√	√	8
	Attachment list of supporting materials	√	√	√	√	√	√	√	√	8

Attachments or supporting materials	Learning steps, assessment plan	√	√	√	√	√	√	√	√	8
	Differentiation plan		√		√	√	√	√	√	6
	Reference material or learning media,	√	√	√	√	√	√	√	√	8
	Worksheets/exercise/assessment	√	√	√	√	√	√	√	√	8
	Reflection instrument		√		√	√		√		4
Amount		2 2	25 2	2 2	25 2	25 4	2 4	25 4	2 4	192
Percentage		8 8	10 0	8 8	10 0	10 0	9 6	10 0	9 6	96

Based on the analysis of the observed data, it shows that in making teaching modules, almost all components have been included in the teaching modules made by PAI educators at SMA Negeri 4 Bekasi. Achievement of the average value of all components, namely general information, learning achievements and objectives, details of usage plans, details of meetings, details of learning activities, and attachments/supporting materials is 96.00%, meaning that the teaching modules made by PAI educators at SMA Negeri 4 Bekasi fall into the very good category.

2. PAI learning process using the discovery learning method at SMA Negeri 4 Bekasi

Education is an interactive process involving students, educators, and learning resources within a specific educational setting. In the context of learning Islamic Religious Education through the discovery learning model, the emphasis is placed on specific objectives. These objectives are carefully planned and established in advance, prior to implementing the learning model in the classroom. The selection of appropriate materials is also deemed a crucial consideration by Islamic Religious Education instructors at SMA Negeri 4 Bekasi, and this is an integral part of the teaching module. Furthermore, educators in Islamic Religious Education consistently adhere to the principles of the Independent Curriculum. These insights are derived from interviews and discussions with three PAI subject educators. Educators design or choose the flow of learning objectives (ATP) according to the developmental stages of students, or refer to the initial stage. Educators can use or adapt examples of learning objectives, ATP, and teaching modules provided by the Ministry of Education and Culture.

- a. Learning is designed by considering the developmental stages of students and the level of achievement of students, according to learning needs, and reflecting the characteristics and development of various students. Thus, learning becomes meaningful and fun for students. For example, at the beginning of the school year, educators try to find out students' learning readiness and previous achievements through dialogue with students, or through small group discussion sessions, question and answer, or even filling out questionnaires.
- b. Learning is designed and implemented to build the capacity of students to become lifelong learners. This can be done by means of educators encouraging students to reflect to understand their own strengths and areas that need to be developed or educators always provide direct feedback that encourages students' abilities to continue learning and exploring Islamic Religious Education.
- c. The learning process supports the development of the competence and character of students holistically. Educators hope that this principle will work well if educators are able to use various models, approaches, methods, strategies or learning techniques that vary and to help students develop competence. There are many student-centered learning models, including: inquiry-based, project-based, problem-based learning, discovery learning and differentiated learning. In addition, educators also reflect on their processes and attitudes to provide examples and sources of positive inspiration for students. The

learning model that has been prepared by each PAI educator at SMA Negeri 4 Bekasi at each level is the discovery learning model.

- d. Relevant learning, namely learning that is designed according to the context, environment and culture of students, and involves parents and the community as partners and even uses learning resources from the environment or invites expert resource persons related to the material to be delivered. Educators organize learning according to needs and linked to the real world, environment, and culture that interest students. Educators design interactive learning to facilitate planned, structured, integrated, and productive interactions between educators and students, fellow students, as well as between students and learning materials.
- e. Continuous future-oriented learning. Educators seek to integrate the principles of sustainable living in various learning activities by integrating values and behaviors that show concern for the environment and the future of the earth. For example using resources wisely (saving water, electricity, etc.), reducing waste, learning to give alms, helping parents and others. Educators motivate students to realize that the future belongs to them, so they need to take roles and responsibilities for their future. Educators must also ensure that the material taught will benefit their lives in the future.

In the pursuit of creating meaningful and effective learning experiences, educators are encouraged to nurture their creativity by selecting engaging learning models for classroom instruction. PAI subject educators at SMA Negeri 4 Bekasi have chosen the discovery learning model, given its emphasis on student activity and the provision of hands-on learning experiences.

Based on interviews with PAI subject educators, three compelling reasons underpin the adoption of discovery learning: 1) Discovery learning fosters exploration and problem-solving by enabling the creation, integration, and generalization of knowledge; 2) It centers on student engagement through diverse and enjoyable learning activities; and 3) It facilitates the integration of new knowledge with students' existing understanding.

Furthermore, interviews with PAI subject educators reveal that the discovery learning model shares common principles with inquiry-based learning and problem-solving learning. The distinction lies in discovery learning's focus on concepts or principles that were previously unknown, with problems designed by educators. In contrast, inquiry-based learning revolves around unscripted problems, prompting students to employ their knowledge and skills in research, while problem-solving learning centers on honing problem-solving skills. Ultimately, the discovery learning model simplifies the comprehension of the subject matter for students.

PAI subject educators also emphasize that for students to apply knowledge effectively in real-life situations, they must be actively engaged in the learning process. To facilitate productive learning, students require an environment that stimulates curiosity and exploration, commonly referred to as a discovery learning environment. In such an environment, students can explore novel discoveries, both unfamiliar and akin to what they already know. With this conducive atmosphere, students can excel academically and harness their creativity. In this study, the implementation of learning was observed by PAI educators at SMA Negeri 4 Bekasi by using the discovery learning model. The results of observations on the performance of PAI educators in implementing the discovery learning model can be seen in the following table:

Table 4.5
Results of Observation of Educators' Ability in Carrying Out PAI Learning Activities
Using the Discovery Learning Model

COMPONENT	SUB COMPONENTS	Amount	Percentage
<i>stimulation</i> (Giving Stimulus)	Asking question	7	87.50
	book reading recommendations	7	87.50

	Exploring subject matter	8	100.00
	Setting up interaction conditions	7	87.50
<i>Problem Statements</i> (Statement or Problem Identification)	Give students a statement or problem identification	8	100.00
	Provides an opportunity to identify various kinds of problem agendas	5	62.50
	Help formulate in the form of hypotheses or temporary answers	8	100.00
<i>Data Collections</i> (Data collection)	Provides an opportunity to gather information	8	100.00
	Gives an opportunity to prove whether it is true or not	8	100.00
	Providing opportunities to read literature, observe objects, conduct interviews with sources	8	100.00
	Provides an opportunity to conduct trials to prove hypotheses	7	87.50
<i>Data Processing</i> (Data processing)	Invite students to carry out activities to process data and information	7	87.50
	Help classify, and tabulate data	5	62.50
	Help calculate and interpret data	8	100.00
<i>verification</i> (Proof)	Provides opportunity for careful inspection	6	75.00
	Help define alternative findings	8	100.00
	Provides an opportunity to discover theory	7	87.50
<i>Generalizations</i> (draw conclusions or generalizations)	Ask students to draw a conclusion	7	87.50
	Pay attention to the results of verification	8	100.00
Amount		137	1712,5
Percentage		90.13	

From the table above it can be seen that the ability of educators to carry out performance improvements in PAI learning as a whole achieves an average value of 90.13%. When confirmed with success criteria, the percentage reaches the very good category.

According to one of the PAI educators when interviewed, the discovery learning learning model can improve accuracy and higher-order thinking skills because using this learning model stimulates students to be active in the learning process by finding funds to independently investigate the concepts being studied, so that new concepts or knowledge obtained will be last a long time because there is a process of thinking not memorizing, besides that students learn to think analysis and solve problems encountered so that this habit will be carried over to real life.

Furthermore, other PAI educators said that discovery learning has steps including providing stimulation, identifying problems and formulating hypotheses, collecting data, processing data, proving, and drawing conclusions. The six learning steps should not be missed. Because each step will give meaning to students. In the problem identification step and data

processing, students will be required to think at a higher level. Careful attitude is needed in the activity of analyzing problems. This is because students must understand what problems are presented which will then be determined by solving the problem to find the appropriate solution. In the process of solving a problem, there is a higher order thinking process.

3. Assessment of Learning Outcomes PAI using the discovery learning method at SMA Negeri 4 Bekasi

In this study, data on student scores was used from documentation obtained by researchers from PAI educators at the tenth grade level at SMA Negeri 4 Bekasi. This is done because class X has used the independent curriculum as a whole. The value documentation obtained by the researcher is the value before and after the implementation of PAI learning using the discovery learning model. The data on the results of the analysis of student learning outcomes can be seen in the following table.

Table 4.6.

PAI Learning Outcomes Class X Students of SMA Negeri 4 Bekasi Before Using the Discovery Learning Model

Class	Number of students	Non-Islamic	Total Value	Average Value	Percentage of KKTP	
					Not Completed	complete
X-1	36	3	2402.50	72,80	48,48	51,20
X-2	35	3	1965.00	61,41	65,63	34,38
X-3	36	4	2073,50	64,80	62.50	37.50
X-4	36	4	2212.50	69,14	50.00	50.00
X-5	36	5	2222.50	71,69	54,84	45,16
X-6	35	4	2247.50	72.50	51,61	48,39
X-7	36	4	2292.50	71,64	56,25	43.75
X-8	36	4	2065.00	64,53	65,63	34,38
X-9	35	4	1990.00	64,19	67,74	32,26
X-10	35	4	1995.00	64,35	64,52	35,48
X-11	35	4	2147.50	69,27	58.06	41.94
X-12	35	5	1900.00	63,33	73,33	26,67
Amount	426	48	25513,5	809.65	718.59	481,11
Average	35.50	4.00	2126,13	67,47	59,88	40.09

From the table above it can be seen that the value of PAI learning in each class at the grade X level still does not meet the KKTP. There is no class average value that meets the KKTP, namely 75.00. Of the number of students who have completed their studies, it means that they have obtained a score of at least 75.00 which is still relatively small and the percentage achievements are still low, ranging from 25% to 55%, with an average percentage of those who have fulfilled the KKTP of 40.09. % of all students who are Muslim.

Then analyzed the value of students after implementing learning through the discovery learning model on the material the benefits of avoiding attitudes *spree*, *riya'*, *sum'ah*, pride, and *hasad*, negative impacts and how to avoid them in class X SMA Negeri 4 Bekasi. The learning outcomes of these students were obtained from the value documentation data owned by each educator and have been reported to the school curriculum section. The analysis of PAI learning outcomes after using the discovery learning model, can be seen in the following table:

Table 4.7.
PAI Learning Outcomes Class X Students of SMA Negeri 4 Bekasi
After Using the Discovery Learning Model

Class	Number of students	Non-Islamic	Total Value	Average Value	Percentage of KKTP	
					Not Completed	complete
X-1	36	3	2685.00	81.36	15,15	84.85
X-2	35	3	2550.00	79,69	6,25	93.75
X-3	36	4	2612.00	81.64	6,25	93.75
X-4	36	4	2624.50	82.58	9,38	90.63
X-5	36	5	2530.00	81.61	6,45	93.55
X-6	35	4	2545.00	82,10	9,68	90.32
X-7	36	4	2605.00	81.41	6,25	93.75
X-8	36	4	2530.00	79.06	21.88	78,13
V-9	35	4	2487.00	80,24	3,23	96.77
X-10	35	4	2495.00	80,48	16,13	83,87
X-11	35	4	2535.00	81.77	12.90	87,10
X-12	35	5	2400.00	80.00	10.00	90.00
Amount	426	48	30598,5	971.94	123.55	1076,47
Average	35.5	4.0	2549.9	81.0	10,3	89.7

The table above shows a very significant increase in the acquisition value. In the 12 classes that were at the X grade level, the class average score increased, even the percentage of students who scored according to the KKTP also greatly increased. In order to make it easier to see the comparison of the acquisition of scores before and after the implementation of PAI learning through the discovery learning model in class X SMA Negeri 4 Bekasi, the following displays the average value of each class contained in the following table:

Table 4.8
Class average scores before and after PAI learning
through the discovery learning model in class X SMA Negeri 4 Bekasi

Class	Average Value	
	Before	After
X-1	72,80	81.36
X-2	61,41	79,69
X-3	64,80	81.64
X-4	69,14	82.58
X-5	71,69	81.61
X-6	72.50	82,10
X-7	71,64	81.41
X-8	64,53	79.06
X-9	64,19	80,24
X-10	64,35	80,48

X-11	69,27	81.77
X-12	63,33	80.00
Amount	809.65	971.94
Average	67.5	81.0

It is clear that the average grade of the whole class increased from 67.50 to 81.00. Before implementing learning through the discovery learning model, most students felt less interested in the material presented by the educator. But with the discovery learning model, students feel fully involved when learning and are passionate about being active during the learning process.

Discussion

1. Definition of Implementation

Implementation is the execution of a meticulously prepared plan or course of action. Consistent with Syaukani's perspective, implementation encompasses a series of actions aimed at translating public policies into tangible outcomes, aligning with the intended goals (Syaukani Syaukani, et al, 2002). Thus, implementation entails the systematic and organized execution of a plan, ensuring it is carried out in accordance with the initial preparations.

Understanding implementation is closely associated with policies or regulations designed to serve the greater public or society's interests. The true value of a policy becomes evident when it is effectively put into practice. As such, implementation plays a pivotal role in the entire process of policy planning and regulation

2. Policy Implementation Supporting Factors

When considering policy implementation on a broader scale, it can be described as a mechanism of legal governance in which diverse stakeholders, organizations, processes, and methodologies collaborate harmoniously to execute policies with the aim of attaining the intended outcome or objective (Budi Winarno, 2002). The prerequisites for flawlessly executing government policies, as articulated by Brian W. Hogwood and Lewis A. Gun in their Implementation Theory, as cited by Solichin Abdul Wahab, are as follows:

1. The implementing body or agency will not encounter significant disruptions or hindrances due to external factors, which could encompass physical or political challenges.
2. Sufficient time and resources are at the disposal for program implementation.
3. The essential resources required for the task are readily accessible.
4. The policy to be executed is grounded in a dependable cause-and-effect relationship.
5. The cause-and-effect relationship is straightforward, with only a few intermediaries in the chain.
6. Minimal interdependencies exist.
7. There is a profound comprehension of and consensus on the objectives.
8. Tasks are meticulously outlined and arranged in a logical sequence.
9. There is seamless communication and coordination.
10. Those who have the authority of power can demand and get perfect obedience (Solichin Abdul Wahab, 1997).

3. Factors Inhibiting Policy Implementation

According to Bambang Sunggono, policy implementation encounters various hindrances, which can be summarized as follows:

1. Policy Content: The ineffectiveness of policy implementation can be attributed to several factors. First, the policy's content may lack clarity, with vague objectives, insufficiently detailed means and priority of implementation, or overly broad or absent policy programs.

Second, it may result from internal and external policy provisions being inadequate. Third, the policy itself may exhibit significant deficiencies. Fourth, implementation failure can stem from inadequacies in supporting resources, such as time, costs, funds, and human resources.

2. Information: Successful policy implementation relies on key stakeholders having the requisite, highly pertinent information to carry out their roles effectively. The absence of such information can be due to communication issues.
3. Support: Policy implementation becomes exceptionally challenging in the absence of adequate support for carrying out the policy.
4. Distribution of Potential: The potential for implementation failure is also linked to the distribution of responsibilities among the actors involved. This pertains to how duties and authority are delineated within the implementing organization. Problems can arise if the organizational structure's division of authority and responsibility is misaligned with task distribution or characterized by unclear boundaries (Bambang Sunggono, 1994).

4. Definition of Learning Model

The model can be understood as a systematically structured procedure or approach that serves as a tool to attain specific objectives. It represents a methodical approach to streamline the accomplishment of predetermined goals. Djamarah defines a model as a method employed to reach particular goals established in advance (Afandi Evi Oktarian, 2013). The utilization of models in the teaching and learning process can have a profound influence as it fosters innovation and diversity within these activities. Consequently, this can lead to higher levels of learning outcomes. Grinder's findings demonstrated that 22 out of 30 students could effectively engage in learning when the material was presented in an innovative and diversified manner, encompassing the learning styles of visual, auditory, and kinesthetic learners. This underscores the significant role that models play in educators' success in meeting learning objectives.

According to Bruner, the Discovery Learning Model is a contemporary educational approach that aims to enhance students' activeness, independence, and comprehension. In this model, students actively seek answers to their own questions, which helps them remember the information more effectively. This approach is termed the "discovery strategy." It encourages students to engage proactively in searching for, comprehending, and discovering answers or related content. Additionally, students develop the ability to analyze the knowledge they've acquired and apply it to real-world situations. The concept of discovery learning involves a teaching method that stimulates students to question and draw conclusions from practical examples and experiences based on fundamental principles. Bruner's idea is grounded in Piaget's belief that children should take an active role in their classroom learning, organizing the subject matter into a coherent framework.

According to Babbage, Byers & Redding cited by Jamil Suprihatiningrum, the learning model is defined as follows (Jamil Suprihatiningrum, 2013) :

- 1) *A broad based philosophy with a theoretical underpinning and a prescribe range of techniques.*
- 2) *A philosophy which dictates approaches and methods and is usually presented as a whole packaged.*
- 3) *A description of set styles and suggested teaching practices which prescribe how pupils are taught.*

The definition above says that the learning model is: 1) A basic philosophy as a theoretical basis and detailed stages of learning techniques; 2) A philosophy that dictates approaches and models and is usually presented in one package; and 3) A description of the teaching style and demonstrated by educational practice, which explains how the students are taught.

Based on the above understanding, it can be concluded that discovery learning is a model for developing ways of learning for active students by finding themselves, investigating themselves, exploring their own knowledge, then the results obtained will be long lasting in memory and will not be easily forgotten by students. By learning discovery, children can also learn to think analytically and try to solve their own problems, this habit will be transferred to social life.

5. Purpose of Using Discovery Learning Learning Model

According to Bell as quoted by (M. Hosnan, 2016) put forward some specific goals of discovery learning, namely as follows:

- 1) In discovery students have the opportunity to be actively involved in learning. The fact shows that the participation of many students in learning increases when discovery is used.
- 2) Through learning with discovery students learn to find patterns in concrete and abstract situations as well as students predict a lot of additional information provided.
- 3) Students also learn to formulate an unambiguous question and answer strategy and use question and answer to obtain useful information in finding a problem.
- 4) LearningDiscovery helps students form effective ways of working together to share information and hear and use other people's ideas.
- 5) Skills learned in discovery learning situations are in some cases more easily transferred to new activities and applied in new learning situations.
- 6) There are several facts that show that the skills, concepts and principles learned There are several facts that show that the skills, concepts and principles learned through discovery are more meaningful.

The above objectives provide confirmation that the discovery learning model wants to direct students to be more active both individually and in groups to learn actively by developing their ideas and learning to respect the ideas and thoughts of others. In other words, the character of students is prioritized so that skills can be developed effectively. In the future we will obtain a more qualified output because young scientists who are competitive will be born.

Analysis

Afterresearch data collection was carried out and analyzed through triangulation, the researcher gave a discussion in accordance with the problems posed, as follows:

1. Implementation of PAI learning using the discovery learning method at SMA Negeri 4 Bekasi

The learning model is a design or pattern that is used as a guide in creating a learning situation in the classroom, which can later provide changes or developments to students. If in the implementation of the learning process the selection of the right learning model is not carried out and in accordance with the conditions and needs of students, then educators will experience difficulties in creating space for students to develop, be productive, active, and creative according to their talents and interests.

The discovery learning learning model is a learning process in which students are not directly confronted with the final results of learning, but students are required to be able to find the learning outcomes themselves through stimulation in the form of questions that direct students.

In the discovery learning learning model, participants do not act as recipients of information, but rather students who explore this information and develop it according to their respective understandings. The educator is only a facilitator of the learning process and confirms the answers and questions submitted by students. The benefits obtained by students through this learning model allow students to learn by cultivating reading in the learning

process, because one of the factors that influence interest is culture, so that it can boost students' interest in reading.

Student-centered learning where students actively express their ideas in finding teaching materials through the stimulation of questions submitted by educators, encourages students to think and work on their own initiative, and students direct their own learning activities by involving their minds and their own motivation so that activeness learning from students is expected to increase.

Planning becomes a very important element before implementing a model in certain learning, so that the process of implementing the discovery learning learning model in Islamic Religious Education is carried out properly in accordance with the objectives set in the initial learning plan. In SMA Negeri 4 Bekasi, it can be seen from the coding that there are five general steps that must be determined in making teaching modules, namely: material, objectives, student characteristics, teaching materials/topics, assessment.

The interview with the school principal said that these five coding categories will be explained further and in depth in the teaching modules that are made, so this coding is only a general reference, the details are adjusted to the teaching modules that are made of course with the steps of the learning model chosen by the educator. Alone. Further explained in the learning planning stage of the discovery learning model for PAI lessons, before implementing the discovery learning model. Observing the suitability of the material with the discovery learning model is very important to do where not all material is in accordance with the discovery learning model or vice versa. Therefore the level of understanding of educators in this context is needed in order to adjust the models and materials that will be applied in learning Islamic Religious Education.

Furthermore, PAI educators determine learning objectives to be one of the keys that must be considered in determining a discovery learning model that is suitable for implementation in Islamic Religious Education learning. From the objectives designed, it will be seen whether the discovery learning model can be applied in learning. Seeing the characteristics of students to be able to be divided into groups, this is often not noticed by educators, when viewed from the basic concept this aspect is included in the category of abilities that must be possessed by professional educators where they are able to control and master the class including understanding the character of each student.

Identification of student characteristics is an effort to understand students' initial abilities, interests, learning styles and so on. This step becomes even more important if the learning process is carried out in groups. Educators who are aware of this will of course create a conducive and balanced learning atmosphere in the absence of a dominant group in the class.

Educators also arrange learning stages from easy material to difficult material according to the stages of discovery learning. Educators must arrange lesson topics from simple to complex, from concrete to abstract, or from enactive, iconic to symbolic stages. Educators must arrange the syntax from general to specific information. PAI educators also carry out this process very well so that it makes it easier for them to achieve the learning objectives as planned in the initial objectives.

The most important thing is that educators prepare assessment sheets or instruments during the learning process that are used to measure the process of implementing discovery learning learning models in learning Islamic education in accordance with the expected goals or not. The instruments used are different for PAI educators, including worksheets, behavioral observation sheets and preparing observation sheets for students' activeness while participating in Islamic Religious Education learning using the discovery learning model.

Evaluation of learning requires educators to make items of questions as assessments according to the target of learning outcomes. Preparing test items is one of the preparations made by PAI educators in their planning, through these questions students will be evaluated at the end of the lesson to see the level of students' understanding of the material that has been taught using this model. This stage is of course important and determines the success of a learning model, this is in accordance with the characteristics of constructivism learning, namely encouraging students to actively participate in dialogue or discussions with other students and educators so that they fully understand the material being taught using a particular model.

Before educators develop teaching modules, there are several basic principles for preparing teaching modules that need to be considered. PAI educators pay attention to differences in levels of understanding, and variations in distance between competency levels that can occur in each phase and realize that each learner is unique. In addition, educators must also understand that learning must be balanced between intellectual, social, and personal and all of these things are important and interconnected. The level of maturity of each learner depends on the stage of development that is passed by a learner and is the impact of previous experience.

After understanding each component, criteria, and principles for compiling Teaching Modules, and analyzing the conditions and needs of students based on their background, as well as the facilities and infrastructure available in schools, as well as the abilities and creativity possessed by educators, educators identify and determine the dimensions of Student Profile Pancasila. At this step, educators can choose several dimensions of the Pancasila Student Profile that are most likely to be developed in learning. For example, for Pancasila material in the PPKn subject, the dimensions of the Pancasila Student Profile selected are global diversity and critical reasoning.

Educators also determine the Flow of Learning Objectives (ATP) which will be developed into Teaching Modules. Arrange Teaching Modules based on the available components. At this step, educators can also add other components according to learning needs. After the Teaching Module has been compiled, educators can immediately use it in learning activities.

Before carrying out learning activities, educators also determine learning approaches, models, methods or strategies in order to get the effectiveness of teaching modules in learning activities as well as being used as a reference for determining follow-up for further learning.

The components of success in learning are quite diverse, starting from how educators design learning activities, interact with students, and analyze behavior. This component is used as a sign or quantitative characteristic if the goal is achieved well, so educators try to fulfill this component.

2. Constraints and supporters of the implementation of the discovery learning model in improving student learning outcomes at SMA Negeri 4 Bekasi

Although the Discovery Learning model can provide significant benefits in improving learning outcomes, it is important to consider the constraints that may occur and take steps to overcome them. Educators need to prepare material carefully, provide appropriate guidance, and ensure that students have sufficient initial knowledge to understand new concepts discovered through the Discovery Learning model.

During the implementation of PAI learning through the discovery learning learning model, educators experienced several obstacles in improving student learning outcomes. The following are some of the experiences experienced by PAI educators in class X SMA Negeri 4 Bekasi.

- a. Educators have planned the allocation of time in PAI learning, but because the discovery learning model allows students to explore material in more depth, the time

set according to class hours is very limited. Educators need more time so that students become accustomed to digging up information through reading or discussing with resource persons. Students need more time to investigate, collect information, and achieve a deeper understanding. This happens because students are not familiar with the discovery learning learning model.

- b. There are some students who are still passive, because they have difficulty being proactive and active in seeking their own knowledge, so educators must motivate, guide and direct students extra. Because the discovery learning model demands active participation from students, and if students are reluctant to take an active role, the effectiveness of learning can be affected and learning outcomes will not be maximized.
- c. Educators identify students to form groups, but there are some students who choose their own groups with the assumption that they are already familiar or they are reluctant to group with other students who are less familiar. In order to use study time effectively, the teacher finally gives students the opportunity to choose their own group. Appropriate grouping is grouping based on the identification results of students, namely in terms of competence, learning activity, ability to ask questions and solve problems. However, when learning takes place, educators try to involve students in groups as often as possible to explore shared knowledge. However,
- d. Another obstacle is limited resources. Implementation of discovery learning requires adequate access to resources, such as laboratory facilities, multimedia devices, and learning materials. Schools or institutions with limited resources may have difficulty in providing a suitable environment for this learning model
- e. Constraints also occur when educators have to evaluate. Measuring the success of discovery learning is more complicated than other learning methods. The test should cover aspects of critical thinking skills, collaboration skills, and deep understanding, not just factual knowledge. Educators must also assess the activeness of students in learning, the personality of students and even assess the attitude of students when learning.
- f. The discovery model is more appropriate for developing understanding, while developing aspects of concepts, skills, and emotions as a whole gets less attention. In PAI learning, there is still a lack of facilities for measuring the ideas put forward by students.
- g. Educators have difficulty providing opportunities to think that will be found by students because in the discovery model things that should be found by students have been chosen in advance by educators. In addition, the preparation of complex material causes students to experience difficulties in finding concepts or principles that they should find through discovery learning methods. This can hinder their ability to gain a deep understanding of the material
- h. Another obstacle is the limited prior knowledge of students in a subject, they may face difficulties in associating new information with the knowledge they already have. This can slow down the learning process and reduce the effectiveness of discovery learning methods in developing cognitive skills such as problem solving, analysis, synthesis, and evaluation. Learners learn to think critically, relate concepts, and develop deep thinking skills.

Apart from the obstacles, in the implementation of PAI learning through the discovery learning model, there are also supporting factors. Some factors supporters in the implementation of the discovery learning model, including:

- a. The discovery learning model can increase students' understanding because they have an active role in seeking and exploring knowledge. Students learn by seeing and experiencing these concepts themselves, which helps them understand the material

more deeply. Searching for information by reading will also familiarize students with an increased interest in reading.

- b. The development of critical thinking skills can also be obtained through discovery learning which encourages students to develop their critical thinking skills. They must evaluate information, relate new concepts to existing knowledge, and address problems in their exploration process
- c. In addition, PAI educators feel that there is intrinsic motivation from students during the learning process. Educators provide opportunities for students to act autonomously to explore material, this model can increase their intrinsic motivation in learning. Learners feel in control of their learning, which can increase their involvement and enthusiasm in the learning process.
- d. Not all material can be taught through the discovery learning model. The discovery learning hierarchy is to help students see the relevance of the subject matter in their daily lives. When students encounter concepts in real contexts, they are more likely to relate them to their own lives and they will remember what they learned for a long time or are hard to forget.
- e. Another advantage of discovery learning is being able to develop creativity. Through discovery learning, students are invited to think "out of the box" and develop their creativity. They can find multiple ways to solve problems, which opens up opportunities to develop creative thinking skills. Through the Discovery Learning model, students have the opportunity to directly experience the process of self-discovery, which involves more brain use and direct interaction with material. These self-discoveries tend to leave deeper impressions in students' memories, which in turn can strengthen information retention in the long term.
- f. Discovery learning models often encourage students to work together in small groups or in pairs. This can facilitate collaboration, communication, and other social skills. Learners learn to work together, discuss ideas, and present their findings to others, which contributes to the development of important social skills.
- g. Another advantage is the role of educators as facilitators. Educators act as facilitators in discovery learning, guiding students in their exploration process without giving direct answers. This can create better relationships between educators and students and promote a positive learning environment.

Broadly speaking, discovery learning has the advantage of developing students' intellectual potential, increasing students' curiosity and motivating students to keep trying to find something until they find it, train their own problem-solving skills and train students to be able to collect, process and analyze data. Alone. So that in the economic learning process using the discovery learning model it is hoped that it can train and develop students' critical thinking skills to be skilled in dealing with and finding solutions to economic problems encountered in the learning process and in everyday life. In utilizing the discovery learning model, it is important for educators to take into account the obstacles that may arise and find ways to overcome them so that the learning process can run effectively and efficiently.

3. PAI learning outcomes at SMA Negeri 4 Bekasi After Using the Discovery Learning Learning Model

Assessment or assessment is the process of collecting and processing information to measure the achievement of student learning outcomes. The principle of assessment is as follows:

- a. Assessment is an integrated part of the learning process, facilitating learning, and providing holistic information, as feedback for educators, students, and parents/guardians to guide them in determining further learning strategies. Educators strengthen the assessment at the beginning of learning which is used to design learning

according to the readiness of students. Educators plan learning by referring to the goals to be achieved and provide feedback so that students determine steps for future improvement.

- b. The assessment is designed and carried out according to the function of the assessment, with the flexibility to determine the technique and time of implementation of the assessment so that it is effective in achieving learning objectives. Educators think about learning objectives when planning assessments and provide clarity to students about the objectives of the assessment at the beginning of learning. Educators use various assessment techniques according to the function and purpose of the assessment. The results of the formative assessment are used for learning feedback, while the results of the summative assessment are used for reporting learning outcomes.
- c. Assessments are designed in a fair, proportional, valid and reliable way to explain learning progress, determine decisions about next steps, and serve as a basis for developing appropriate learning programs in the future. Educators provide sufficient time and duration so that assessment becomes a learning process and not just for the sake of testing. Educators determine success criteria and convey them to students, so they understand the expectations that need to be achieved.

Reports on learning progress and student achievement are simple and informative, providing useful information about the characters and competencies achieved, as well as follow-up strategies. Educators compile learning progress reports concisely, prioritizing the most important information for students and parents to understand. Educators provide regular feedback to students and discuss follow-up together, and involve parents.

The results of the assessment are used by students, educators, educational staff, and parents/guardians as material for reflection to improve the quality of learning. Educators provide time to read, analyze, and reflect on the results of the assessment. Educators use the results of the assessment as material for discussion to determine things that have gone well and areas that need improvement. The education unit has a strategy so that the results of the assessment are used as a reflection by students, educators, education staff, and parents to improve the quality of learning.

In a learning activity will produce changes that occur in students. The changes in question are changes in the form of knowledge, attitudes and skills. The changes that occur are a refinement of the results that have been achieved by previous students. The results of the learning process are often referred to as learning outcomes.

Learning outcomes show the ability of students after participating in the learning process. Sudjana (2014) argues that learning outcomes are abilities possessed by students after they receive their learning experience. According to Howard Kingsley (Sudjana, 2014) divides three kinds of learning outcomes, namely: 1) skills and habits, 2) knowledge and understanding, 3) attitudes and ideals. Each type of learning outcomes is filled with materials that have been defined in the curriculum.

The learning process certainly cannot be separated from an assessment. Assessment of students can be seen from the learning outcomes obtained by students after completing certain subject matter. According to Purwanto (2013) "Learning outcomes are changes in student behavior as a result of learning" (p. 34).

The change is sought in learning to achieve the specified goals. Each learning process affects certain behavioral changes in students, depending on the desired changes to occur in accordance with educational goals.

According to Kelvin (2009), various techniques and forms of assessment are used in class assessment, including test assessment, performance assessment, attitude assessment, project assessment, and portfolio assessment. In line with the definition of learning outcomes according to M.Thobroni (2015: 22) learning outcomes are changes in behavior

as a whole, not just one aspect of human potential. That is, the learning outcomes that are categorized by educational experts as mentioned above are not viewed fragmentary or separately, but comprehensively. So learning outcomes are changes in behavior in a person that can be observed and measured in the form of knowledge, attitudes and skills.

From the side of educators, the act of teaching ends with the process of evaluating learning outcomes. From the side of students, learning outcomes are the end of education from the peak of the learning process.

Conclusion

The application of the discovery learning model cannot be implemented without two important elements in its implementation, namely planning, process and evaluation. These three stages stand separately in the application of the discovery learning model, namely at the beginning before implementation, during the implementation process and at the end after the implementation process is carried out. The results of the field study found that:

1. The application of discovery learning for educators of Islamic Religious Education at SMA Negeri 4 Bekasi includes several main components. First, educators must choose material that fits the discovery learning model. Next, they set the learning objectives to be achieved in the process. Educators also conduct an analysis of student characteristics to adapt learning to their needs. In addition, they determine learning topics and plan learning stages. Finally, process assessment instruments and test questions are made to measure the success of learning with the discovery model. All of these steps are planned and carried out by Islamic Religious Education educators at SMA Negeri 4 Bekasi in accordance with the stages or syntax of the discovery learning model.
2. The discovery learning learning model has several constraints and supports in improving learning outcomes. Here are some of these obstacles: 1) Complicated material preparation; 2) Lack of prior knowledge; 3) Time required; 4) Passive students 5) Improper grouping; 6) Limited resources; and 7) Complex evaluation. While the supporting factors are: 1) Development of critical thinking skills; 2) intrinsic motivation; 3) relevant learning; 4) Development of creativity; 5) The role of educators as facilitators; and 6) Strengthen information retention.

Evaluation of learning outcomes was carried out after the application of the discovery learning model to the subjects of Islamic Religious Education and Moral Education at SMA Negeri 4 Bekasi. This evaluation includes an assessment during the learning process and a final assessment. The evaluation results showed that the level of student activity and enthusiasm during the learning process was very good, and from the final assessment, 89.70% of students had achieved the minimum competency level of completion (KKTP). The results of these achievements indicate that the implementation of discovery learning is in accordance with the expected goals in the two schools in the cognitive and psychomotor aspects, as well as student attitudes.

References

- Arif Afandi. Minangkabau Government Applied Journal Vol. 1, No. 1, January – June 2021 Issue, pp.33-46 Website: <http://ejournal.ipdn.ac.id/jtpm>. West Sumatra Campus Domestic Administration Institute. 2021.
- Arif Afandi. Minangkabau Government Applied Journal Vol. 1, No. 1, January – June 2021 Issue, Website: <http://ejournal.ipdn.ac.id/jtpm>. West Sumatra Campus Domestic Administration Institute. 2021.
- Bafadal, Ibrahim, 2008, Increasing the Professionalism of Elementary School Teachers. Jakarta: PT Bumi Aksara.

- Delfi Eliza et al. 2022, "Building Professional Teachers through the Development of Teacher Professionalism in the Application of Their Profession". *Basicedu Journal* Vol 6 No 3.
- Fahmi, Dzul 2021 "Perception of How Perception Really Shapes Our Thinking Constructions". Yogyakarta: Indonesia's Great Child.
- Fathul Fauzi. 2020. "Increasing Teacher Professionalism through Clinical Supervision". *Edusina: Journal of Management and Islamic Education* Volume 7 No 2.
- Fatuhurrohman, Pupuh and Aa Suryana, 2015, *Educational Supervision in the Development of the Teaching Process*, Bandung: PT Refika Aditama.
- Fauzi. Fathul 2020. "Increasing Teacher Professionalism through Clinical Supervision". *Edusina: Journal of Management and Islamic Education* Volume 7 No 2.
- Heri Susanto. 2020, *Teaching Profession*. Banjarmasin: History Education Study Program, Faculty of Teacher Training and Education, Lambung Mangkurat University.
- Inom Nasution. 2022. "The Professional Role of Teachers as Curriculum Developers". *Islamic Education: Journal of Islamic Education*. VOL. 11. NO. 01.
- Inscription. Suci 2017, "Teacher Work Ethic and Professionalism". *PENJAS Scientific Journal*, VOL. 3 NO. 2,
- Irmawati. 2009, "*Teachers' Perceptions of Supervision by the Principal and Their Relation to Teacher Performance at SMPN 99 Jakarta*". *Education Management Journal*
- Mardiana, Yeni, 2016, "Effectiveness of Principal Clinical Supervision in Improving Teacher Professional Competence at It Iqro Middle School, Bengkulu City". *Journal An-Nizom* Vol. I, No. 3.
- Mustova Joko Susilo. Thesis. *The Relationship between Teacher Perceptions of Principal Academic Supervision and Teacher Social Competence with Teacher Performance in Private Elementary Schools in Rawalumbu District, Bekasi City*. 2022.
- Natalia. 2020. "Increasing Teacher Professionalism in the Learning Process Through Clinical Supervision" *KANSASI Journal* Vol.5, No.2.
- Rakhmat, Jalaludin 2007, *Communication Psychology*. PT. Rosdakarya Youth, Bandung,
- Rosmawati, Nur Ahyani, & Missriani. 2020. "The Influence of Teacher Discipline and Professionalism on Teacher Performance" *Journal of Education Research*, 1(3).
- Sugiono S. 2014, *Quantitative, Qualitative and Combination Research Methods (Mixed Methods)*. Bandung: Alfabeta.
- Badriati, Baiq, 2021, *Work Ethics in an Islamic and Cultural Perspective*. Sanabil
- Sugiyono, *Administrative Research Methods*, (Bandung: Alfabeta. 2004).
- Suyitno. 2021. "Analysis of Principal Leadership, Application of Discipline, and Supervision of Work Ethics". *Educative: Journal of Educational Sciences* vol 3. No. 3.
- Tatang, 2020,. *MADINASIKA Journal of Management and Teacher Training* Homepage:<http://ejurnalunma.ac.id/index.php/madinasika>, Vol. 2, No. 1,