# Implementation of Islamic Religious Education Subjective and Objective Tests in Improving Students' Cognitive Abilities

(Study at SMA Muhammadiyah 1 Karanganyar)

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#### **ABSTRACT**

Increasing students' cognitive abilities is a measure of the success of students' understanding in learning, by increasing students' cognitive abilities it is necessary to carry out an evaluation of learning outcomes. In this study, it discusses the need for several tools to measure the level of student success, namely using objective tests and subjective tests. In this study, several forms of objective and subjective tests are presented that can be used by educators who are implemented in learning as well as good levels or standards in their application, of course in terms of implementing objective and subjective tests this has advantages and disadvantages, it is hoped that these advantages and disadvantages can complement each other. The purpose of this research is to identify, develop, improve evaluation instruments in learning Islamic Religious Education, as well as to conduct a study of cognitive domain learning evaluation instruments on objective and subjective tests. The results of this study indicate that the implementation of objective and subjective tests must be in accordance with KKO standards or based on C1-C6 Bloom's Taxonomy to be able to develop students' thinking patterns or levels of thinking in their cognitive.

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#### INTRODUCTION

Education is a structured effort or process in instilling knowledge values, skill values, and cultural values from one generation to the next (Nursinta et al., 2024). Education has development goals in several aspects, namely cognitive, affective and psychomotor. In this case, education is an investment in the formation of humans who have benefits to society at large, and in this case it involves complex communication between students, guardian teachers and educational institutions (Basri, 2018).

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Islamic Religious Education in this case has a clear goal and one frequency with Islam, namely creating humans to become servants who believe and fear Allah SWT so that they can achieve happiness in life in this world and in the hereafter. Evaluation of learning outcomes can be used as something important and necessary to be carefully prepared in realizing an Islamic generation (Kayla Azzahra et al., 2023). Evaluation of learning outcomes is an important process involving the collection of values or results and information to evaluate or analyze student learning outcomes in terms of progress, achievement as well as effectiveness in learning at all levels and aspects of education (Nursinta et al., 2024). In this case, assessment or evaluation has the aim of providing feedback on student learning achievements, either during learning or at the end of learning (Mahirah, 2017). In this case, the evaluation form is divided into 2, namely objective and subjective tests.

Subjective tests or description tests in this case have the meaning of tests that are in the form of questions or orders that require answers in the form of descriptions or exposure to sentences that are generally quite long, in which the answers provide explanations, comments, interpretations, comparisons, differences and so on. The number of items from this subjective test is generally limited, which is around five to ten items, which generally begin with the words "Explain", "Explain", "Describe" "why", "How" and so on (Sudjiono, 2016).

Objective tests or commonly referred to as short answer tests are one type of learning outcome test consisting of items that can be answered by students by choosing one or more of the most appropriate answers among several possible answers that have been paired with each item or by writing the answer in the form of words or certain symbols in the place or space provided (Sudjiono, 2016).

In achieving student competence, students are required to achieve three domains in competence, namely cognitive, affective, and psychomotor. The problem that occurs at SMA Muhammadiyah 1 Karanganyar is that in the cognitive aspect, students tend to fulfill more competencies from the memorization aspect. If we refer to the cognitive process in accordance with Bloom's cognitive level, Bloom's cognitive level shows the polarization of cognitive levels between low-level thinking skills Low Order Thinking Skills (LOTS) include cognitive levels C1 (remember), C2 (understand), C3 (apply), while C4 (analyze), C5 (evaluate), C6 (create) including high-level thinking skills (HOTS).

Then students should be able to master all aspects from C1 to C6. (Widodo, 2021) To obtain these competencies, teachers should pay more attention to the students' knowledge and make cognitive tests or evaluations in accordance with the standards, which follow the steps in making instruments, determining appropriate signs and levels of questions in accordance with the standards (Ardyanto, 2016).

The purpose of this research is to identify, develop, improve evaluation instruments in learning Islamic Religious Education, as well as to conduct a study of cognitive domain learning evaluation instruments on objective and subjective tests. The evaluation process carried out must be objective and in accordance with existing KKO standards, so that students are able to develop their thinking skills in accordance

## LITERATURE REVIEW

with existing standards.

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In a study explained that objective tests are one type of systematic test where each test has answer options that can be selected or in the form of a written test with content that students can answer by selecting the answer options that are already available. The implementation of multiple choice tests is included in the category of tests that are very good to implement (Kayla Azzahra et al., 2023).

In other studies, it is explained that subjective tests are one type of test that is structured with systematic questions, by having several possibilities for students to provide answers using their own language. Because the nature of this subjective test varies, giving this subjective test assessment is a task that must be done gradually and with caution. Assessment will be efficient if it is supported by evaluation tools that are in accordance with existing standards (Nursinta et al., 2024).

According to Arikunto in a study explained, the tendency experienced by previous teachers, learning assessment in the cognitive domain only focused on the first 3 aspects, namely on the aspects of remembering, understanding, and applying, while not focusing on the aspects of analyzing, evaluating, and creating (Arikunto, 2010).

In Sufiyah Rahmawati's research (2024) it is explained that there are several methods in the education assessment used, namely written exams. This method has several types of questions, such as multiple choice questions, essays or true and false questions (Nursinta et al., 2024).

In Kayla Azzahra's research (2023) also explains that in the implementation of learning evaluations, several types of objective tests have been applied, but the tests used during the evaluation have less effect on students, this happens because along with the change of the K13 curriculum to an independent curriculum, and Islamic Religious Education has been included in the office and questions have been published by the government (Kayla Azzahra et al., 2023).

According to Santrock, there are five steps in the higher order thinking process, namely preparation, incubation, insight, evaluation and elaboration. Preparation, which is presenting a problem to students and sparking students' curiosity, so that in this case students are provoked to find out. Incubation, which is giving students a

duration of time to think about the problem and assist students in making different connections in their thinking. Insight, which is when all things that are enigmatic are seen to correlate and feel suitable. Evaluation, where students determine which ideas have value and are something new or updated. Elaboration or elaboration or expansion, namely students elaborate or re-expand their ideas, so that students' critical thinking will not stop at that point, so it requires a long period of time (Santrock, 2011).

#### **METHOD**

This research method uses a qualitative approach with a focus on interviews as the main data collection technique. This research uses 2 accurate data sources, namely primary and secondary data (Amzana et al., 2024).

Primary data is conducted by Identification of respondents involves the selection of Islamic religious education learning teachers at SMA Muhammadiyah 1 Karanganyar. Development of interview questions involves preparing structured questions related to the application of Objective Test and Subjective Test evaluations. Interviews were conducted directly and in-depth. Interpretation of the results focuses on further understanding the effectiveness and challenges of applying the subjective essay test evaluation in the context of Islamic religious education learning at SMA Muhammadiyah 1 Karanganyar. In addition, the author also uses secondary data sourced from, articles, scientific papers, books and the internet to support the objectivity of data and research.

## **DISCUSSION**

#### **Objective Test**

Objective tests or commonly known as short answer tests and are a new model test is one type of tess used in the assessment of learning outcomes in the form of items that can be answered by students by choosing one or more answers among several possible answers that have been paired on each question (Sudjiono, 2016). There are several classifications of objective tests: true-false objective tests, objective test in the form of matching, objective test of complete form, fill-in-the-blank objective test, and objective test of multiple-choice form.

First, true or false objective test is one form of objective test where the items submitted in a learning outcome test are in the form of statements or statements. Presented which statements are true and which statements are false. Here the student's task is to determine a certain sign or symbol or cross out the letter B (*Benar* means true) if it is believed that the answer is correct, and cross out the letter S (*Salah* means false) if the answer is wrong.

Test Example: Below are some statements that have two possible answers: true and false. You are asked to decide whether the statements are true or false. If true, circle the letter B on the answer sheet. If false, circle the letter S corresponding to each statement. Number 1 is an example of how to do the next question.

- **T-F** The Islamic teachings that entered Indonesia were "defeated Islam", i.e. only the Sufistic aspects, while the rationalistic aspects were taken by Westerners."
- **T-F** The Islamic theology that developed in Indonesia was dominated by the Asy'ariy version of theology. As a result, Indonesian Muslims are not creative-dynamic."

Second, objective test in the form of matching. So in this objective matching test there are 2 lists of choices, namely lists I and II. Each word in list I has a pair in list II.

#### Test Example:

List 1				List 2		
A voluntary prayer performed on every night of Ramadan					A.	Istisqa
(B)						Prayer
Voluntary pra	yers performed	d upon	entering	the	B.	Tarawih
mosque						Prayer
Voluntary prayers for which there is no fixed time and no					C.	Rawatib
fixed number of rak'ahs						Prayer

Third, fill-in-the-blank objective test usually in the form of a story or an essay. The words that are considered important in the story are left blank, and the student's task is to fill in the blanks.

Test Example: Fill in the following dots with the right answer!

The definition of Islamic education according to Sheikh Anwar Jundi is.....(1) the concept of Islamic education above implies that Islamic education takes place....(2), Sheikh Anwar Jundi then formulates the objectives of Islamic education, namely.....(3), Meanwhile, according to Sheikh Dr. 'Athiyah al-Abrasyi, the objectives of Islamic education are....(4).

Fourth, completion objective test. This test is often called a completion or completion test, in this objective completion test the test items can be made different from one another.

Test Example: Fill in the following dots with the correct and appropriate answers.

a. The Jabariah sect is famous for its .....

- b. The famous scientific institution in the heyday of Caliph al- Ma'mun was called....
- c. The book al-Syifa' is an encyclopaedia about.....

In addition to being written in the form of sentences as stated in the example above, objective tests in the form of completion can also be written in the form of pictures or maps.

Fifth, multiple choice objective test. This objective test is a form of objective test consisting of questions or statements that are unfinished, and to solve them, one or more of the several possible answers that have been provided on each item concerned must be chosen.

Test Example: Choose the correct answer!

The person who replaces the fast of Ramadan by feeding the poor is called paying:

- A. Jariyah
- B. Fidiyah
- C. Shadaqah
- D. Hibbah
- E. Wakaf

Appropriateness of Using Objective Tests are: large number of participants, the test compiler has the ability and extensive experience in compiling test items, test compilers have free time in compiling tests, the compiler plans, that the items are not only used once but can even be used in the upcoming test ice, test compilers have confidence that the test items prepared can be analyzed in order to determine the quality of the question, and the principle of objectivity will be more likely to be realized.

Operational guidelines Objective test preparation are: the compiler familiarizes himself and often practices in making questions, after the test is used, it is expected to analyze the item, the compiler needs to prepare a norm that takes into account the trap factor, the compiler should use aids in the form of a question specification table or often called a lattice grid, the language used is simple, concise, clear and easily understood by students, the compiler in making questions is really trying to avoid multiple interpretations, writing punctuation must be written clearly and correctly, and the compiler should provide clear and clear guidelines or instructions.

#### **Subjective Test**

Subjective tests are one type of learning outcome test that has characteristics as stated in the form of statements or instructions that require answers in the form of descriptions, statements or orders that require students to provide explanations, comments, interpretations, compare, contrast and so on, and the number of items is generally limited, ranging from five to ten items.

First, Classification of Subjective Tests, these are open subjective test and limited subjective test. Open subjective test contains answers that are desired to emerge from students completely left to the students themselves. This means that students have the freedom to formulate, interpret, explain, organize and present their answers in the form of descriptions.

Example Test: Allah has bestowed His favors on us so much that we are unable to count them. Therefore, we should be grateful to Allah for these favors. Explain how we can be grateful for Allah's blessings in accordance with the teachings of the Prophet!

A limited subjective test contains answers that are more directed or limited in nature.

Test Example: Among the objects of discussion in kalam science are human actions and God's power. In this matter, the four major schools of kalam, namely the Muktazilah, the Ash'ariyah, the Bukhara Maturidis, and the Samarkand Maturidis, have different opinions. Explain the opinions of these four schools!

Second, accuracy of using subjective tests. This subjective test is appropriate if the question maker in addition to wanting to reveal students' memory and understanding of the combustion material asked in the test, also wants to reveal students' ability to understand various kinds of application concepts, except that subjective tests are more appropriate to use if the number of students is limited (Sudjiono, 2016).

Operational guidelines in the preparation of objective tests: attempted in the preparation can cover the main ideas of the subject matter that has been taught; the compiler should endeavor to make the sentence structure of the question different from the sentence structure contained in the textbook; the compiler should immediately arrange and formulate explicitly regarding how the answer should be desired by the student as the right answer; questions or statements should not be made uniform; the question sentences should be concise, concise, and clear; and the compiler should put forward guidelines on how to work on or answer these question items.

## Objective Tests and Subjective Tests in improving student cognition.

In its implementation, this cognitive domain includes the ability of students to repeat or restate concepts or principles that have been learned in the learning process they have obtained. This process includes thinking skills, competence in developing knowledge, recognition, understanding, conceptualization, determination, and reasoning.

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**Cognitive Process Definition** C1 L Recalling Retrieving relevant knowledge from memory Construct meaning from the learning process, including C20 Understanding oral, written and pictorial communication. C3 Perform or use a procedure in an unusual situation Apply Breaking down material into parts and determining how C4 H Analyzing the parts connect to each other and to the structure Make judgments based on criteria or standards C5 Assess/Evaluate

**Table 1.** Cognitive Processes According to Bloom's Cognitive Levels.

HOTS is the result of a creative thinking process. Creative thinking involves engaging in the same processes used in other forms of thinking which include reasoning, association and retrieval (Sari & Wulandari, 2020).

functional whole

T

S

Create

C6

Putting elements together to form a coherent or

At SMA Muhammadiyah 1 Karanganyar, the evaluation process used in improving thinking skills is HOTS-based with several variations and applications. The results of an interview with one of the Islamic Religious Education Teachers at SMA Muhammadiyah 1 Karanganyar, Mr. Sholikin, said that Islamic religious education focuses on four areas of learning: cognitive, emotional, spiritual, and psychomotor. Therefore, based on the findings of the author's conversation with one of the PAI teachers at SMA Muhammadiyah 1 Karanganyar emphasized that "Every PAI subject matter certainly has the characteristics of learning objectives, so not all materials use the same evaluation instrument, because cognitive has its own model, as well as affective, spiritual and psychomotor". According to the teacher's explanation, PAI teachers distinguish learning assessment models based on the components of the desired learning outcomes rather than equating them with other learning evaluation models.

PAI teachers at SMA Muhammadiyah 1 Karanganyar use a variety of learning assessment instruments to evaluate student learning outcomes, of course using objective and subjective tests, including multiple choice test and essay test.

First, the use of multiple-choice exams as an evaluation tool may not be strange at all. However, in this case, the format of the test provided is different. Previously, tests were written on HVS paper, however, during the pandemic, teachers changed it to an online test format. Based on the results of an interview with a figh teacher at SMA Muhammadiyah 1 Karanganyar, "this form of online test is to further reduce costs and flexibility of time, so that in any condition students will be able to fill it in, without having to leave the house, and without having to stick to a certain time. However, when

this situation returned to normal, the test format that was previously online was switched back to offline by having to come to school and do it in class.

In the application of this multiple-choice test, of course, as a teacher, we still pay attention to the preparation of test questions to be done by students, with the weight of the HOTS-based questions, involving the ability to analyze, assess and create, although indeed this type of HOTS question when applied to multiple choice tests cannot be entirely, because this multiple choice test is limited.

Test Example: According to the view of Islamic law, adultery is a major sin categorized as an abominable, despicable, and bad act. surahs and verses that explain adultery and promiscuity are......

a. Q.S al – Isra' : 32 b. Q.S an – Nur : 35 c. Q.S al – Isra : 1-5

d. Q.S al – Baqarah : 31-32 e. Q.S al – Maidah : 56

Maybe in terms of making objective questions like this, it cannot guarantee the level of understanding of students, and in terms of measuring the level of depth of student material, but at least as teachers, we give these items to students not only involving the process of remembering or memorizing, but also still prioritizing the process of analyzing so that students are accustomed to this HOTS type question.

With the type of questions as above, students not only use their thinking power to memorize verses, but also the meaning of the verse and the analysis of a verse. It is true that this small assessment modification is highly customizable to the circumstances and needs of the students. In fact, what PAI teachers do with SMA Muhammadiyah 1 Karanganyar is included in the category of theoretical innovation. As Syafrudin explained that the principle of innovation (in this case learning assessment innovation) is to facilitate and help human work, meaning that we don't talk about innovation if the change makes it difficult for users or users.

Second is essay test. The results of this observation show that essay tests are used by most PAI teachers at SMA Muhammadiyah 1 Karanganyar in the learning evaluation process in the cognitive domain. Al Islam teacher Mr Sholikin, who said that, "Essay tests are used to measure students' ability to express ideas, and their ideas related to the problems presented by the teacher". Whereas as mentioned in the Aqidah Akhlak class, teachers often ask difficult questions in everyday life, it is clear that the answer needed is how students express their opinions about the problem.

According to the teacher, the test format with written tests is also suitable for improving students' critical thinking, when students not only understand but are able

to think critically and solve a problem, so that they can not only answer questions, but also identify problems and convey solutions to the problems presented.

Test Example: The life of the world is characterized by very dynamic changes. Allah encourages his people to compete in goodness. The Prophet SAW taught that starting a charity by reading basmalah. Why when starting a good deed should be by reading basmalah and praying to Allah Swt.?

The question above requires students not only to answer based on their own assumptions or student memorization in reading, but also student understanding in a material that has been taught and the ability of students to convey in the form of a narrative with a strong scientific basis.

# Weaknesses and Advantages of Objective and Subjective Tests.

Like subjective tests, as a tool to measure success, objective tests certainly have advantages and disadvantages. Among the advantages possessed by objective tests are: (1) Objective tests are more representative in terms of covering and representing the material that has been taught to students in learning it; (2) It allows for students to be more objective; (3) Correcting objective tests is much easier and faster than subjective tests; (4) Objective tests provide the possibility for other people to be assigned or asked for help to correct the answers, because the answer key has been made beforehand and submitted to the corrector; and (5) Objective test items are much easier to analyze, both from difficulty, distinguishing power, validity and reliability.

As for the weaknesses of this objective test, among others, are: (1) Developing objective tests is not as easy as what subjective tests do; (2) Objective tests are generally less able to measure and high and deep thinking processes, objective tests encourage memory or memorization rather than students' depth of thinking processes; (3) With this objective test, it is possible for students to play speculation, guess, or profit in providing answers to these questions; and (4) Can cause or open opportunities for students to cooperate with other students, this is because the answers are objective and relatively the same.

This subjective form of learning outcomes test, besides having advantages, also has disadvantages. Among the advantages that this subjective test has are: (1) Making this subjective test is relatively easy and can be done quickly, because the sentences used in making this question are quite short and concise and not too time consuming; (2) By using this subjective test, it can prevent the possibility of speculation games among students. This is because only students can understand the instructions and questions that have been presented; (3) Through this test, the compiler will be able to find out how far the level of depth and level of mastery of students in understanding the material that has been presented in the test; and (4) Students will be more easily

encouraged and accustomed to having the courage to express their opinions using their arguments and style.

The weaknesses of subjective tests include: (1) This subjective test is generally less able to accommodate or cover and represent the content and breadth of material or subject matter that has been delivered to students; (2) Correcting the answers to this subjective test is quite difficult, because even though the question items are very limited, the answers can also be long and varied, so it will take more time; (3) In giving test scores, there is a tendency that students are more subjective; (4) The work of correcting the answers to this test is difficult to hand over to someone else, because the one who best understands the questions and the right answers is the one who made the question itself; and (5) The accuracy of measuring and the reliability of measuring are very low.

### **CONCLUSION**

The results of this study can be concluded that measuring or evaluating students in improving students' cognitive abilities in Islamic Religious Education learning at SMA Muhammadiyah 1 Karanganyar is carried out using objective and subjective tests by prioritizing or involving the processes of remembering, understanding, applying, analyzing, evaluating, and creating.

In this case at SMA Muhammadiyah 1 Karanganyar, objective tests are carried out using tests in the form of multiple choice in general, while still involving the C3-C6 process, namely analyzing, evaluating, and creating. Meanwhile, the subjective tests used are in the form of essay or description tests which can be maximized in measuring or evaluating student test results.

Of course, objective tests and subjective tests have several advantages and disadvantages, which of course will hinder the process of developing students in the cognitive domain, so it is necessary to align items that have a HOTS (*High Order Thinking Skills*) base so that students are accustomed to dealing with these questions.

#### REFERENCES

- Amzana, N., Alhasbi, M. P. I. F., Kom, S. I., Kom, M. I., Yusriani, S. K. M., Yulianto, A., ... & Kep, M. METODE PENELITIAN KUANTITATIF: TEORI DAN PENERAPANNYA.
- Ardyanto, E. R. (2016). Mengembangkan Instrumen Kognitif (Pengetahuan)
  Pendidikan Jasmani Olahraga Kesehatan Kelas XII. *Prosiding Seminar Nasional Universitas Malang*, 334–348. ardyantoedo@gmail.com
- Basri, H. (2018). Kemampuan Kognitif Dalam Meningkatkan Efektivitas Pembelajaran Ilmu Sosial Bagi Siswa Sekolah Dasar. *Jurnal Penelitian Pendidikan*, 18(1), 1–9. https://doi.org/10.17509/jpp.v18i1.11054

- Imamah. (2020). Penggunaan Loose Parts dalam pembelajaran dengan Muatan STEAM. *Pendidikan Non Formal*, *21*(2), 19–20.
- Kayla Azzahra, Silviana Diah Sukmawati, Aqiila Khairunisa Nur Aisyah, & Nurul Latifatul Inayati. (2023). Implementasi Penggunaan Tes Objektif Dalam Evaluasi Pembelajaran Pendidikan Agama Islam di SMPIT Ar-Risalah Sukoharjo. *Jurnal Ilmiah Edukatif*, 9(2), 183–190. https://doi.org/10.37567/jie.v9i2.2586
- Mahirah, B. (2017). Evaluasi belajar peserta didik (siswa). *Idaarah: Jurnal Manajemen Pendidikan*, 1(2), 257–267.
- Nursinta, W. T., Ayubi, A. Al, & Khairunnisa, N. (2024). *IJM : Indonesian Journal of Multidisciplinary Strategi Evaluasi Pembelajaran Pendidikan Agama Islam di SMA Batik 1 Surakarta. 2*, 289–298.
- Sari, I. K. W., & Wulandari, R. (2020). Analisis kemampuan kognitif dalam pembelajan IPA SMP. *Jurnal Pendidikan Dan Pembelajaran Sains Indonesia (JPPSI)*, 3(2), 145–152.
- Sudjiono, A. (2016). Pengantar Evaluasi Pendidikan. Jakarta: Raja Grafindo.

Widodo, H. (2021). Evaluasi Pendidikan. Yogyakarta: UAD PRESS.