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TEACHER ASSISTANCE IN COMPILING HOTS ASSESSMENT INSTRUMENTS THROUGH CHATGPT AT MADRASAH IBTIDAIYAH

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Abstrak

Tujuan dari pengabdian ini adalah untuk mendampingi guru di Tingkat dasar dalam Menyusun instrument assessment HOTS menggunakan bantuan AI Chat GPT. Kegiatan ini di ikuti oleh semua guru di Madrasah Ibtidaiyah Mambaul Hidayah dengan jumlah 12 guru, dimana pada pendampingan tersebut di berikan pre-test dan post-test yang dilakukan oleh para guru secara offline. Pengabdian ini menggunakan starategi service learning dengan tidak melibatkan mahasiswa karna bentuk pengabdian langsung dilakukan ke guru madrasah dengan berbasis kolaboratif dan praktis. Berdasarkan hasil pelatihan menunjukkan peningkatan pemahaman guru sebesar 68% dari yang awalnya 46%. Kendala terkait penyusunan asasmen berkurang dan kemampuan guru dalam Menyusun instrument asasmen HOTS menunjukkan kemampuan yang lebih baik dari sebelumnya. Hasil akhir dari tujuan pendampingan ini berupa instrument asesmen yang dapat dipersiapkan guru untuk diujikan pada siswa pada kegiatan asasment akhir tahun Madrasah di semester genap. pengabdian ini juga menghasilkan program pengembangan kompetensi guru melalui komunitas belajar pedagogi digital.

***Kata kunci**: Pendampingan Guru, Instrument Assesmen, HOTS, ChatGPT.*

Abstract

The purpose of this service is to assist teachers at the elementary level in compiling HOTS assessment instruments using the help of AI Chat GPT. This activity was attended by all teachers at Madrasah Ibtidaiyah Mambaul Hidayah with a total of 12 teachers, where in the assistance pre-test and post-test were given by the teachers offline. This service uses a service-learning strategy by not involving students because the form of direct service is carried out to madrasah teachers on a collaborative and practical basis. Based on the results of the training it showed an increase in teachers' understanding by 68% from the initial 46%. Obstacles related to the preparation of principles are reduced and teachers' ability to prepare HOTS foundation instruments shows better ability than before. The final result of this mentoring goal is in the form of an assessment instrument that teachers can prepare to test on students at the Madrasah year-end foundation activities in even semesters. This service also produces a teacher competency development program through the Digital Pedagogy Learning Community.

Keywords: Teacher Mentoring, Assessment Instruments, HOTS, ChatGPT.

INTRODUCTION

Entering the era of the Industrial Revolution 4.0 and Society 5.0, the world of education in Indonesia is faced with the demands of 21st century competencies that

emphasize critical, creative, collaborative, and communicative thinking skills (Mahsup at al., 2024). The Independent Curriculum, which has begun to be implemented in various educational units, including Madrasah Ibtidaiyah (MI), requires a more meaningful learning process and is oriented towards higher-level thinking skills (Nisa, 2024). However, the reality on the ground reveals a significant disparity between policy demands and educator readiness (Rahmawati, 2022). In many Madrasah Ibtidaiyah, teachers are still stuck in a learning routine based on memorization and simple assignments, while students should be taught to analyze, evaluate, and create (Jannah, 2024). If not bridged immediately, risks placing MI graduates in a less competitive position in the future (Febriana, 2024).

However, one of the most crucial root problems lies in the ability of teachers to design HOTS assessment instruments (Santi, 2021). In reality, many c's show that more than 70% of daily repetition questions are still at the level of Lower-Order Thinking Skills (LOTS) which simply measures the domains of C1 (remembering) and C2 (understanding) in Bloom's taxonomy (Elisyah, 2024). Teachers admitted that it was difficult to write contextual stimulus, determine the right operational verbs, and design analytical assessment rubrics (Yamtinah et al., 2019). This condition is not only due to a lack of training, but also due to limited time, access to learning resources, and a lack of ongoing mentoring (Ely, 2024). As a result, assessment becomes an obstacle, not a driving force for improving student competence (Passey, 2019).

This condition also occurs at MI Mambaul Hidayah, a Madrasah Ibtidaiyah located in a rural area, where the majority of teachers are senior educators who are not fully familiar with digital technology. The lack of training and limited access to digital learning resources cause teachers in this school to not be optimal in utilizing technology to prepare assessment instruments. The preparation of foundation instruments with the type of HOTS (Higher Order Thinking Skill) in learning requires teachers to pay more attention to the assessment of knowledge aspects (Black & Wiliam, 2009). This realm refers to the Concept of Benjamin S. Bloom, that revised by Lorin Anderson, David Krathwohl (Taubah, 2019).

There are six levels of students' thinking processes (Bower, 2017), namely remembering (C1), understanding (C2), applying (C3), analyzing (C4), evaluating (C5), and creating (C6) (Mishra & Koehler, 2006). High-level thinking ability measures C4, C5, and C6 levels (C. A. Putri et al., 2021). The ability to do HOTS questions for students needs to be done from an early age, because in addition to being able to improve the cognitive quality of students, it also has benefits for them to have the ability to solve problems (Hayun, at.al, 2024).

There are several things that teachers need to pay attention to in compiling HOTS questions, including teachers must determine the behavior that will be measured in certain situations and formulate material that will be the basis for the questions (Selwyn, 2012). Descriptions of the questions asked may also not be

available manually (Nitko & Brookhart, 2014). Therefore, in addition, teachers can also innovate by adding stimulation questions and of course still adjust the conditions of educational institutions. (Putri et al., 2023). Therefore, the form of foundation instruments that tend to be objective tests that only reveal facts, concepts and procedures is more minimized by teachers when compiling HOTS questions (Poerwanti & Tribudhiarto, 2020).

This is where artificial intelligence, particularly ChatGPT, offers a breakthrough (Hasibuan, 2025). As a generative language model, ChatGPT is able to help teachers explore stimulus ideas, formulate analytical question items, vary local contexts, and compile descriptive assessment rubrics, all in seconds (Sakti et al., 2023). More importantly, conversational interactions provide space for teachers to ask questions, criticize, and improve the question design iteratively to achieve the expected quality (Ekowati, 2023). However, the use of AI does not necessarily replace the professional role of teachers, but rather it becomes a digital collaborative partner that enables teachers to express their pedagogical creativity in a more efficient and measurable way (Sofa, 2025).

Chat GPT (Generative Pre-trained) is one of the artificial intelligence applications that functions to interact in text-based conversations (Santhosh et al., 2023). ChatGPT can also be called a robot or chatbot that utilizes Artificial Intelligence (AI) or artificial intelligence that is able to interact and assist humans in doing various tasks based on the search words used (Iriyani et al., 2024). The use of Chat GPT in the field of service is actually able to improve customer service and greatly contributes to consumer satisfaction where Chat GPT itself can be accessed all the time, besides that Chat GPT can automate repetitive tasks (Paul et al., 2023).

Although there has been a lot of training related to the use of artificial intelligence technology in learning, several studies show that the focus of teacher mentoring is still general and has not specifically led to the preparation of assessment instruments based on Higher Order Thinking Skills (HOTS) at the Madrasah Ibtidaiyah level. For example, the paper (Ruindungan et al., 2024) provides training on the use of ChatGPT and Tome App in the development of learning content, but has not yet targeted the aspect of systematic assessment preparation. Similarly, (Saputra et al., 2024) only focused the training on digitizing learning resources and evaluating learning without in-depth exploration of HOTS. Meanwhile, (Mukhlis et al., 2023) developed ChatGPT-based literacy training, but limited to the field of reading literacy at the high school level. Thus, there has been no study of contextual teacher assistance in compiling HOTS assessment instruments through ChatGPT in the Madrasah Ibtidaiyah environment, which is urgently needed to support the implementation of the Independent Curriculum at the elementary level.

Based on these problems, this community service activity is carried out as a form of response to the needs of teachers in improving their digital competence,

especially in preparing relevant, efficient, and technology-based assessment instruments. The purpose of this activity is to provide intensive assistance to MI Mambaul Hidayah teachers to be able to prepare formative and summative assessment questions with the help of AI-based technology, so that the learning process becomes more adaptive and contextual.

MATERIALS AND METHODS

This service activity uses the Service-Learning approach, which is a learning and community empowerment strategy that integrates community service activities with the academic learning process. The Service Learning method is a learning method that prioritizes a service, both service to oneself, to others, and to the environment (Prasasty, 2022). Service Learning emphasizes collaboration between academics and the community in designing, implementing, and reflecting on service activities that are meaningful and have a direct impact on the needs of the community (Syamsudduha et al., 2017).

Pengabdi plays the role of tutor and facilitator, who not only delivers material but also guides teachers directly in compiling assessment instruments. This service was carried out at Madrasah Ibtidaiyah Mambaul Hidayah, Menampu village, Gumukmas District, Jember Regency. This service location is relatively far from the city, but internet access is still affordable. The service activity was carried out on May 20-21, 2025. The time was chosen with the aim that before the implementation of the foundation activities at the end of the madrasah year, even semester of the 2025-2026 academic year, teachers could prepare student assessment instruments through the training. This service activity was attended by all teachers of MI Mambaul Hidayah, with a total of 12 teachers assisted.

The steps of this service activity with Service Learning include: Identification and analysis of community needs (in this case, teachers), collaborative program planning, compiling success indicators, implementation of activities (delivery of materials related to pedagogic digitalization through ChatGPT in compiling assessments). Followed by reflection and follow-up activities.

RESULTS AND DISCUSSION

This service produces an activity that can help teachers in compiling Assessment instruments easily and quickly. Through AI Chat GPT, teachers not only create questions, but also at the same time compile a series of foundations, such as question grids, as well as remediation and enrichment programs. The following are the results of this service activity with a service-learning strategy.

Identification and Analysis of Community Needs

The initial stage is observation and interviews to find out the real problems faced by the target community, which in this case is teachers. Informal observations and interviews were conducted with several teachers to explore the challenges they

faced in compiling assessment instruments. This process aims to uncover what obstacles teachers face in developing Higher Order Thinking Skills (HOTS)-based questions, as well as difficulties in utilizing technology, especially in the use of digital tools such as ChatGPT.

Interviews are conducted through open discussions that allow teachers to express their grievances and expectations honestly. The results of this identification are the basis for the preparation of training materials that are contextual and according to the needs of the field. Based on the results of observations and interviews, MI Mambaul Hidayah has 12 education staff. 9 of them are teachers, 1 head of madrasah, and 2 as education personnel.

Based on the results of interviews with several teachers at MI Mambaul Hidayah, there was a grade 5 teacher who said that:

> "I have never compiled a problem using ChatGPT, and so far I have always made problems by handwriting and then transferred them by typing to a laptop".

The 2nd grade teacher said the same thing:

> "So far, I have always had difficulty making questions, because I am an Arabic teacher, automatically the questions I write must be in Arabic, and I cannot type Arabic fonts on my laptop".

The complaint is still related to the process of writing and preparing the Assessment instrument. One teacher also revealed:

> "I am already familiar with ChatGPT, and have used it to ask other things such as subject matter and even personal, but never to compile HOTS questions".

The statement is in line with the teacher's statement that:

> "I've also heard of ChatGPT a lot, but I've never used it, let alone to create problems in the form of HOTS."

Meanwhile, four senior teachers with an age range of 50 to 60 years old admitted that they have never heard of things related to AI, because so far they have only used smartphones as a means of communication, and it is only Whatsapp. One of the teachers stated that he had used AI ChatGPT in compiling questions, but the question had not led to the form of HOTS due to limited understanding related to the form of HOTS questions.

This is in line with the statement of the head of the MI Mambaul Hidayah that teachers have participated in the assessment preparation workshop, but this activity was 5 years ago, and there have been no training activities related to regular

assessments. So far, only workshop related to the curriculum and learning design have been made. There are 2 educators who are already familiar with AI Chat GPT and often use it for several administrative purposes because their position is not as a teacher but as an Administrator and Operator. Based on these findings, pedagogic digitization through AI Chat GPT in compiling foundation instruments does need to be done at MI Mambaul Hidayah.

Collaborative Program Planning

The planning stage is carried out as a follow-up to the identification of needs, to ensure that the designed program is truly contextual, applicable, and relevant to the conditions and challenges faced by the partners. In this stage, the devotees actively cooperate with the madrasah to prepare and agree on a comprehensive activity plan. The steps taken include the following activities.

First, a discussion on the preparation of activity plans. The service provider held a coordination meeting with the head of the madrasah and teacher representatives to explain the results of the identification of needs and propose an activity scheme. In this discussion, the two parties had a dialogue to agree on the form of activity, implementation time, technical implementation, and participant involvement. Activities are designed to be flexible and take into account the teacher's workload.

Second, determine methods, materials, and media. Based on the results of the discussion, the service providers prepared a training design that included practice-based, participatory, and direct mentoring methods. The implementation of mentoring was carried out for 2 days, 1 day for providing material, the second day was practice. Furthermore, the main material, namely the material for the preparation of HOTS questions, consists of 1) the concept of standard question development, 2) the concept of question grids, 3) the concept of HOTS questions, 4) the formulation of operational verbs in the formulation of indicators, 5) training on the use of AI (ChatGPT) as a tool and the practice of preparing HOTS questions by participants. Finally, tools or media such as laptops, internet networks, LCD projectors or TVs, and written guides.

The following is an example of a guideline for the description of the HOTS Assessment instrument as a guide for teachers in compiling the HOTS assessment instrument described in Table 1.

Table 1. Guidelines for Instrument Description Assessment HOTS Taxonomy Bloom Revision

Level	Definition	Learning Objectives	Operational Verbs	Example Questions
Analysis	Break down information into sections, identifying relationships between sections	Students can distinguish, classify, and relate information	Grouping, distinguishing, comparing, studying, organizing, associating	"Compare the two types of changes in the form of objects and explain the differences in processes and causes."
Evaluation	Make judgments based on specific criteria and standards	Students can evaluate ideas, procedures, or solutions logically	Assess, consider, decide, criticize, recommend, justify	"Which method is more effective to slow the melting of ice? Explain the reason for your choice."
Creations	Combining elements into a new structure or pattern	Students can create new solutions or products based on their knowledge	Design, create, arrange, develop, build, formulate	"Design a simple experiment to show the change of liquid to solid. Explain the tools and steps."

Then, an example of a score scale guideline in the assessment rubric is explained in Table 2.

Table 2. Example of a Score Scale Guideline (Assessment Rubric)

Score	Answer Criteria
4	Explain the impact in full and logically on 3 living beings, accompanied by real examples and applicative solutions.
3	Explain the impact on 2 living beings, with general examples and basic solutions.
2	Mention the impact on 1 living thing without a detailed explanation.
1	Incorrect answers or just repeating the content of the question.

The final stage in planning activities is to compile success indicators. Indicators are compiled to assess the achievement of goals, both in processes and results. Indicators include the level of teacher involvement in training sessions and practice, teachers' ability to prepare assessment instruments in accordance with the HOTS criteria, teachers' ability to utilize AI-based technology. The level of involvement or active participation, and the ability of teachers to participate in training in the preparation of HOTS foundation instruments through AI ChatGPT are carried out through pretests and post-tests while the increase in teachers'

confidence in utilizing AI ChatGPT is evidenced through the results of observation and oral interviews through evaluation activities.

Implementation of Activities: Delivery of Materials and Assistance

The activity began with giving a pre-test to participants to measure the initial understanding of the concept of preparing assessment instruments and the level of technological literacy related to the use of AI (in this case ChatGPT). After that, it was followed by a material presentation session, practice of using ChatGPT, and the preparation of assessment instruments directly by participants. At the end of the session, a post-test was given to evaluate the improvement of participants' understanding after the training. The following are the results of the pre-test of MI Mambaul Hidayah teachers before being given the mentoring material presented in Table 3.

Table 3. Pre-Test Results of HOTS and AI Chat GPT Capabilities

Categories of Comprehension	Number of Teachers	Percentage (%)
Mastering AI, not yet mastering HOTS	2	16,7%
Mastering HOTS, not yet mastering AI	4	33,3%
Haven't mastered both (AI & HOTS)	6	50,0%
Total	**12**	**100%**

Based on the results of the pretest given to 12 teachers at Madrasah Ibtidaiyah Mambaul Hidayah Pulorejo-Gumukmas, an initial picture was obtained of the level of teachers' understanding of two important aspects of learning, namely the ability to compile HOTS-based assessment instruments and the ability to utilize AI-based technology such as ChatGPT. The results of the analysis showed that the average teacher pretest score was 11.5 out of a maximum score of 25, which means that the initial mastery level of the participants was only 46%. This figure reflects that most teachers have not fully understood the principles of preparing HOTS questions and the use of artificial intelligence technology in the learning process.

In detail, only 2 teachers (17%) seem to be quite familiar with AI technology, but they have not mastered the preparation of HOTS questions. Meanwhile, 4 teachers (33%) already understand the concept of HOTS, but still have difficulty in using AI technology such as ChatGPT. The other 6 teachers (50%) have not mastered both aspects. Furthermore, the facilitator provided interactive training on the principles of preparing assessment questions in accordance with the Independent Curriculum, including the characteristics of HOTS questions. In addition, participants were also introduced to the use of ChatGPT as a tool in developing questions, including how to give the right commands (prompts). The training is carried out in short but concise sessions, interspersed with hands-on simulations so that teachers not only receive the material theoretically, but also directly practice it. The facilitator accompanies each teacher individually or in small groups, ensuring that each participant understands the concept and can apply it as depicted in Figure 1.

Figure 1. Implementation of Material Assistance (First Day)

After getting the material, at the next meeting the teacher is asked to prepare an assessment instrument based on the learning topic they are teaching as illustrated in Figure 2. This process is carried out in groups with direct assistance from service providers. Teachers seemed enthusiastic about trying to use ChatGPT to compile and revise questions. After the preparation is completed, the teacher's work is evaluated together through a reflection forum. This reflection is an important moment to strengthen conceptual understanding, correct misconceptions, and provide constructive feedback.

Figure 2. The Practice of Compiling HOTS Assessment Instruments with AI ChatGPT (Day Two)

Reflection Together

Hold an open reflection or evaluation forum after field practice. Participants were invited to review the process that had been undertaken, the impact of the activity, and the challenges felt. From the results of the reflection, the majority of participants said that this training opened up new insights about the use of artificial intelligence technology in pedagogical practice, especially in designing assessment

questions that are varied and in accordance with learning outcomes. The teachers admitted that they initially felt awkward using the ChatGPT platform, but after doing hands-on practice, they felt the ease and efficiency in producing various question items, including HOTS (Higher Order Thinking Skills) questions.

Some of the mentoring participants admitted that they found it easier to compile questions using AI ChatGPT, and began to understand how to compile questions with the HOTS type. However, challenges are also recognized, especially for senior teachers with older age who still need to adapt in applying AI. This reflection forum is not only a means of evaluating activities, but also a moment to strengthen the learning community among teachers. There is a joint commitment to form a regular discussion forum as a forum for sharing experiences and practices both in using ChatGPT and other educational technologies. This shows that the training does not stop at knowledge transfer alone, but also encourages a change in attitude and a sustainable collaborative work culture.

Evaluation and Follow-up

The evaluation of training activities was carried out systematically by referring to several indicators, including: (1) the active participation of teachers in each training session, (2) the teacher's ability to understand the HOTS foundation instrument and (3) the teacher's ability to apply ChatGPT AI technology. Based on direct observation, participants' work results, and feedback during the practical sessions, it can be concluded that most teachers show high enthusiasm and increased ability to design varied assessment questions. Some teachers have even been able to customize ChatGPT prompts to generate questions according to certain cognitive levels in Bloom's taxonomy.

The results of the observation were also supported by the questionnaire results data before the training started, participants were given a *pre-test* questionnaire to measure their understanding of the HOTS assessment and the use of AI technology. The following are the results of post-test activities after mentoring and practical activities described in Table 4.

Table 4. Post-Test Results After Mentoring

Categories of Comprehension	Number of Teachers	Percentage (%)
Mastering HOTS & AI	6 Teachers	50%
Mastering one (HOTS or AI)	4 Teachers	33%
Have not mastered both optimally	2 Teachers	17%
Total	**12 Teachers**	**100%**

After training and assistance in the preparation of the HOTS assessment instrument assisted by AI technology (ChatGPT), there was a significant increase in teacher understanding. Based on the results of the post-test given to 12 teachers, an average score of 17 out of 25 points was obtained, or equivalent to 68% of the mastery level. When compared to the average score of the previous pretest of 11.5 (46%), there was an increase of 22 percent in material mastery.

The details are as follows: 6 teachers (50%) have mastered both the concept of HOTS and the use of AI. 4 teachers (33%) show mastery of one of the aspects, be it HOTS or AI. Only 2 teachers (17%) still need further assistance, mainly due to limited digital literacy or experience in compiling competency-based questions. The results of the testimonials after the mentoring were also revealed by several teachers, including grade 4 teachers who stated:

> "After participating in the assistance in the preparation of the HOTS assessment instrument with the help of ChatGPT, I felt that it was very helpful in understanding how to design questions that not only test students' basic knowledge, but also HOTS abilities such as analyzing, evaluating, and creating. ChatGPT provides examples of questions that are precise, fast, and in accordance with the learning context in madrasas. Now I am more confident in compiling assessments that are challenging and meaningful for students. Thank you for your very practical and inspiring mentoring!"

A similar statement from a Class V teacher, MI Mambaul Hidayah Pulorejo who revealed the efficiency of making HOTS questions with ChatGPT

> "This mentoring opened my insight into how to prepare HOTS questions that are in accordance with the characteristics of elementary school students. With the help of ChatGPT, the process becomes easier and more efficient."

As a follow-up, a follow-up mentoring agenda was designed in the form of regular coaching clinics, to ensure the sustainability of the use of ChatGPT in the MI Mambaul Hidayah environment. The sustainability of this service program will be continued in other pedagogic digitalization, such as the design of teaching materials, media, including teaching modules. Communication and collaboration with madrasah heads also continue to be built to support the integration of this technology in the school's work plan. The following is an analysis of the results of the evaluation using the CIPP (Context, Input, Process, and Product) model. This evaluation confirms that the success of service activities is not only measured by momentary results, but also by efforts to build reflective and adaptive habits in facing the challenges of digital learning. Thus, this activity not only provides practical solutions, but also instills the spirit of technology-based pedagogical transformation.

In the context of the development of HOTS assessment instruments, the role of teachers as learning designers is crucial (Nurhikmah et al., 2025). According to Mahmud, et al., (2023), high-level thinking skills include the skills of analyzing (C4), evaluating (C5), and creating (C6), which are not enough to be measured by simple multiple-choice questions. Unfortunately, many teachers at Madrasah Ibtidaiyah are not used to developing questions that require deep thinking due to the limitations of pedagogical knowledge and time (Indriani, 2023). This is in line with findings

(Indriani et al., 2023) which show that only about 30% of teachers are able to compile HOTS-based questions independently. Through this mentoring activity, the active involvement of teachers in understanding the HOTS theory and trying to directly formulate problems with technology-based guidance is an effective approach to bridge the gap (Utami, 2024).

The use of ChatGPT as a tool in the preparation of assessments can be attributed to the theory of connectivity (Prastowo et al., 2025). Knowledge is built through digital networks and collaboration with technology (Eliaumra et al., 2024). Teachers are no longer the only source of information, but are transformed into facilitators who are able to manage information intelligently with the help of technology (Ginting et al., 2024). A study by Hanis et al., (2024) even confirms that the use of generative AI in learning can increase teacher productivity, as long as it is used critically and ethically. In the context of this activity, mentoring that integrates ChatGPT not only improves teachers' technical skills, but also forms a new awareness of how technology can be a partner in assessment innovation, not just an automation tool (Insani et al., 2024). This shows that devotion is not only the transfer of knowledge, but also the transformation of the professional mindset of educators.

CONCLUSIONS AND SUGGESTIONS

Service activities through a collaborative and practical service-learning strategy, this mentoring shows significant results. At the beginning of the activity, as many as 50% of teachers had not mastered both the concept of HOTS and the use of AI, and the average score of the pre-test only reached 46%. However, after training and hands-on practice, there was an increase in the average score to 68%, with 50% of teachers having mastered both, and only 17% still requiring further assistance. The results of reflection and evaluation activities from the mentoring also show that the results of the use of AI not only facilitate the process of preparing questions, but also are able to expand the insight of digital pedagogy among teachers. This training also encourages the formation of technology-based learning communities in the madrasah environment and produces real products in the form of assessment questions that are ready to be used for year-end assessments ahead of the even semester.

Based on the implementation and results of service activities, it is suggested that the assistance program for the preparation of ChatGPT-based HOTS assessment instruments be used as a sustainable program that is integrated with the teacher learning community at the Madrasah Ibtidaiyah level. Similar activities can be expanded in scope through cross-madrasah cooperation or KKG MI in order to create a collaborative ecosystem in improving assessment competencies that are relevant to the demands of the curriculum and technological developments. In addition, it is necessary to conduct advanced training that not only focuses on the

technical use of ChatGPT, but also on ethical aspects, question validation, and the development of authentic assessment rubrics so that teachers can produce assessments that are not only innovative, but also quality and useful.

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