

WEB BASED TRAINING ON DEVELOPING COMPETENCY BASED ASSESSMENT INSTRUMENTS FOR ISLAMIC RELIGIOUS EDUCATION AMONG MASTER'S STUDENTS IN ISLAMIC RELIGIOUS EDUCATION AT THE GRADUATE SCHOOL OF ZAINUL HASAN GENGONG ISLAMIC UNIVERSITY PROBOLINGGO

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Keywords:

Web Based Training, Competency Based Assessment, Islamic Religious Education, Assessment Literacy

Abstract

The increasing integration of digital technologies in higher education requires prospective educators to develop competency-based assessment instruments through technology-enhanced learning. However, many Master's students in Islamic Religious Education have limited experience in designing assessment instruments using web-based resources and digital platforms. This community service program aimed to strengthen participants' competencies through web-based training on developing competency-based assessment instruments. The program employed a participatory approach involving online workshops, guided practice, collaborative discussions, mentoring, and evaluation. Participants learned to formulate learning outcomes, develop assessment indicators, construct scoring rubrics, and design authentic assessment instruments using web-based educational resources. The program enhanced participants' understanding of competency-based assessment principles and improved their ability to develop valid and reliable assessment instruments. Furthermore, the web-based learning environment promoted collaborative knowledge sharing, independent learning, and digital assessment literacy, preparing participants to implement innovative assessment practices in Islamic Religious Education and future professional settings.

INTRODUCTION

The rapid advancement of digital technology has transformed assessment practices in higher education, requiring prospective educators to develop competency-based assessment instruments supported by digital platforms and web-based resources. For Master's students in Islamic Religious Education, the ability to design valid, reliable, and authentic assessment instruments is an essential professional competency that supports outcome-based learning. However, many students still encounter difficulties in translating learning outcomes into measurable assessment indicators, constructing scoring rubrics, and integrating digital tools into assessment design. To address these challenges, a web-based training program was implemented to strengthen participants'

competencies through interactive learning, guided practice, collaborative discussions, and continuous mentoring. The program aimed to improve assessment literacy while fostering participants' readiness to implement competency-based assessment practices in Islamic Religious Education. Assessment is a fundamental component of the teaching and learning process because it provides evidence of students' achievement of intended learning outcomes. In higher education, competency-based assessment has become increasingly important as it emphasizes not only the acquisition of knowledge but also the development of skills, attitudes, and professional competencies. For students in Islamic Religious Education, the ability to design valid and reliable assessment instruments is an essential professional competency, as they are expected to become educators capable of implementing meaningful and authentic assessment practices in schools and higher education institutions (Arifin & Sofa, 2025).

Despite its importance, many master's students in Islamic Religious Education still encounter difficulties in developing competency-based assessment instruments. Assessment practices often focus on measuring cognitive achievement through conventional written tests, while the assessment of affective and psychomotor competencies remains limited. In addition, some students experience challenges in formulating measurable learning outcomes, constructing assessment indicators, designing scoring rubrics, and aligning assessment instruments with competency standards. These limitations may affect the quality of assessment and reduce its effectiveness in supporting student learning (Mardiya & Sofa, 2025).

Training and mentoring programs provide an effective strategy for improving assessment competencies through experiential learning and continuous guidance. Practical workshops enable participants to understand assessment principles, design authentic assessment instruments, and receive constructive feedback from facilitators and peers. Such activities also encourage reflective practice and collaborative learning, allowing participants to refine their assessment skills through direct application. Consequently, community service initiatives focusing on assessment instrument development can contribute significantly to strengthening the professional competencies of future Islamic Religious Education educators (Nadia & Sofa, 2025).

This community service program was designed to enhance the assessment competencies of master's students in Islamic Religious Education at the Graduate School of Zainul Hasan Genggong Islamic University, Probolinggo. The program focused on training participants to formulate learning outcomes, develop competency-based assessment indicators, construct scoring rubrics, and design authentic assessment instruments aligned with competency-based learning. Through participatory training and mentoring, the program is expected to improve participants' readiness to implement high-quality assessment practices in their future academic and professional responsibilities.

LITERATURE REVIEW

Competency-based assessment emphasizes the evaluation of learners' knowledge, skills, and attitudes through authentic and outcome-oriented assessment strategies (Saifullah & Sofa, 2025). The integration of web-based learning environments has further enhanced assessment practices by providing flexible access to digital resources, collaborative learning opportunities, and interactive assessment development tools (Hanafi & Sofa, 2024). Previous studies have shown that web-based training improves participants' assessment literacy, promotes independent learning, and strengthens

professional competencies through continuous practice and feedback. In the context of Islamic Religious Education, integrating competency-based assessment with web-based technologies enables prospective educators to develop valid assessment instruments while adapting to the demands of digital transformation in higher education. Competency-based assessment is an educational approach that evaluates learners' achievement based on predefined learning outcomes, emphasizing the integration of knowledge, skills, and attitudes. Unlike traditional assessment, which primarily measures cognitive achievement, competency-based assessment focuses on students' ability to demonstrate competencies in authentic learning contexts. In higher education, this approach supports outcome-based education by ensuring that assessment activities are aligned with curriculum objectives and expected graduate competencies (Sholeha & Sofa, 2025).

Assessment instruments play a crucial role in ensuring the validity, reliability, and fairness of competency-based assessment. Well-designed instruments enable educators to collect accurate evidence of student learning and provide meaningful feedback for continuous improvement. The development of assessment instruments involves several stages, including formulating learning outcomes, determining assessment indicators, selecting appropriate assessment techniques, constructing scoring rubrics, and validating the instruments before implementation. Authentic assessment methods, such as performance tasks, portfolios, projects, and observations, are widely recommended because they measure students' ability to apply knowledge in real-life situations (Helmi & Sofa, 2025).

In Islamic Religious Education, competency-based assessment should comprehensively evaluate cognitive, affective, and psychomotor domains while reflecting Islamic educational values. Assessment practices are expected to measure not only academic achievement but also character development, religious attitudes, ethical behavior, and practical religious skills. Therefore, IRE educators need adequate competencies to design assessment instruments that integrate pedagogical principles with the objectives of Islamic education, ensuring that learning outcomes reflect both academic excellence and moral development (Ilahi & Sofa, 2025).

Training and mentoring are recognized as effective strategies for strengthening educators' assessment competencies. Participatory training encourages active engagement through workshops, collaborative discussions, guided practice, and reflective evaluation, allowing participants to develop practical skills in assessment instrument design. Continuous mentoring further supports the application of newly acquired knowledge by providing feedback and opportunities for revision. Within community service programs, this integrated approach contributes to sustainable professional development and improves participants' readiness to implement competency-based assessment in educational practice.

RESEARCH METHODS

This community service program employed a participatory training and mentoring approach to strengthen the competencies of Master's students in Islamic Religious Education in developing competency-based assessment instruments. The participants were Master's students enrolled in the Islamic Religious Education program at the Graduate School of Zainul Hasan Genggong Islamic University, Probolinggo. The program was conducted through four stages: needs assessment, training implementation, mentoring, and evaluation. The initial needs assessment identified participants' prior

understanding of competency-based assessment and the challenges they encountered in developing assessment instruments aligned with learning outcomes (Nurhamsalim & Sofa, 2025).

The training phase consisted of interactive lectures, workshops, guided practice, and collaborative discussions. The materials covered the principles of competency-based assessment, formulation of learning outcomes, development of assessment indicators, preparation of assessment rubrics, and design of authentic assessment instruments for Islamic Religious Education courses. During the mentoring sessions, participants worked individually and in groups to develop assessment instruments, while facilitators provided continuous feedback and guidance to ensure that the instruments met the principles of validity, reliability, and alignment with competency standards.

The effectiveness of the program was evaluated using pre-test and post-test assessments, direct observation, document analysis, and participant feedback questionnaires. The pre-test and post-test measured improvements in participants' knowledge of competency-based assessment concepts, while document analysis evaluated the quality of the assessment instruments developed during the training. Observations and questionnaires were used to assess participant engagement, satisfaction, and the perceived usefulness of the program. The collected data were analyzed descriptively to determine the effectiveness of the training and mentoring activities in improving participants' assessment competencies.

RESULTS AND DISCUSSION

The community service program was successfully implemented through a combination of training workshops and intensive mentoring sessions involving Master's students in Islamic Religious Education at the Graduate School of Zainul Hasan Genggong Islamic University, Probolinggo. The activities began with a needs assessment to identify participants' prior understanding of competency-based assessment, followed by interactive lectures on assessment principles, learning outcomes, assessment indicators, scoring rubrics, and authentic assessment techniques. During the workshops, participants actively engaged in discussions and practical exercises to develop assessment instruments aligned with competency-based learning objectives (Bulqiyah & Sofa, 2025). The collaborative learning environment encouraged participants to exchange ideas, analyze assessment practices, and refine their instrument designs under the guidance of the facilitators.

The mentoring sessions provided participants with opportunities to apply the concepts learned during the workshops by designing competency-based assessment instruments for Islamic Religious Education courses. Each participant developed learning outcome indicators, selected appropriate assessment methods, and constructed scoring rubrics based on authentic assessment principles. Continuous feedback from the facilitators enabled participants to revise and improve their instruments, ensuring alignment between learning outcomes, assessment activities, and evaluation criteria. As a result, the quality of the assessment instruments improved substantially, particularly in terms of validity, clarity of indicators, and consistency between competencies and assessment techniques (Mardiyah & Sofa, 2025).

Interview findings further confirmed the effectiveness of the program. According to Mr. Amin, one of the facilitators, many participants initially experienced difficulties in translating course learning outcomes into measurable assessment indicators and authentic

assessment tasks. He explained that the mentoring process helped participants understand the relationship between competency standards, learning outcomes, assessment indicators, and scoring rubrics. Furthermore, participants became more confident in selecting appropriate assessment methods capable of evaluating cognitive, affective, and psychomotor competencies in Islamic Religious Education. This finding indicates that continuous mentoring provides meaningful support for developing professional assessment competencies beyond what can be achieved through conventional lectures alone.

Figure 1. Web-based training on developing competency-based assessment instruments for Master's students in Islamic Religious Education at the Graduate School of Zainul Hasan Genggong Islamic University, Probolinggo.



Figure 1 shows participants actively taking notes while accessing web-based learning resources provided by the facilitators. During this session, participants reviewed reference materials, competency-based assessment guidelines, and examples of assessment instruments available through online platforms. The combination of note-taking and web-based learning enabled participants to deepen their understanding of assessment concepts, compare various assessment models, and apply the acquired knowledge in developing competency-based assessment instruments for Islamic Religious Education courses.

Overall, the training and mentoring program had a positive impact on participants' assessment competencies. The evaluation results demonstrated noticeable improvements in participants' understanding of competency-based assessment principles and their ability to design comprehensive assessment instruments. Participants also expressed greater confidence in implementing authentic assessment strategies that promote meaningful learning and continuous student development. These outcomes suggest that integrating workshops with sustained mentoring is an effective community service model for strengthening assessment literacy among future Islamic Religious Education educators and supporting the implementation of competency-based learning in higher education.

CONCLUSION

The web-based training program successfully enhanced the competencies of Master's students in Islamic Religious Education in developing competency-based assessment instruments. Through interactive online learning, guided practice, collaborative discussions, and continuous mentoring, participants improved their understanding of learning outcomes, assessment indicators, scoring rubrics, and authentic assessment strategies. The program also strengthened participants' digital assessment literacy and their ability to design valid, reliable, and competency-oriented assessment instruments that support effective learning evaluation in Islamic Religious Education.

To sustain the impact of the program, web-based professional development should be integrated into graduate education through regular training, mentoring, and collaborative learning communities. Future community service initiatives are encouraged to incorporate emerging educational technologies, such as learning management systems, artificial intelligence-assisted assessment, and learning analytics, to further improve assessment quality and innovation. These efforts will contribute to preparing competent Islamic Religious Education educators who are capable of implementing technology-enhanced and competency-based assessment practices in diverse educational settings.

REFERENCES

- Arifin, M. Z., & Sofa, A. R. (2025). Pengaruh shalat lima waktu terhadap disiplin dan kualitas hidup. *Lencana: Jurnal Inovasi Ilmu Pendidikan*, 3(1), 70–78.
- Bulqiyah, H., & Sofa, A. R. (2025). Strategi meningkatkan kompetensi maharoh qiroah dalam pembelajaran bahasa Arab di Pondok Pesantren Rofiu Darojah. *Ikhlas: Jurnal Ilmiah Pendidikan Islam*, 2(2), 136–148.
- Hanafi, H., & Sofa, A. R. (2024). Refleksitas iman dan ilmu serta apresiasinya berdasarkan studi Al-Qur'an dan Al-Hadits. *Moral: Jurnal Kajian Pendidikan Islam*, 1(4), 278–294.
- Helmi, M., & Sofa, A. R. (2025). Melahirkan generasi berkarakter unggul melalui transformasi sosial yang berbasis pendidikan, nilai, dan kolaborasi masyarakat di MTs Miftahul Khoir Alastengah Besuk. *Reflection: Islamic Education Journal*, 2(1), 186–199.
- Ilahi, D. S. K., & Sofa, A. R. (2025). Digitalisasi konsep mawaddah wa rahmah dalam Al-Qur'an dan Hadist: Strategi psikologi keluarga untuk membangun keharmonisan rumah tangga di Desa Bucor Wetan Probolinggo. *Jurnal Budi Pekerti Agama Islam*, 3(1), 180–200.
- Mardiya, Z., & Sofa, A. R. (2025). Keutamaan menuntut ilmu dalam perspektif Islam di kehidupan modern: Tantangan, peluang, dan pengaruh teknologi dalam pembentukan karakter di era digital. *Inspirasi Dunia: Jurnal Riset Pendidikan Dan Bahasa*, 4(1), 13–26.
- Mardiyah, F., & Sofa, A. R. (2025). Keutamaan ilmu dalam perspektif Islam: Transformasi spiritualitas dan kontribusi sosial bagi kaum Muslim dalam kitab Mahfudzot Fadhoilul Iman. *Inspirasi Dunia: Jurnal Riset Pendidikan Dan Bahasa*, 4(1), 55–66.
- Nadia, R. Y., & Sofa, A. R. (2025). Keutamaan Ilmu dan Klasifikasi Pendidikan Menurut Al-Ghazali dan Ibnu Qayyim: Perspektif Al-Qur'an dan Hadits. *Jurnal Budi Pekerti Agama Islam*, 3(1), 291–300.
- Nurhamsalim, M., & Sofa, A. R. (2025). Implementasi nilai-nilai al-Qur'an dan hadits

dalam kehidupan sehari-hari di SMK Negeri 1 Probolinggo: Studi tentang pengembangan karakter Islami siswa. *Reflection: Islamic Education Journal*, 2(1), 127–143.

Saifullah, S., & Sofa, A. R. (2025). Membangun Karakter Santri Melalui Pendekatan Spiritual Berbasis Al-Quran dan Hadits: Studi Empiris di Lingkungan Pesantren Raudlatul Hasaniyah Mojolegi Gading Probolinggo. *Jurnal Budi Pekerti Agama Islam*, 3(1), 158–179.

Sholeha, S., & Sofa, A. R. (2025). Konsep etika keutamaan dalam tasawuf Abdul Qadir Al-Jailani dan pengaruhnya terhadap terbentuknya akhlak manusia. *Jurnal Manajemen Dan Pendidikan Agama Islam*, 3(1), 176–186.