



Development of the Android application Amaan Reading Books (AARAVI) to Build International Competitiveness of Students

Bisri Mustofa^{1*}, Gufron², Nurhadi³, M. Rofik Fitrotulloh⁴, Inayaturo Rosyidah⁵

^{1,2,3,4,5} Universitas Islam Negeri Maulana Malik Ibrahim Malang, Indonesia

Received:	Revised:	Accepted:	Published:
13 January 2023	15 February 2023	16 March 2023	16 May 2023

Abstract:

Islamic Education (PAI) teachers play a strategic role in shaping and guiding Islam in Indonesia. One of the essential competencies for PAI students is the ability to read Arabic texts, which is crucial for accessing primary sources of Islamic knowledge. However, this skill remains weak among students. To address this issue, an Android-based learning application called Mahir Baca Kitab (AARAVI) was developed as an alternative to support Arabic text reading learning. This research employs a multimedia-based instructional design method using the ADDIE model, which includes five stages: analysis, design, development, implementation, and evaluation. The research subjects consisted of 20 students from the Islamic Education Department of UIN Maulana Malik Ibrahim Malang, class of 2020, who were taking the Qira'atul Kutub course. Data collection was conducted through interviews, literature review, questionnaires, tests, and documentation. The data were analyzed using descriptive analysis, quantitative descriptive analysis, and paired sample t-test or Wilcoxon Rank Test techniques. The results indicate that the AARAVI application is highly valid for use as a learning medium for Arabic text reading. Validation by subject matter experts yielded a score of 89%, media experts scored 83%, and field trials with students achieved 87%. Furthermore, there was a significant improvement in students' learning outcomes before and after using the application, demonstrating its effectiveness in enhancing the Arabic text reading skills of beginner-level students. Thus, the AARAVI application is deemed suitable for use as a learning tool for PAI students.

Keywords: *ADDIE model, reading skill, international competitiveness*

Abstrak:

Guru Pendidikan Agama Islam (PAI) memiliki peran strategis dalam membangun dan mengarahkan Islam di Indonesia. Salah satu kompetensi yang penting bagi mahasiswa PAI adalah kemampuan membaca kitab berbahasa Arab, yang menjadi kunci untuk mengakses sumber primer ilmu keislaman. Namun, kemampuan ini masih lemah di kalangan mahasiswa. Untuk mengatasi permasalahan tersebut, dikembangkan sebuah aplikasi pembelajaran berbasis Android bernama Mahir Baca Kitab (AARAVI) sebagai alternatif untuk mendukung pembelajaran baca kitab. Penelitian ini menggunakan metode pengembangan media pembelajaran berbasis Multimedia-Based Instructional Design dengan model ADDIE, yang meliputi lima tahap: analisis, desain, pengembangan, implementasi, dan evaluasi. Subjek penelitian adalah 20 mahasiswa jurusan Pendidikan Agama Islam UIN Maulana Malik Ibrahim Malang angkatan 2020 yang mengikuti mata kuliah Qira'atul Kutub. Data penelitian dikumpulkan melalui wawancara, studi pustaka, kuesioner, tes, dan dokumentasi, serta dianalisis menggunakan teknik analisis deskriptif, analisis deskriptif kuantitatif, dan uji beda paired sample t-test atau Wilcoxon Rank Test. Hasil penelitian menunjukkan bahwa aplikasi AARAVI sangat valid untuk digunakan sebagai media pembelajaran baca kitab. Validasi ahli materi menghasilkan skor 89%, validasi ahli media 83%, dan uji lapangan oleh mahasiswa 87%. Selain itu, terdapat perbedaan signifikan dalam hasil belajar mahasiswa sebelum dan sesudah menggunakan aplikasi, yang menunjukkan efektivitas aplikasi ini dalam meningkatkan keterampilan baca kitab mahasiswa tingkat pemula. Dengan demikian, aplikasi AARAVI layak digunakan sebagai media pembelajaran untuk mahasiswa PAI.

Kata Kunci: *model ADDIE, kemampuan membaca, daya saing internasional*

*Corresponding author

Email: bisrimustofa@gmail.com

How to Cite:

Mustofa, B. (2023). Development of the Android application Amaan Reading Books (AARAVI) to Build International Competitiveness of Students. *IJ-ATL (International Journal of Arabic Teaching and Learning)*, 7(1).

DOI: <https://doi.org/10.33650/ijat.v7i1.4033>

INTRODUCTION / المقدمة

The Department of Islamic Education (PAI) plays a crucial role in preparing Islamic Education teachers for public schools. It holds a strategic responsibility in shaping and directing Islamic perspectives in Indonesia. Several Islamic higher education institutions have designed various programs and policies to enhance the Islamic competence of PAI students (Nurhidin, 2022), including their ability to read classical Islamic texts.

According to F. Mas'ud, one of the essential competencies for graduates of Islamic higher education is Arabic language proficiency, particularly the ability to read classical Islamic texts (kitab kuning). This skill is vital for independently studying Islamic sciences found in Arabic texts. These texts represent the intellectual heritage of classical scholars (ulama salaf) in a distinctive pre-modern form (Mas' udi, 1988).

The ability to read these texts is an integral part of PAI students' academic journey in Islamic studies (Wijayanto, 2020). Universitas Islam Negeri Maulana Malik Ibrahim Malang has placed a special emphasis on developing this competence among PAI students (Ali, 2020). Various initiatives are organized annually, including the Musabaqah Qira'atil Kutub (MQK), training sessions, and text-reading examinations, which are prerequisites for completing a thesis. However, the implementation of these programs has yet to reach optimal effectiveness, as the proficiency levels of students in reading classical texts remain low.

In this context, a former rector of UIN Maulana Malik Ibrahim Malang highlighted that one of the primary challenges faced by Islamic higher education students is their inadequate mastery of the Arabic language and text-reading skills. This is particularly concerning, as these students are being prepared to become scholars in Islamic sciences but are unable to engage with their field of study through primary Arabic sources. Instead, they often rely solely on secondary sources, such as translated works or interpretations by Indonesian scholars. This limitation hinders their ability to apply established methods directly in the study of the Qur'an, Hadith, and works by Middle Eastern scholars, as traditionally practiced by earlier generations of scholars, including kiai and santri.

Therefore, it is imperative to design globally-oriented programs that enhance the national and international competitiveness of PAI students, enabling them to excel across various levels. One potential initiative is the development of an Android-based application called Mahir Baca Kitab (AARAVI) for PAI students. This application is designed as an alternative tool to facilitate the learning of classical text reading by providing Arabic grammar materials, including nahwu and sharaf. It is also equipped with explanatory videos to aid students in practicing foundational text-reading skills. Additionally, the application features quizzes to deepen students' understanding of the materials and visually appealing illustrations to foster user interest in learning. With its user-friendly interface, this application enables students to engage in independent learning, significantly improving their text-reading proficiency (Nazruddin, Smartphone, & Tablet, 2014).

Several compelling reasons necessitate this study. First, it aims to support the university's policy of accelerating its internationalization program (recognition and international reputation) and implementing the concept of a smart university. Second, it seeks to improve the orientation and quality of PAI graduates by equipping them with the competence and competitiveness to study Islamic sciences from their primary sources. Third, in response to the advancements of the 21st century, education must be designed to meet the competencies required for this era.

Given these challenges, research on the development of the Mahir Baca Kitab (AARAVI) application to enhance the international competitiveness of PAI students at UIN Maulana Malik Ibrahim Malang is both important and urgent. This study will present the development process of the Mahir Baca Kitab (AARAVI) application and evaluate its feasibility and effectiveness in improving the international competitiveness of PAI students at UIN Maulana Malik Ibrahim Malang.

RESEARCH METHOD / المنهجية

This study is based on Multimedia-Based Instructional Design, employing the ADDIE model developed by Dick and Carey (Dick, 1996). The ADDIE model consists of five stages: Analysis, Design, Development, Implementation, and Evaluation (Rusdi, Sirajuddin, & Alfah, 2022).

The research population comprises 20 students from the 2020 cohort of the Islamic Education (PAI) Department at Universitas Islam Negeri Maulana Malik Ibrahim Malang who are enrolled in the Qira'atul Kutub course. Data for the development of the Mahir Baca Kitab (AARAVI) application were collected from five sources: interviews, literature review, questionnaires, tests, and documentation.

Two types of data were gathered for this study: (1) Qualitative data: Used to design the product and assess its validity, (2) Quantitative data: Used to evaluate the feasibility and effectiveness of the product. The qualitative and quantitative data were obtained through reviews conducted by language experts, subject matter experts, instructional media experts, lecturers, and students. This process spanned from the needs analysis phase to the field-testing phase.

The study employed three data analysis techniques: (1) Qualitative Descriptive Analysis: This technique was used to process data obtained from expert reviews, lecturers, and students in the form of feedback, responses, criticisms, and suggestions collected through questionnaires and interviews. The results of this analysis were used to revise the developed product. (2) Quantitative Descriptive Analysis: This technique was used to process questionnaire data presented in percentages. (3) Inferential Statistical Analysis: To determine the differences or significance between pretest and posttest scores, a paired sample t-test was conducted for normally distributed data, while the Wilcoxon Rank Test was used for non-normally distributed data. Additionally, the N-gain calculation was applied to assess the improvement in individual student scores

FINDINGS AND DISCUSSION / نتائج البحث و المناقشة

The Android application Mahir Baca Kitab (AARAVI) was designed to enhance the international competitiveness of students in the Islamic Education (PAI) Department at Universitas Islam Negeri Maulana Malik Ibrahim Malang. The application incorporates the following features:

Content

The application provides Arabic grammar materials, specifically nahwu and sharaf, as foundational keys for mastering text-reading skills. Nahwu materials include: Sentence classification, Types of Arabic sentences, Mabni (inflexible) and Mu'rab (flexible) words, l'rab (grammatical analysis) and its indicators, Sentences in marfu' (nominative), mansub (accusative), and majrur (genitive) cases, At-tawaabi' (words that follow the grammatical state of another word).

The application presents Sharaf material as follows: Word structure and classification, Word forms (shighat), Scales (wazan) and measured words (mawzun), Tri-literal roots (tsulatsi mujarrad), Augmented tri-literal roots (tsulatsi mazid): quadrilateral, quinqueliteral, and sextaliteral forms, Linguistic conjugations (tashrif lughawi).

Presentation Model

The materials in the application are presented using a mind-mapping model in a network tree format, where key ideas are displayed in boxes and relationships between elements are connected by linking lines. Each topic is accompanied by examples with vowel marks (harakat) and translations, aiding students in bridging knowledge gaps and facilitating a more realistic mastery of the material.

Additionally, the application is integrated with YouTube links, offering detailed video explanations to complement the textual content

Interactive Quizzes

This feature enables lecturers to evaluate students' understanding of the materials through interactive questions during the learning process

Problem-Solving Exercises

Students can apply and deepen their understanding of nahwu and sharaf rules using this feature. The problem-solving exercises are designed to address issues systematically, fostering a more practical understanding of text-reading skills.

Tips for Text-Reading

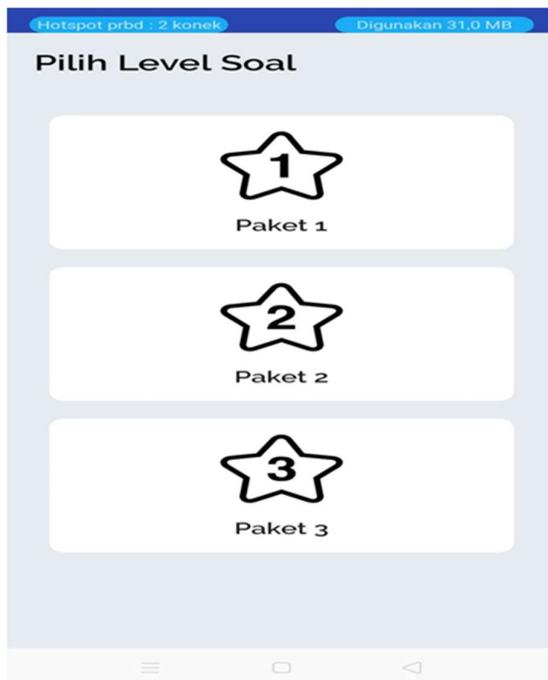
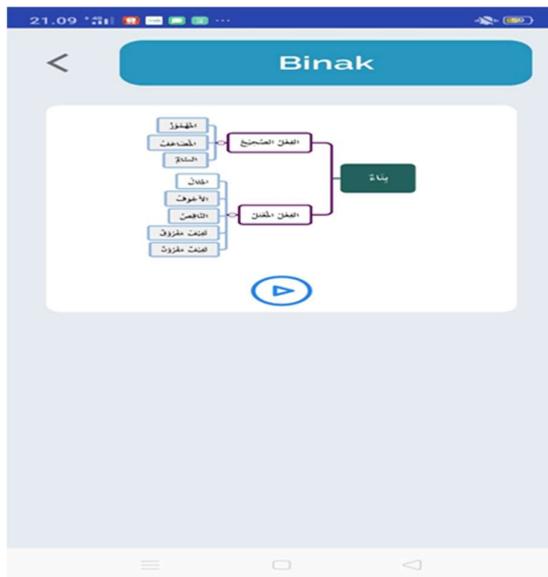
This feature provides systematic guidelines to address challenges in reading classical texts. It includes steps such as identifying problems, analyzing the root causes, and formulating creative and critical alternative solutions. Students are encouraged to develop optimal solutions that can be implemented without creating new problems.

Discussion

The integration of these features into the AARAVI application highlights a comprehensive approach to addressing the learning needs of PAI students in mastering classical text-reading skills. The use of multimedia tools, such as mind maps and video explanations, bridges traditional learning methods with modern instructional technology. Furthermore, interactive quizzes and problem-solving exercises provide practical applications of the theoretical concepts taught (Radityatama, 2017).

The systematic design ensures that students not only gain proficiency in nahwu and sharaf but also acquire problem-solving skills and creative thinking capabilities, equipping them to compete on a global scale in the field of Islamic studies.





Mahir Baca Kitab (AARAVI) Application Trial Results

The findings of this study indicate that the Mahir Baca Kitab (AARAVI) application is valid for use as a learning medium for classical text reading among Islamic Education (PAI) students. This is based on the results of the validation test by material experts with a cumulative score of 43 out of 12 statements (89%, categorized as highly valid), by media experts with a cumulative score of 40 out of 12 statements (83%, categorized as highly valid), and field tests by PAI students with a cumulative score of 42 out of 12 statements (87%, categorized as highly valid).

Furthermore, the study demonstrated a significant and positive difference in students' learning outcomes before and after using the application. This indicates that

learning facilitated by the AARAVI application is effective in improving beginner-level classical text reading skills among PAI students. Consequently, the application is deemed suitable and recommended as a learning medium for students in the PAI department.

Based on the results of the research obtained, it can be concluded that the Mahir Baca Kitab (AARAVI) application is a valid and effective learning medium to improve the reading skills of Arabic classical texts among Islamic Religious Education (PAI) students. The validity of this application has been proven through three stages of evaluation. First, in terms of content or material, validation by experts shows a cumulative score of 43 out of a total of 12 statements, which translates to 89% and is categorized as very valid. This shows that the material presented in the AARAVI application is in accordance with the rules of nahwu and sharaf, and is relevant to the learning needs of students in reading classical Arabic texts. Second, from the media aspect, validation by media experts resulted in a cumulative score of 40 (83%), which is also included in the very valid category. This indicates that the design, navigation, visual display, and interactivity in the application have met pedagogical and technological standards as a digital learning medium. Third, from the results of field tests by direct users—namely PAI students—the application obtained a cumulative score of 42 (87%), which again shows a very high level of validity. This means that users find the app easy to use, useful, and able to help them understand the Arabic structure in classical texts better.

Furthermore, this study also revealed a significant increase in student learning outcomes after using the AARAVI application. The difference in pre-test and post-test results shows that the use of this application has a positive impact on students' ability to read and understand classical Arabic texts, especially for those at the beginner level. Thus, the AARAVI application is stated to be not only suitable for use, but also recommended as an effective supporting learning medium in teaching reading the yellow book in the Islamic Religious Education study program. In the future, the integration of this application in the PAI curriculum can enrich the learning approach and encourage students' learning independence in understanding Islamic literature in Arabic.

CONCLUSION / الخلاصة

The development of the Android-based application Mahir Baca Kitab (AARAVI) represents an innovative alternative to enhance the international competitiveness of students in the Islamic Education (PAI) Department at Universitas Islam Negeri Maulana Malik Ibrahim Malang. This application equips students with the skills to directly apply recognized methodologies for studying the Qur'an, Hadith, and works of Middle Eastern scholars, methodologies traditionally practiced by early Muslim scholars, including kiai and santri.

This research employed a multimedia-based instructional design approach using the ADDIE model, encompassing five stages: Analysis, Design, Development, Implementation, and Evaluation. The findings indicate that the AARAVI application is highly valid as a learning medium for reading classical Islamic texts among PAI students. The validation of material experts resulted in a cumulative score of 43 out of 12 statements (89%, highly valid), the validation of media experts resulted in a cumulative score of 40 out of 12 statements (83%, highly valid), and the field test by students resulted in a cumulative score of 42 out of 12 statements (87%, highly valid).

Moreover, the study revealed a significant and positive improvement in students' learning outcomes after using the application. This demonstrates that the AARAVI

application is effective in enhancing the text-reading skills of beginner-level PAI students. So that this application is suitable for use as a learning medium for students majoring in PAI.

REFERENCES / المراجع

- Ali, N. (2020). Integrating science and religion in the curriculum of Indonesian Islamic higher education: A case study of UIN Malang. *International Journal of Innovation, Creativity and Change*, 13(9), 948–960.
- Dick, W. (1996). The Dick and Carey model: Will it survive the decade? *Educational Technology Research and Development*, 44(3), 55–63.
- Mas' udi, M. F. (1988). *Pandangan hidup ulama Indonesia (UI) dalam literatur kitab kuning*. Lembaga Ilmu Pengetahuan Indonesia: Departemen Agama.
- Nazruddin, S., Smartphone, A. P. A. M., & Tablet, P. C. (2014). berbasis Android. *Bandung: Informatika*.
- Nurhidin, E. (2022). Peran Guru Pendidikan Agama Islam dalam Meningkatkan Kualitas Literasi Membaca Qur'an Siswa Sekolah Menengah Atas. *Edudeena: Journal of Islamic Religious Education*, 6(1), 1–11.
- Radityatama, R. G. (2017). *Rancang Bangun Aplikasi Mobile Android Sistem Kehadiran Mahasiswa Melalui Pencocokan Wajah dengan Menggunakan Library Android Face Recognition with Deep Learning Studi Kasus Jurusan Teknik Informatika ITS*. Institut Teknologi Sepuluh Nopember.
- Rusdi, M., Sirajuddin, H., & Alfah, R. (2022). Implementation of the Addie Model (Analysis, Design, Development, implementation, evaluation) in php-based E-Learning in the era of pandemic. *Jurnal Teknologi Informasi Universitas Lambung Mangkurat (JTIULM)*, 7(1), 49–56.
- Wijayanto, M. E. (2020). The integration of islamic values in implementation of learning english: islamic education students perspective. *ETERNAL (English, Teaching, Learning, and Research Journal)*, 6(1), 18–30.