TADBIR JURNAL STUDI MANAJEMEN PENDIDIKAN
http://journal.iaincurup.ac.id/index.php/JSMPI
DOI: http://dx.doi.org/10.29240/jsmp.v10i2.18284

Braille Qur'an Recitation Learning anagement: Practices, Needs, And Models

Deni Kurnia
Universitas Islam Negeri Sunan Gunung Djati Bandung, Indonesia
daniabizaki5657510@gmail.com

Ajid Thahir
Universitas Islam Negeri Sunan Gunung Djati Bandung, Indonesia
ajid.thohir@uinsgd.ac.id

Tarsono
Universitas Islam Negeri Sunan Gunung Djati Bandung, Indonesia
tarsono@uinsgd.ac.id

Ridwan Effendi
Universitas Islam Negeri Sunan Gunung Djati Bandung, Indonesia
ridwan.effendi@uinsgd.ac.id

Abstract: This study examines the management of Braille Qur'an tilawah learning, identifies management needs, and develops a management model suited to visually impaired santri (students) in three pesantren. A qualitative research and development approach was employed, following the ADDIE stages. Data were collected through observation, documentation, and interviews with 15 informants (three pesantren leaders, five teachers, and seven santri) at Pesantren Cahaya Al-Anshor, Raudlatul Makfufin, and Sam'an Qur'an Durushudur. Analysis comprised data reduction, data display, and conclusion drawing and verification. The findings show that planning, organizing, actuating, and controlling (POAC) have been implemented with adjustments to each pesantren's condition. Strengthening needs include teacher competence, role division among support staff, accessible media, and monitoring of learning progress. The resulting model links Islamic and inclusive education foundations, inputs, the core POAC process, outputs, and feedback, supported by continuous mentoring. Validation by three experts yielded a score of 197 out of 225 (87.56%), categorized as highly feasible. Responses from 15 users regarding Braille media reached 994 out of 1,125 (88.36%), categorized as very good; this is not a direct measure of the model's practicality. The main contribution lies in the interrelation of management functions, Braille accessibility, individual mentoring, and pesantren culture as a basis for continuous improvement of learning services. The model offers an adaptive framework for pesantren, although its effectiveness requires broader testing.

Keywords: Learning Management; Braille Qur'an; Visually Impaired Santri; Pesantren; ADDIE.

INTRODUCTION

Learning the Qur'an for students with visual disabilities requires educational services that enable access to reading materials, structured guidance, and skill development according to learners' readiness and abilities. In Braille Qur'an recitation learning, the process of recognizing Braille symbols through

tactile perception occurs simultaneously with listening to recitation models, practicing reading, and receiving corrective feedback from teachers. Therefore, the availability of a Braille *mushaf* alone is insufficient without well-organized instructional activities and continuous mentoring. In this context, learning management becomes essential for ensuring the alignment of educational objectives, resources, implementation processes, and evaluation mechanisms in Qur'anic education for students with visual disabilities (Sabtina et al., 2024).

The management of such services is closely aligned with the principles of inclusive education. Ainscow (2005) conceptualizes inclusion as involving ways of thinking, institutional practices, and contextual conditions that support learner participation and accessibility (González-Afonso et al., 2026). Similarly, Florian and Black-Hawkins (2011) emphasize expanding learning opportunities for all students regardless of their backgrounds or abilities (Barla, 2025; Losberg & Zwozdiak-Myers, 2024; Nijakowska & Guz, 2024). Within the Islamic educational tradition, these principles resonate with the values of human dignity, equal opportunities to learn the Qur'an, and the moral responsibility of educators to provide guidance and mentoring. Consequently, the management of Braille Qur'an learning may be understood through the intersection of inclusive education principles and Islamic educational values.

Previous studies have examined various aspects of Qur'an learning for students with visual disabilities. Agnung et al. (2024) and Widiarti (2019) investigated the use of Braille Qur'ans in printed and digital formats at ITMI DPD Surakarta, highlighting their advantages and limitations (Agnung Anggraeni & Hasanah, 2024; Widiarti, 2019). Falah Amelia et al. (2024) discussed tactile learning media, auditory approaches, and teacher and companion support at Rumah Tahfidz Difabel Aisyah Luqman in Semarang (Falah Amelia et al., 2024). Imanudin and Septiana (2025) emphasized repetitive practice and individualized instruction for visually impaired learners at SLBN Kabupaten Kuningan (Iman Imanudin & Fajar Indra Septiana, 2025). At a broader level, Kana and Hagos (2025) identified barriers to Braille utilization, including limitations in learning materials, teacher competence, curriculum support, educational policy, and technology, demonstrating that learners' needs are strongly related to educational service management (Kana & Hagos, 2025). From a management perspective, Istiqomah and Hidayah (2021) analyzed Qur'anic learning management at Bahrul Ulum Bondowoso Islamic Boarding School, covering planning, task organization, differentiated implementation, and evaluation of learning processes and outcomes (Istiqomah & Hidayah, 2021).

Although these studies contribute important insights into Braille Qur'an learning, teacher support, accessibility barriers, and educational management, several gaps remain. Existing research generally examines instructional media,

teaching strategies, or support systems separately and within individual institutions. Furthermore, studies on Qur'anic learning management have not specifically addressed the distinctive characteristics of Braille recitation learning, including learners' Braille literacy, media accessibility, mentoring requirements, and diverse learning paces. Likewise, the barriers identified by Kana and Hagos (2025) have not been examined within the cultural and educational context of Islamic boarding schools (*pesantren*). More importantly, previous studies have not integrated management functions, Braille accessibility, and continuous mentoring into a comprehensive model derived from evidence across multiple *pesantren* settings.

Based on these gaps, the scientific novelty of this study lies in three interrelated contributions. Firstly, this research analyzes the management of Braille Qur'an recitation learning comparatively across three Islamic boarding schools with different institutional logics: *Pesantren Cahaya Al-Anshor* in Bogor, which emphasizes individualized mentoring services; *Pesantren Raudlatul Makfufin* in South Tangerang, which adopts a tiered institutional learning structure supported by the provision of Braille *mushaf*; and *Pesantren Sam'an Qur'an Durushudur* in Bandung, which develops program-oriented *takhashush* and *muballigh* systems. This comparative multi-site design provides analytical breadth and empirical diversity, enabling the identification of both shared and context-specific management practices while strengthening the adaptability of the resulting model across different *pesantren* contexts.

Secondly, this study offers a distinctive theoretical contribution by integrating Islamic educational values and inclusive education principles as the dual foundation of the proposed management model. While inclusive education emphasizes accessibility, participation, and the expansion of learning opportunities for all learners (Ainscow, 2005; Florian & Black-Hawkins, 2011), Islamic education underscores the dignity of every learner, equal opportunities to access religious knowledge, and the ethical responsibility of educators to provide sustained guidance. The integration of these perspectives is rarely addressed within the educational management literature and represents a contextual adaptation of international inclusive education theory to the Islamic *pesantren* environment. Consequently, the proposed model not only addresses functional management concerns but also incorporates religious, ethical, and cultural dimensions relevant to Qur'anic education for students with visual disabilities.

Thirdly, management practices are examined through the Planning, Organizing, Actuating, and Controlling (POAC) framework, but the study extends the conventional interpretation of POAC by conceptualizing mentoring as a cross-cutting element present throughout all management functions. In

contrast to traditional approaches that position mentoring primarily within the implementation or actuating stage, the findings indicate that mentoring influences planning through learner needs assessment, organizing through the allocation of support resources and responsibilities, implementing through instructional guidance and corrective feedback, and controlling through monitoring and evaluation processes. This concept of cross-cutting mentoring constitutes an original contribution to learning management theory and provides a more comprehensive understanding of how educational support is sustained in Braille Qur'an learning environments.

Based on these considerations, the study addresses three research questions: (1) How is Braille Qur'an recitation learning managed through the POAC framework in three Islamic boarding schools? (2) What management strengthening needs emerge from the implementation of Braille Qur'an learning? and (3) How can a management model be developed and refined based on field findings and expert validation? To answer these questions, the study employs POAC as the analytical framework for examining management practices, while model development follows the ADDIE stages of Analysis, Design, Development, Implementation, and Evaluation (Moore & Powell, 2023). This distinction clarifies POAC as the framework for analyzing learning management practices and ADDIE as the methodological framework for model development.

Ultimately, this study aims to analyze the management practices of Braille Qur'an learning, identify areas requiring improvement, and develop a management model that is responsive to students' characteristics and *pesantren* resources. The resulting model integrates Braille accessibility, continuous mentoring, Islamic educational values, inclusive education principles, and *pesantren* culture into a coherent framework for enhancing Qur'anic education services for students with visual disabilities. Moreover, by positioning mentoring as a cross-cutting component across all POAC functions and grounding management practices in both Islamic and inclusive educational perspectives, the study contributes a theoretically enriched and contextually relevant model for managing Qur'anic learning in Islamic boarding schools.

RESEARCH METHODOLOGY

This study employed a convergent mixed-methods research and development (R&D) design, integrating qualitative inquiry for the analysis of learning management practices and quantitative descriptive data for model validation and user responses (Morgan, 2022; Tomaszewski et al., 2020). The qualitative component was used to examine the management of Braille Qur'an learning through the Planning, Organizing, Actuating, and Controlling (POAC)

framework, while the development component followed the Analysis, Design, Development, Implementation, and Evaluation (ADDIE) model to construct and refine a management model grounded in empirical findings. The integration of qualitative and quantitative evidence enabled the study to identify institutional needs, develop a contextual management model, and assess its feasibility through expert validation.

The research was conducted at three Islamic boarding schools (*pesantren*): Cahaya Al-Anshor Islamic Boarding School in Citeureup, Bogor; Raudlatul Makfufin Islamic Boarding School in South Tangerang; and Sam'an Qur'an Durushudur Islamic Boarding School in Cimenyan, Bandung. These sites were selected purposively because they have established experience in organizing Qur'an learning for students with visual disabilities and represent different management characteristics, thereby providing opportunities for comparative analysis across institutional contexts. Although the overall research program was originally planned for the period 2024-August 2026, all stages reported in this article had been completed before manuscript submission. Data collection through observations, interviews, and documentation, as well as qualitative data analysis, model development, expert validation, limited implementation, and revision processes, were finalized prior to the preparation of this manuscript. The quantitative validation data and user response data presented in the findings section represent finalized datasets used in the development and refinement of the model. The remaining activities scheduled until August 2026 relate to project administration, dissemination, and follow-up reporting rather than the generation of additional data included in this article.

The study population consisted of all leaders, teachers, and students with visual disabilities involved in Braille Qur'an learning at the three *pesantren*. Fifteen interview informants were selected purposively based on their involvement, experience, and knowledge of the learning process. The participants consisted of three institutional leaders, five teachers, and seven students with visual disabilities. Their distribution was as follows: Sam'an Qur'an Durushudur (one leader, two teachers, and three students), Raudlatul Makfufin (one leader, two teachers, and two students), and Cahaya Al-Anshor (one leader, one teacher, and two students). The inclusion of these three participant groups enabled the study to capture complementary perspectives regarding institutional policy, instructional practice, and student learning experiences.

To complement the qualitative findings, a response questionnaire concerning the use of the Braille Qur'an *mushaf* was administered to 15 users comprising six teachers and nine students. Each institution contributed two teachers and three students who were selected purposively based on their involvement in the use of Braille learning media. Model validation was

conducted by three expert validators selected based on professional competence and experience: a representative of the Indonesian Muslim Blind Association, a Braille Qur'an media expert, and a leader of a *pesantren* serving students with visual disabilities.

The researcher served as the primary research instrument, supported by observation guides, interview guides, and documentation protocols (Georgescu & Anastasiu, 2022). Interview protocols were developed according to participant roles. Questions for institutional leaders focused on educational policy and management practices; teacher interviews explored instructional strategies, media utilization, mentoring processes, and evaluation procedures; while student interviews addressed learning experiences, accessibility needs, and challenges encountered during Braille Qur'an learning. The model validation instrument consisted of 15 items rated on a five-point scale covering conceptual suitability, component completeness, relationships among components, applicability, and systematic presentation. The user response questionnaire likewise contained 15 items evaluated on a five-point scale addressing media suitability, ease of use, and perceived benefits for Qur'an recitation learning.

Because the researcher participated in learning activities and occasionally performed instructional roles during the study, reflexivity procedures were implemented to minimize potential bias. Firstly, observation protocols and interview guides were reviewed by academic colleagues with expertise in qualitative research and Islamic education prior to field application. Secondly, field notes were maintained separately from analytic memos to distinguish observed events from researcher interpretations. Thirdly, preliminary interpretations were discussed with selected participants through member-checking procedures to confirm the accuracy of descriptions and interpretations. Fourth, interview data, observational findings, and documentary evidence were continuously cross-checked to reduce the influence of a single perspective. These procedures were intended to enhance transparency and trustworthiness while managing the researcher's insider position within the learning environment.

Data were collected through three complementary techniques. First, participatory observation was conducted during Qur'an learning activities, enabling the researcher to observe the use of Braille media, mentoring practices, learner participation, and instructional interactions. Second, in-depth interviews explored management arrangements, division of responsibilities, learning strategies, barriers, and developmental needs. Third, documentation was collected in the form of institutional profiles, schedules, lesson plans, activity records, and evaluation documents.

Model development followed the ADDIE framework (Branch, 2010; Moore & Powell, 2023; Sabtina et al., 2024; Spatioti et al., 2022; Zhang et al., 2024). To clarify the operational boundaries between stages, the procedures were implemented as follows:

The analysis stage focused on identifying existing learning management practices, learner needs, institutional resources, Braille accessibility conditions, and mentoring patterns in the three *pesantren*. Data were obtained through interviews, observations, and documentation and analyzed using the POAC framework. In the design stage translated the needs analysis results into an initial conceptual model. The relationships among management functions, mentoring processes, accessibility elements, and *pesantren* resources were mapped and organized into a preliminary framework.

The development stage involved the preparation of the prototype model and expert validation. Three expert validators assessed the model using the validation instrument. Qualitative feedback regarding mentoring components, interrelationships among model elements, model structure, and presentation format was incorporated into revisions. All modifications resulting from validator recommendations were completed within the development stage.

Meanwhile, **t**he implementation stage consisted of a limited-scale application of the revised model within learning contexts in the participating *pesantren*. The purpose was not to test effectiveness but to observe the practicality and clarity of model components in real educational settings. Observations focused on the implementation of management procedures, mentoring arrangements, accessibility support, and the usability of model components by teachers and institutional managers.

Moreover, **t**he evaluation stage involved reviewing findings from the limited implementation and assessing whether model components functioned coherently and aligned with institutional conditions. This stage emphasized reflection on implementation experiences and confirmation of model suitability rather than large-scale effectiveness testing. The final model was then refined based on the combined evidence obtained from earlier stages.

In this research, ADDIE functioned as the framework for model development, whereas POAC served as the analytical framework for examining learning management practices and structuring the resulting model (Figure 1).

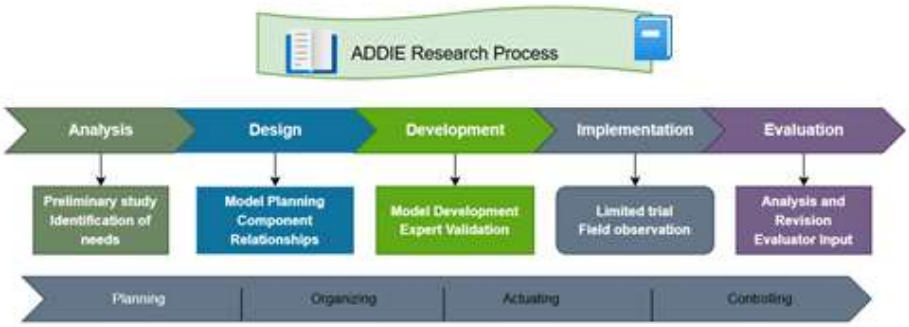


Figure 1. Research Flowchart

Qualitative data analysis was conducted concurrently with and after data collection through data reduction, data display, and conclusion drawing and verification. Interview transcripts, observation records, and documents were coded and categorized according to themes related to management, student needs, media accessibility, mentoring practices, and evaluation procedures. Comparisons were conducted both across participant groups and across institutions to identify common and distinctive management practices. The POAC framework was subsequently employed to analyze learning management functions systematically through planning, organizing, actuating, and controlling dimensions (Ramdhani & Taufiq, 2025; Wafda et al., 2025).

Quantitative validation data were analyzed descriptively. Total scores from the three validators were compared with the maximum possible score of 225 (15 items × 5 points × 3 validators) to determine model feasibility percentages. Validator comments were analyzed qualitatively to guide revisions of mentoring mechanisms, inter-component relationships, model visualization, and contextual adaptation to *pesantren* conditions.

Similarly, questionnaire data were analyzed using descriptive statistics, including scores, percentages, and response categories, based on a maximum score of 1,125 (15 items × 5 points × 15 respondents). The questionnaire findings were interpreted alongside qualitative data to enrich understanding of participant experiences using the Braille Qur'an *mushaf*. No inferential statistical analyses were conducted because the quantitative component was intended to support model development rather than hypothesis testing.

Trustworthiness was established through source triangulation and methodological triangulation (Schlunegger et al., 2024). Source triangulation involved comparing data obtained from leaders, teachers, and students, while methodological triangulation compared evidence derived from observations, interviews, and documentation. Prolonged engagement during the research

period enabled repeated observations of educational practices across sites. Model credibility was further strengthened through expert validation involving representatives from disability organizations, Braille Qur'an media specialists, and *pesantren* administrators, followed by revisions based on their recommendations.

This study assumes that participants provided information based on their lived experiences and that the observed learning activities reflected routine educational practices. The scope of the study is limited to the management of Braille Qur'an learning in three *pesantren*; therefore, the transferability of findings should be considered in relation to contextual similarities. While the researcher's involvement as an educator facilitated access to rich contextual data, this insider role also required careful reflexive management to minimize potential bias.

Furthermore, the limited implementation stage was designed to examine the applicability and coherence of the model rather than its effectiveness or practicality at scale. Consequently, the study does not claim effectiveness outcomes. In addition, several recommendations regarding progress-recording systems, including structured voice recordings, Braille learning notes, and screen-reader-compatible documentation, are presented as preliminary design recommendations generated from field findings. These recommendations require further implementation and effectiveness testing in future research before broader adoption can be recommended

RESULTS AND DISCUSSION

The results and discussions were compiled following three research questions: (1) the practice of managing learning Al-Qur'an Braille recitation through POAC in three Islamic boarding schools, (2) the need for its strengthening, and (3) the preparation and improvement of models based on field findings and expert assessments.

Learning Management Practice of Braille Qur'an Recitation in Three Islamic Boarding Schools

The results of interviews, observations, and documentation show that the three *pesantren* manage the learning of the Braille Qur'an recitation by paying attention to the students' initial abilities, the use of media, gradual exercises, and mentoring. Differences are found in the way of organizing programs, grouping students, carrying out learning, and monitoring learning progress. Cahaya Al-Anshor highlights personal adjustment to the diverse abilities of students. Raudlatul Makfufin develops tiered learning with institutional support and the provision of Braille *mushaf*. Durushudur Qur'an Sam'an connects learning with the orientation of the takhashush and muballigh programs as well as halaqah

activities. A comparison of practices based on the function of POAC is presented in Table 1.

Table 1. Comparison of Learning Management Practices of Braille Qur'an Recitation

Management Functions	Cahaya Al-Anshor	Raudlatul Makfufin	Sam'an Qur'an Durushudur
Planning	Recognize the initial ability and determine the approach according to the individual needs of the students.	Determine the stages of learning based on ability level, with services for school and non-school students.	Organize Arabic Braille learning, reading rules, recitations, and memorization according to the program orientation.
Organizing	Arrange groups and mentoring flexibly according to the learning conditions of students.	Divide classes in stages and regulate the use of media and learning resources.	Arrange study groups and halaqah according to the ability and orientation of the program, with the involvement of senior students.
Implementation	Providing personal guidance, repetitive exercises, and learning adjustments according to student development.	Carry out gradual exercises with attention to tactile abilities and focus on learning.	Carry out recitation and memorization through reading guidance, the use of audio, and murajaah habits.
Supervision and evaluation	Observe the progress of reading and repeat material that has not been mastered.	Evaluating abilities according to the level as the basis for learning adjustments.	Combining semester exams with daily observations in halaqah.

Source: Processed from interviews, observations, and research documentation

In the planning function, initial ability is a consideration in determining the material and form of learning support. Mastery of Braille, tactile ability, readiness to participate in learning, and guidance needs affect the way teachers organize activities. In Cahaya Al-Anshor, adjustment is seen through the selection of approaches that follow the individual conditions of students. In Raudlatul Makfufin, the initial ability determines the placement of students at the learning level, starting from basic Braille and Iqra' to reading, reciting, and memorization. In Sam'an Qur'an Durushudur, the material stages are linked to the target program. Planning thus has a common element in the form of an introduction to the needs of students, but the operational form follows the characteristics of the institution.

Organizing includes the organization of study groups, the division of roles, time, and learning resources. At Cahaya Al-Anshor, teachers have the space to adjust grouping and mentoring based on daily needs. Raudlatul Makfufin uses tiered class divisions to direct activities according to ability levels. In Sam'an Qur'an Durushudur, organization considers the ability of the students and the orientation of the program, with the support of halaqah and the involvement of senior students. The coordination of learning can thus take place through several forms of arrangement, and the appropriateness needs to be read from the relationship between the division of roles, the needs of the students, and the support available in each Islamic boarding school.

In practice, reading through touch takes place along with the activity of listening to examples, imitating readings, receiving corrections, and practicing again. The teacher accompanies the students when recognizing the arrangement of Braille dots and improving pronunciation. At Cahaya Al-Anshor, the closeness of the teacher with the students provides space for personal guidance and adjustment of exercises. Raudlatul Makfufin directs learning in stages with attention to the students' touch skills and focus. Sam'an Qur'an Durushudur develops recitation and memorization exercises accompanied by the use of audio and murajaah in the life of the Islamic boarding school. The use of mushaf, oral guidance, and exercises are complementary activities.

These findings are in line with previous research. Repeated exercises and individual guidance are in accordance with the findings of Imanudin and Septiana (2025), while the use of tactile media, auditory approaches, and companion support is in accordance with Falah Amelia et al. (2024). The difference is that this study examines this support in class settings or halaqah, program orientation, and daily activities in three Islamic boarding schools. Mentoring therefore needs to be prepared, coordinated, implemented, and reviewed throughout the management process.

In the supervision function, teachers' pay attention to the accuracy and fluency of reading and the learning development of students (Alimni et al., 2022; Li & Hu, 2024). Sam'an Qur'an Durushudur combines semester exams with observations in halaqah. Cahaya Al-Anshor uses more daily observations and repetition of material when students are still having difficulties. Raudlatul Makfufin carries out evaluations according to the level of ability. The results of monitoring are used to determine the needs of practice and subsequent learning adjustments, so that the evaluation connects the implementation experience with decisions about materials, grouping, and mentoring.

The relationship between these functions is in line with Istiqomah and Hidayah (2021), but in this study it is directed at Braille accessibility and the individual needs of students. Variation in management is the basis for the formulation of common elements in the model as well as the adaptation space of each *pesantren*. These differences have not proven that one *pesantren i*s more effective than another.

The answer to the first question: the three *pesantren* manages learning through the four functions of POAC with a common pattern in the form of introduction of initial skills, gradual learning based on Braille mushaf, mentoring, and evaluation. The operational form is different, namely personal in Cahaya Al-Anshor, tiered in Raudlatul Makfufin, and oriented to the halaqah program in Sam'an Qur'an Durushudur.

The Need to Strengthen Learning Management

Cross-*pesantren* analysis shows that learning of the Braille Qur'an recitation has developed through teacher experience, adjustment to the ability of students, and support of the *pesantren* environment. These practices are the basis for model development, but the relationship between needs identification, planning, role sharing, media use, and evaluation still needs to be clarified. In some respects, management has not been fully outlined in systematic procedures and documentation. The need for reinforcement is therefore directed at structuring practices that have been running so that it is easier to coordinate, review, and adjust to the development of students (Table 2).

Table 2. Findings and Directions for Learning Management Strengthening

Aspects	**Research findings**	**Direction of reinforcement in the model**
Identify needs and plan	Teachers recognize early abilities and adjust learning, but the procedures and	Connect initial abilities with objectives, material stages, media, and

Aspects	**Research findings**	**Direction of reinforcement in the model**
	recording are not entirely systematic.	mentoring needs.
Teaching and mentoring competencies	Teachers play an important role in Braille learning; support and division of roles follow the conditions of each Islamic boarding school.	Strengthening teacher competence and clarifying the coordination of teachers, companions, and senior students.
Media management	Mushaf Braille is used as the main medium, with a pattern of utilization according to the practice of each institution.	Organize the readiness, use, and support of media based on the activities and abilities of students.
Progress monitoring	Evaluations have taken place, but indicators and documentation have not been fully compiled systematically.	Determine observable indicators and provide accessible recording for implementers.
Management integration	The practice develops based on the experience of the lecturer and the internal policies of the *pesantren.*	Connect POAC functions with feedback, while maintaining the agency's customization space.

Source: Synthesis of research findings and model development direction.

The first need is to connect the introduction of early abilities with planning. Teachers have paid attention to reading skills, Braille mastery, touch, and learning readiness, but the recording is not entirely sustainable. This information needs to be the basis for determining materials, targets, groups, and mentoring, and the model provides guidance for these relationships while still considering the differences in students' abilities.

The second need concerns teacher competence and the sustainability of mentoring. The findings show the need for the ability to guide the recognition of Braille points, provide reading examples, correct pronunciation, and adapt exercises to the conditions of students. Imanudin and Septiana (2025) provide a comparison of repetitive exercises and individual approaches in learning the Braille Qur'an. Munir, Ali, and Nazir (2024) identify time management

constraints and lack of understanding of Braille in other staff in special education services in Faisalabad, Pakistan(Munir et al., 2024). In the context of the pesantren studied, reinforcement is directed at the competence of teachers, time management, and the division of roles of companions and senior students according to institutional resources. The responsibility of teachers in directing learning still needs to be clarified so that individual support is coordinated in program management.

The third need is to strengthen media management, which includes its readiness, suitability, and use. The Braille Mushaf is the main media in the three Islamic boarding schools, while audio and other aids are used as needed. Kana and Hagos (2025) identify the limitations of Braille materials and teachers' knowledge as barriers to learning. Argyropoulos, Padeliadu, Avramidis, Tsiakali et all (2019), through a survey in Greece, showed that students' media preferences can differ from the media they consider to be the most supportive of learning activities(Argyropoulos et al., 2019; Loh et al., 2024). The study reinforces the need to consider user experience. In this model, media management is directed at suitability with students' abilities, materials, and teacher support.

The fourth need is to strengthen monitoring learning progress. Teachers have made reading corrections, daily observations, and evaluations according to the patterns of each institution, but assessment indicators and documentation have not been fully systematically arranged. The model needs to help teachers recognize observable developments, such as mastery of Braille writing, reading accuracy, fluency, and assistance needs. This information can be used to determine the material that needs to be repeated, the next form of guidance, or the readiness of students to follow the next stage of learning.

The form of progress recording needs to consider accessibility for students and managers who also have visual disabilities. As an operational recommendation, recording can use structured voice recordings, Braille notes, or digital documents that can be accessed through a screen reader, according to the user's skills and facilities. This option is an alternative development that needs to be adjusted and tested in implementation. The main information recorded can include exercise materials, reading progress, difficulties that still arise, and follow-up plans, so that documentation helps the continuity of mentoring.

The answer to the second question: the need for reinforcement lies in four things, there are; (1) connecting students' initial abilities with planning, (2) strengthening teacher competence and mentoring coordination, (3) arranging media readiness and use, and (4) compiling accessible evaluation indicators and

documentation. This linkage is in line with Istiqomah and Hidayah (2021), with an emphasis on Braille accessibility and assistance for students with visual disabilities. Needs mapping is the basis for input design, POAC core processes, and feedback mechanisms in the model.

Model Development and Refinement

The development of the model departs from the synthesis of learning management practices and needs in three Islamic boarding schools. The ADDIE framework was adapted from Branch (2009) and Pribadi (2016) to direct the preparation and improvement of the design. The model connects the initial abilities of students, teacher competence, mentoring, media, and evaluation through the core POAC process, so that the design has an empirical basis as well as a space for adjustment to the conditions of each Islamic boarding school.

Analysis. This stage maps the characteristics of students, practices, resources, and reinforcement needs. Common elements include the introduction of initial abilities, gradual learning, Braille mushaf, mentoring, and evaluation. The differences lie in programs, study groups, guidance, and assessment. The results form the basis for model components that can be adjusted to the conditions of each Islamic boarding school.

Design. The needs that have been mapped are translated into a design that connects the foundations, inputs, POAC core processes, outputs, and feedback. The model foundation combines the values of Islamic education and inclusive education principles, especially respect for the dignity of students, opportunities to learn the Qur'an, and services that pay attention to individual needs. Inputs include students, teachers and companions, Braille mushaf and supporting media, pesantren environment, and learning resources. Continuous mentoring is designed to accompany all management functions. Outputs are directed at the development of recitation skills, learning independence, and service quality, the achievements of which need to be monitored in the application of the model.

Development. This stage includes drafting, expert validation, and revision. The three validators involved were representatives of the Indonesian Muslim Blind Association, experts in the Qur'an Braille media, and leaders of blind Islamic boarding schools. The assessment used 15 items on a scale of 1–5 which included concept suitability, component completeness, intercomponent relationships, applicability, and systematics of presentation. Each validator had a maximum score of 75, so the overall maximum score was 225. The results of the assessment are presented in Table 3 and Table 4.

Table 3. Results of Expert Validation of the Model

Validator	Score	Max Score	Percentage	Category
Representative of the Indonesian Muslim Blind Association	66	75	88,00%	Highly feasible
Ahli media Al-Qur'an Braille	65	75	86,67%	Highly feasible
Leaders of blind Islamic boarding schools	66	75	88,00%	Highly feasible
Total	**197**	**225**	**87,56%**	**Highly feasible**

Source: Results of expert validation data processing, 2026.

Table 4. Expert Validation Results per Assessment Aspect

Aspects	Score	Max Score	Percentage
Concept fit	40	45	88,89%
Applicability	40	45	88,89%
Component completeness	39	45	86,67%
Relationships between components	39	45	86,67%
Systematics of presentation	39	45	86,67%
Total	**197**	**225**	**87,56%**

Source: Results of expert validation data processing, 2026.

The overall score of 197 out of 225 resulted in a percentage of 87.56% and was included in the very feasible category according to the criteria used in the study. All aspects received positive assessments, with conceptual suitability and applicability as the highest aspect and component completeness, intercomponent relationships, and presentation systematics slightly lower. The small difference between aspects indicates that the assessment is relatively even, but the aspects with lower scores are a concern in the revision. The application assessment is an expert consideration of the design and has not proven the effectiveness of the application of the model.

Validator input is the basis for the revision. Representatives of the Indonesian Muslim Blind Association asked for clarity on mentoring, so that the revision clarifies the form of assistance and the relationship between teachers, companions, and students. Braille media experts suggested simplifying the chart, so that the flow and relationship of components are clarified. The leaders of the pesantren emphasized the suitability with the characteristics of students and

resources, so that the revision strengthens the adjustment of the model to the condition of the institution while maintaining the foundation and core management process.

Implementation. The model is used in a limited way as a reference for management by educators. The researcher accompanies and observes the implementation of its components to examine the suitability of the design with learning. This application is part of model development, so that the findings are read according to the limited scope.

Supporting information on the use of media was obtained through a questionnaire to 15 users, namely six teachers and nine students, with two teachers and three students from each Islamic boarding school. This composition was different from the group of interview informants, although the overall number was the same. The questionnaire consisted of 15 items that assessed the suitability of the Braille mushaf with learning, ease of use, and its benefits for recitation activities (Table 5)

Table 5. User Response to the Utilization of Braille Qur'an Mushaf

Groups	Respondent	Score	Max Score	Percentage	Category
Teacher	6	397	450	88,22%	Excellent
Student	9	597	675	88,44%	Excellent
Total	**15**	**994**	**1.125**	**88,36%**	**Excellent**

Source: Results of user response questionnaire processing, 2026

The overall response of 88.36% showed a very good assessment of the use of Braille mushaf based on research instruments. The percentage of teachers (88.22%) and students (88.44%) was almost the same, so the two groups assessed the media similarly. These results complement the findings of interviews and observations about the experience of using media. This percentage is not used as a measure of the practicality of the management model directly, because the object assessed is the Braille mushaf. In model development, user responses help explain the position of media as one of the learning inputs that need to be managed along with teacher competence, mentoring, and training activities.

Evaluation. This stage reviews the fit between field needs, design, expert assessment, and implementation experience. Improvements are mainly directed at the clarity of mentoring, inter-component relationships, model presentation, and flexibility of implementation. The process produces a model that connects

foundations and inputs to management through POAC and uses the monitoring results as feedback for future planning.

Answer to the third question: the model was compiled through five stages of ADDIE based on mapping practices and needs in the three Islamic boarding schools, then refined through the validation of three experts (87.56%, very feasible) and limited implementation. The revision focused on the clarity of mentoring, simplification of charts, and flexibility to the condition of the institution.

Final Model and Its Contribution to Islamic Education Management

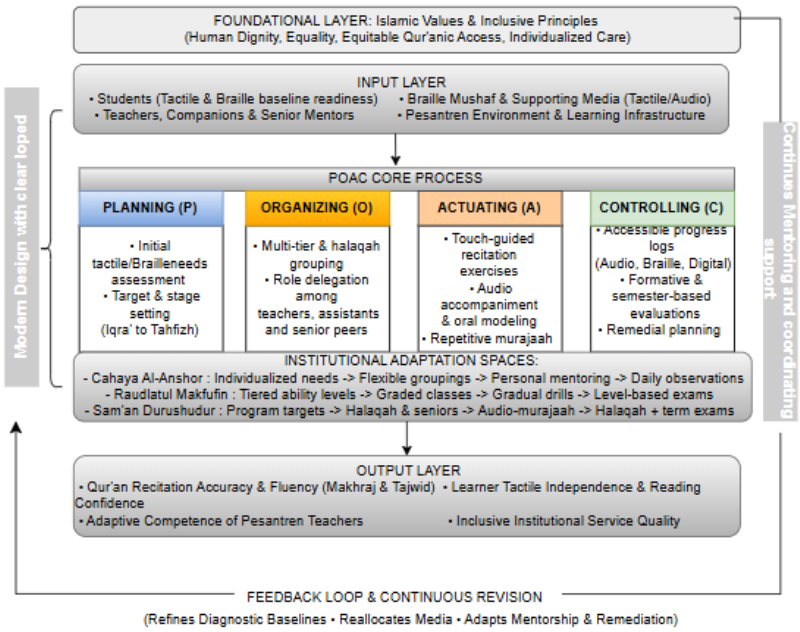


Figure 2. Learning Management Model for Braille Qur'an Recitation

The final model connects the foundations, inputs, core processes of POAC, outputs, and feedback, with ongoing assistance that accompanies the entire management process. This arrangement is a synthesis of practices and needs in the three pesantren that is refined through expert assessment. The foundation combines the values of Islamic education and the principles of inclusive education. Idris, Sidiq, and Fajarudin (2024) discuss justice, equality, and respect for human dignity as the basis of inclusive education in the perspective of the Qur'an. In this model, these values direct the management of opportunities for students to learn the Qur'an, media accessibility, and support according to individual needs(Idris et al., 2024).

Inputs include students, teachers and companions, the Braille Qur'an mushaf and supporting media, the pesantren environment, and learning resources. Its management through POAC connects the initial abilities of students with goals and materials, division of roles, implementation of exercises, and monitoring of learning progress. Mentoring is considered from the time of planning, regulated through the division of responsibilities, provided during learning, and reviewed based on the results of supervision, so that the form of assistance can be adjusted to the needs of students.

Outputs are directed at the development of recitation skills, learning independence, teachers' ability to manage adaptive learning, and the quality of pesantren services. All of them are implementation goals that still require assessment. Ainscow (2020) emphasizes the use of evidence regarding student attendance, participation, and achievement to direct the development of inclusive education. In this model, information on student development and learning obstacles becomes feedback to adjust targets, exercises, media, and mentoring. For example, difficulty recognizing Braille writing can be the basis for adjustments to the next aid and exercise. This mechanism is the working direction of the model offered, while feasibility assessments by experts have not proven the effectiveness of its implementation.

The contribution of research to Islamic Education Management lies in the relationship between management functions, Braille accessibility, continuous mentoring, and pesantren culture. Ainscow (2016) places collaboration as an education improvement strategy that needs to be adjusted to the institutional context. In this model, the division of roles of teachers, companions, and senior students is a direction to strengthen joint work in learning, with the habituation of recitation and teacher-student relationships as the context of its implementation. The model provides room for adjustment to personal services at Cahaya Al-Anshor, tiered learning at Raudlatul Makfufin, and the orientation of takhashush and muballigh in Sam'an Qur'an Durushudur. This joint management framework still pays attention to the characteristics of students and the resources of each pesantren.

CONCLUSION

This study aimed to analyze the management practices of Braille Qur'an learning, identify areas requiring strengthening, and develop a management model that corresponds to the characteristics of learners and *pesantren* resources. The findings provide answers to all three research questions.

Firstly, the three *pesantren* manage Braille Qur'an learning through the Planning, Organizing, Actuating, and Controlling (POAC) functions,

demonstrating a common management pattern that includes initial learner assessment, the use of Braille *mushaf*, gradual instructional progression, and continuous mentoring. However, the operational implementation varies according to institutional characteristics. *Pesantren Cahaya Al-Anshor* emphasizes individualized services and personal mentoring, *Pesantren Raudlatul Makfufin* applies a tiered instructional structure based on learner readiness, and *Pesantren Sam'an Qur'an Durushudur* utilizes *halaqah*-based learning supported by senior students. These findings indicate that effective management does not depend on a single standardized model but rather on the alignment between learner needs, institutional resources, and organizational culture.

Secondly, the study identifies four major areas requiring strengthening: educator competence in Braille Qur'an instruction, clarification of facilitator and mentoring roles, systematic management of accessible learning media, and structured monitoring of learner progress. These needs emerge not because existing practices are ineffective, but because many valuable practices remain insufficiently documented and systematized. Accordingly, management strengthening should focus on institutionalizing and coordinating existing good practices rather than replacing them.

Thirdly, the developed model integrates the foundational values of Islamic education and inclusive education, input components, POAC management processes, output indicators, and feedback mechanisms within a single framework. A distinctive contribution of the model is the conceptualization of continuous mentoring as a cross-cutting element that accompanies all management functions rather than being restricted to the implementation stage alone. The model further combines Islamic educational values, including human dignity, equal opportunities to learn the Qur'an, and mentoring responsibility, with inclusive education principles of accessibility, participation, and learning expansion. This integration represents a contextual adaptation of inclusive education theory to the *pesantren* environment and constitutes the study's principal theoretical contribution.

Expert validation produced a feasibility score of 87.56%, placing the model in the very feasible category and providing the basis for model refinement. Importantly, this score should be interpreted as evidence of the model's design feasibility and conceptual appropriateness according to expert judgment, rather than proof of implementation effectiveness. Similarly, the user response score of 88.36% reflects positive responses regarding the use of the Braille *mushaf* and supporting learning media. It should not be interpreted as a direct measure of the practicality or effectiveness of the overall management model. This distinction is important to maintain methodological rigor and avoid overgeneralization of the findings.

From a scientific perspective, this study contributes to the field of Islamic Educational Management by offering a management framework that integrates management functions, Braille accessibility, continuous mentoring, inclusive education principles, and *pesantren* culture. The comparative analysis of three *pesantren* with different institutional logics strengthens the adaptability of the model and demonstrates how common management principles may be implemented through different organizational arrangements. The framework may therefore serve as an initial reference for other Islamic boarding schools that provide educational services for students with visual disabilities.

Future research should focus on testing the effectiveness of the model through broader research designs, such as quasi-experimental studies, design-based research, or multi-cycle action research. Such studies may examine outcomes related to Qur'an recitation accuracy, learner independence, educational participation, and service sustainability. Further testing is also needed in *pesantren* with different organizational characteristics, sizes, and levels of resource availability, including institutions located in areas with limited access to Braille learning media.

In addition, future studies should examine the practicality of the model through instruments specifically designed to evaluate management implementation rather than media use alone. An important agenda emerging from this study is the development and validation of a dedicated management model implementation evaluation instrument, distinct from both expert validation tools and Braille *mushaf* user-response questionnaires. Such an instrument would enable more systematic assessment of implementation fidelity, practicality, sustainability, and institutional readiness.

Finally, recommendations concerning learner progress documentation, including structured voice-recording systems, Braille-based learning records, and screen-reader-compatible digital documentation, should be regarded as preliminary design recommendations generated from field findings. These innovations require separate implementation and effectiveness studies before broader adoption can be recommended. For *pesantren* managers, the findings provide practical guidance for establishing more systematic management procedures, clarifying the division of responsibilities among teachers, companions, and senior students, and strengthening educator competence in Braille Qur'an instruction.

This study was conducted with approval form of State Islamic University Sunan Gunung Djati Bandung. Institutional permission was obtained from *Pesantren Cahaya Al-Anshor*, *Pesantren Raudlatul Makfufin*, and *Pesantren Sam'an Qur'an Durushudur* prior to data collection. All interview participants (n =

15) and questionnaire respondents (n = 15) provided informed consent before participating in the study. For participants with visual disabilities, study information was communicated in accessible formats, and participant assent was obtained prior to data collection. To protect confidentiality, all participant identities were anonymized using codes during transcription, analysis, and reporting, and no personally identifiable information is disclosed in this article.

ACKNOWLEDGMENTS

The authors express their sincere gratitude to the leaders, teachers, and santri of Pesantren Cahaya Al-Anshor in Bogor, Pesantren Raudlatul Makfufin in South Tangerang, and Pesantren Sam'an Qur'an Durushudur in Bandung for their openness, time, and willingness to share their experiences throughout the data collection process. Appreciation is also extended to the three expert validators, representing the Indonesian Muslim Blind Association (Ikatan Tunanetra Muslim Indonesia), Braille Qur'an media expertise, and pesantren leadership, whose critical feedback was instrumental in refining the model. The authors further thank the supervisors, colleagues, and reviewers who provided guidance, constructive criticism, and encouragement during the research and writing of this article. Finally, the authors are grateful to their families for their continuous support and prayers.■

REFERENCES

Agnung Anggraeni, L., & Hasanah, U. (2024). Strategi Hafalan Al-Qur'an Untuk Meningkatkan Daya Ingat Siswa Penyandang Disabilitas Di Slbn Saronggi. *Jurnal Pendidikan Inklusi Citra Bakti*, *2*(2). https://doi.org/10.38048/jpicb.v2i2.4434

Alimni, A., Amin, A., & Kurniawan, D. A. (2022). The role of Islamic education teachers in fostering students' emotional intelligence. *International Journal of Evaluation and Research in Education*, *11*(4). https://doi.org/10.11591/ijere.v11i4.22116

Argyropoulos, V., Padeliadu, S., Avramidis, E., Tsiakali, T., & Nikolaraizi, M. (2019). An investigation of preferences and choices of students with vision impairments on literacy medium for studying. *British Journal of Visual Impairment*, *37*(2). https://doi.org/10.1177/0264619619838667

Barla, E. (2025). From Movement To Inclusion: The Role Of Physical Education In Early Childhood Education. *European Journal of Physical Education and Sport Science*, *12*(9).

Branch, R. M. (2010). Robert Maribe Branch - Instructional Design (The ADDIE Approach). In *Journal of Chemical Information and Modeling*.

Falah Amelia, R., Sanal Barqiy, Q., Mulyani Oktaviana, S., Fathudin, F., Irma Masfia, H., & Fahmy, Z. (2024). Implementasi Pembelajaran Al-Qur'an Braille dalam Proses Membaca dan Menghafal pada Anak Disabilitas Netra di Rumah Tahfidz Difabel Aisyah Luqman Semarang. *COMSERVA : Jurnal Penelitian Dan Pengabdian Masyarakat*, *4*(2). https://doi.org/10.59141/comserva.v4i2.1360

GEORGESCU, Ştefan-D., & ANASTASIU, I.-E. (2022). *The Interview As A Qualitative Research Instrument*. https://doi.org/10.24818/imc/2021/05.14

González-Afonso, M. C., Perdomo-López, C. de los Á., Plasencia-Carballo, Z., Cabanilla-García, J. L., & Pérez-Jorge, D. (2026). Presence, Participation and Learning in Educational Inclusion: A Systematic Mapping Review of Barriers in School Contexts According to Booth and Ainscow. In *Education Sciences* (Vol. 16, Issue 1). https://doi.org/10.3390/educsci16010095

Idris, H., Sidiq, M. A. H., & Fajarudin, A. A. (2024). Konsep Pendidikan Inklusif dalam Al-Qur'an: Analisis Multidimensional terhadap Implementasi Keragaman dan Kesetaraan di Pesantren. *Moderasi : Journal of Islamic Studies*, *4*(2). https://doi.org/10.54471/moderasi.v4i2.88

Iman Imanudin, & Fajar Indra Septiana. (2025). Upaya Guru dalam Meningkatkan Kemampuan Membaca Al-Qur'an Braille pada Peserta Didik Tunanetra di SLBN Kabupaten Kuningan. *IQRO: Journal of Islamic Education*, *8*(3). https://doi.org/10.24256/iqro.v8i3.7898

Istiqomah, R., & Hidayah, R. (2021). Manajemen Pembelajaran Al-Qur'an: Studi Kasus Longitudinal di Pondok Pesantren. *Jurnal Pendidikan Agama Islam Al-Thariqah*, *6*(1). https://doi.org/10.25299/al-thariqah.2021.vol6(1).6932

Kana, F. Y., & Hagos, A. T. (2025). Factors hindering the use of Braille for instruction and assessment of students with visual impairments: A systematic review. *British Journal of Visual Impairment*, *43*(2). https://doi.org/10.1177/02646196241239173

Li, X., & Hu, W. (2024). Peer versus teacher corrections through electronic learning communities and face-to-face classroom interactions and EFL learners' passion for learning, speaking fluency, and accuracy. *Heliyon*, *10*(4). https://doi.org/10.1016/j.heliyon.2024.e25849

Loh, L., Prem-Senthil, M., & Constable, P. A. (2024). A systematic review of the impact of childhood vision impairment on reading and literacy in education. In *Journal of Optometry* (Vol. 17, Issue 2). https://doi.org/10.1016/j.optom.2023.100495

Losberg, J., & Zwozdiak-Myers, P. (2024). Inclusive pedagogy through the lens of primary teachers and teaching assistants in England. *International Journal of Inclusive Education*, *28*(4). https://doi.org/10.1080/13603116.2021.1946722

Moore, J. L., & Powell, G. C. (2023). Robert Maribe Branch. In *AECT at 100*. https://doi.org/10.1163/9789004682580_041

Morgan, H. (2022). Conducting a Qualitative Document Analysis. *Qualitative Report*. https://doi.org/10.46743/2160-3715/2022.5044

Mudzingiri, C., Mwamba, J. W. M., Keyser, J. N., & Bara, A. (2019). Indecisiveness on risk preference and time preference choices. Does financial literacy matter? *Cogent Psychology*, *6*(1). https://doi.org/10.1080/23311908.2019.1647817

Munir, B., Hadayat Ali, H., & Nazir, M. (2024). Challenges Faced by Teachers in Teaching Braille to Students with Visual Impairment. *Journal of Asian Development Studies*, *13*(3). https://doi.org/10.62345/jads.2024.13.3.97

Nijakowska, J., & Guz, E. (2024). Inclusion and Accessibility in Teacher Education. *Neofilolog*, *62*(1). https://doi.org/10.14746/n.2024.62.1.4

Ramdhani, D., & Taufiq, M. (2025). Implementation of POAC Managerial Functions in Building Santri's Religious Character in Islamic Boarding Schools in the Era of Globalization. *Nidhomiyyah: Jurnal Manajemen Pendidikan Islam*, *6*(2). https://doi.org/10.38073/nidhomiyyah.v6i2.2887

Sabtina, D., Nasution, R. A., Rahayu, P., & Hafis, B. (2024). Manajemen Pembelajaran Bagi Anak Tunanetra di SLB TPI ABC Medan. *Indo-MathEdu Intellectuals Journal*, *5*(1). https://doi.org/10.54373/imeij.v5i1.587

Schlunegger, M. C., Zumstein-Shaha, M., & Palm, R. (2024). Methodologic and Data-Analysis Triangulation in Case Studies: A Scoping Review. In *Western Journal of Nursing Research* (Vol. 46, Issue 8). https://doi.org/10.1177/01939459241263011

Spatioti, A. G., Kazanidis, I., & Pange, J. (2022). A Comparative Study of the ADDIE Instructional Design Model in Distance Education. In *Information (Switzerland)* (Vol. 13, Issue 9). https://doi.org/10.3390/info13090402

Tomaszewski, L. E., Zarestky, J., & Gonzalez, E. (2020). Planning Qualitative Research: Design and Decision Making for New Researchers. *International Journal of Qualitative Methods*. https://doi.org/10.1177/1609406920967174

Wafda, M., Sukarman, S., Khoiruddin, M., & Kindi, F. A. Al. (2025). Integrating Islamic Values into Discipline Management: A Conceptual Study of the

POAC Framework in Pesantren. *HEUTAGOGIA: Journal of Islamic Education*, *5*(2). https://doi.org/10.14421/hjie.2025.52-04

Widiarti, F. H. (2019). Penggunaan Media Al-Qur'an Braille Book Dan Braille Digital Bagi Tunanetra Di Surakarta. *Profetika: Jurnal Studi Islam*, *19*(2). https://doi.org/10.23917/profetika.v19i2.8118

Zhang, Z., Yue, S., Wang, J., & Yang, P. (2024). An innovative teaching model of automotive manufacturing process based on ADDIE model. *Applied Mathematics and Nonlinear Sciences*, *9*(1). https://doi.org/10.2478/amns.2023.1.00098

This page belongs to the Tadbir : Jurnal Studi Manajemen Pendidikan

Tadbir : Jurnal Studi Manajemen Pendidikan Vol. 10, No.2, November 2026
IAIN Curup –Bengkulu | p-ISSN 2580-3581; e-ISSN 2580-5037