



From Manual Counseling Records to Digital Services: Strengthening Student Counseling Management through the Pedatren Application

Rusli ¹, Vince Ratnawati ¹

¹ University of Riau, Indonesia

Correspondence: ratnawtvinc0@gmail.com

Abstract : This Community Service (PkM) activity aims to strengthen student counseling management through the optimization of the Pedatren application as a digital-based counseling service system. The activity was initiated by the need to improve counseling administration, particularly in managing student cases, documentation, reporting, and coordination among Guidance and Counseling (BK) and guardianship administrators. Previously, several counseling processes were still managed manually, resulting in limitations in data integration, accessibility, and service effectiveness. The program was implemented using a participatory training and mentoring approach involving the introduction of Pedatren features, practical case recording, digital data management, report preparation, and service coordination simulations. The results showed that participants experienced improved understanding and skills in utilizing the Pedatren application to support more structured counseling management. In addition, the activity encouraged the development of digital counseling workflows and institutional commitment to strengthening technology-based student services. Several challenges, including differences in digital literacy levels and technical limitations, require continuous assistance and follow-up training. This program demonstrates that the transition from manual counseling records to digital services can enhance administrative effectiveness and support the development of more responsive, integrated, and sustainable counseling management in Islamic boarding schools.

Keywords : Digital Counseling; Pedatren Application; Student Services; Counseling Management.

Article History :	Received	Revised	Accepted
	October 2025	November 2025	December 2025

How to Cite (APA Style) : Rusli, Ratnawati. (2025). From Manual Counseling Records to Digital Services: Strengthening Student Counseling Management through the Pedatren Application. *Gemeinschaft: Journal of Social and Community Engagement*, 3(2), 99-119.

DOI : <https://doi.org/10.71392/gjsce.v3i2.152>

Copyright © 2025 Gemeinschaft: Journal of Social and Community Engagement, All Rights Reserved



INTRODUCTION

The development of digital technology has significantly influenced the management of educational services, including student support and counseling systems. Digitalization in education is no longer limited to learning processes but has expanded to administrative management, data documentation, communication, and decision-making processes (Jones & Roberts, 2024; Kumar & Bargavi, 2024). Effective counseling services require accurate, integrated, and accessible information management to respond to the increasingly complex needs of students (Khawaja & Bélisle-Pipon, 2023). Therefore, educational institutions are encouraged to utilize digital platforms that can support more systematic, responsive, and sustainable student service management.

Student counseling services play an important role in supporting students' academic, psychological, social, and character development. In Islamic boarding schools, counseling management has unique characteristics because student supervision involves various elements, including Guidance and Counseling (BK) administrators, guardianship administrators, caregivers, and other educational personnel. However, many counseling services still rely on conventional administrative systems, such as manual case recording, separate documentation, and limited coordination mechanisms (Campaz-Landazábal et al., 2024; Khan & Mita, 2023; Krishnan, 2025). These conditions may create challenges in monitoring student development, managing counseling histories, and providing timely interventions for student problems.

The complexity of student cases in Islamic boarding schools requires a more organized counseling management system (Damayanti & Sejati, 2023; Tuazon & Tacuban, 2017). Based on initial observations and discussions with related administrators, several challenges were identified, including the lack of an integrated digital system for recording counseling cases, limited utilization of technology in managing student data, and difficulties in coordinating information among counseling service providers. Although administrators have an important role in maintaining student welfare, manual management practices can reduce the effectiveness of services due to limitations in data accessibility, reporting efficiency, and continuity of case handling.

To address these challenges, the utilization of the Pedatren application provides an alternative solution for strengthening digital-based counseling management. The application is designed to support the recording, organization, and management of student-related data in a more structured manner (Bowker & Villamizar, 2017). Through the optimization of Pedatren, BK and guardianship administrators can develop more effective workflows, improve documentation quality, and facilitate coordination in handling student cases (Astuti et al., 2025; Mayasari et al., 2024). However, successful technology adoption requires not only the availability of digital tools but also the improvement of users' competencies through structured training and continuous assistance.

Previous technology-based educational service initiatives indicate that digital platforms can contribute to improving institutional efficiency, data management, and service quality when supported by adequate human resource capacity. Nevertheless, digitalization of counseling services in Islamic boarding schools remains a developing area that requires practical implementation models based on institutional characteristics. Therefore, strengthening the capacity of BK and guardianship administrators in utilizing Pedatren becomes an important step to bridge the gap between technological availability and effective counseling service implementation.

Based on these conditions, this Community Service (PkM) activity aims to strengthen student counseling management through the optimization of the Pedatren application. The program focuses on improving the digital competencies of BK and guardianship administrators, enhancing the

management of counseling records, and encouraging the development of more integrated counseling service workflows. Through a participatory training and mentoring approach, this activity is expected to contribute to the improvement of counseling service quality and provide a practical model for developing digital-based student services in Islamic boarding school environments.

METHOD

The implementation method of this Community Service (PkM) activity was systematically designed to strengthen student counseling management through the optimization of the Pedatren application. The program was implemented using a participatory, collaborative, and solution-oriented approach involving Guidance and Counseling (BK) administrators and guardianship administrators as the main partners. This approach was selected to ensure that the utilization of the application was not only understood at a technical level but also integrated into the existing counseling service management system.

The implementation process consisted of several interconnected stages, including needs identification, program preparation, application training, mentoring, and evaluation. The initial stage focused on identifying existing counseling service management practices and determining the digital needs of the institution. This process was conducted through observations, discussions, and interviews with BK administrators and guardianship administrators to understand challenges related to student case documentation, reporting systems, and coordination mechanisms. The results of this stage became the basis for designing training materials and mentoring strategies according to partner conditions.

The training stage was conducted through a combination of conceptual explanation, application demonstrations, and direct practice. Participants were introduced to the role of digital systems in improving counseling service management and guided to understand the main features of the Pedatren application. Practical activities included student data management, digital recording of counseling cases, documentation of follow-up actions, and preparation of counseling reports. The practice-based approach allowed participants to directly connect the application features with their daily responsibilities in managing student services.

After the training activities, the program continued with intensive mentoring to support the implementation of Pedatren in real counseling management practices. During this stage, participants received technical assistance in organizing digital counseling records, adapting existing administrative procedures, and solving technical problems encountered during application utilization. The mentoring process was conducted collaboratively between the PkM team and institutional administrators to ensure that the

digital system could be adjusted to the operational needs and characteristics of the Islamic boarding school environment.

The evaluation stage was conducted to measure the effectiveness of the program and identify changes in participants' competencies after participating in the training and mentoring activities. Evaluation instruments included observations, participant feedback, practical assessments, and discussions with BK and guardianship administrators. The evaluation focused on several aspects, including participants' understanding of Pedatren features, ability to manage digital counseling records, ability to prepare counseling documentation, and readiness to implement digital-based counseling workflows independently.

The participation of partners became an important factor in the success of this activity. BK administrators and guardianship administrators actively contributed by providing information regarding existing counseling management conditions, participating in training sessions, practicing the application features, and providing feedback during the evaluation process. Through this participatory implementation method, the program was expected to strengthen administrators' digital competencies, improve the quality of counseling documentation, and encourage the development of more integrated and sustainable student counseling services.

RESULT AND DISCUSSION

Planning Stages

1. Identification of Counseling Management Needs and Digital Service Readiness

The initial results of the Community Service (PkM) activity focused on identifying the existing conditions of student counseling management and assessing the readiness of the Guidance and Counseling (BK) and guardianship units to implement digital-based services through the Pedatren application. This stage was important to ensure that the program intervention was developed based on the actual needs of the institution rather than merely introducing a technological application. The identification process involved reviewing institutional documents, observing counseling service practices, and collecting information from administrators involved in student mentoring activities.

The document review showed that the BK and guardianship units have an important role in supporting student character development through continuous monitoring, guidance, and case management. Several institutional documents, including student mentoring procedures, BK activity reporting formats, and documentation of interactions between foster parents and students, were analyzed to understand the existing counseling management system. The analysis indicated that counseling services

already had structured mechanisms; however, the management of student records, reporting, and communication processes still required improvement through a more integrated digital system.

To obtain deeper information regarding operational practices, the PkM team conducted a two-day field assessment involving the BK administrators, guardianship administrators, and supporting staff. Data collection was carried out through semi-structured interviews, direct observations of counseling administration flows, and focus group discussions (FGD) with the counseling service team. The activities focused on understanding how student information was recorded, how counseling reports were prepared, and how coordination occurred between BK administrators, foster parents, and other educational personnel.

The results of the field assessment revealed several important challenges in the existing counseling management system. First, the recording of student activities and counseling histories was still conducted manually and was often incidental, causing limitations in documentation consistency and accessibility. Second, although the Pedatren application had already been utilized within the institution, its functions were still primarily limited to attendance and licensing services. The application had not been optimally utilized to support counseling management, student development monitoring, and digital documentation of counseling processes.

Furthermore, the assessment found that coordination mechanisms between BK administrators, foster parents, and academic administrators had not been fully integrated through a digital system. Information related to student development and counseling follow-up actions still required manual communication processes, which could potentially affect the speed and accuracy of service delivery. In addition, the absence of specific technical training related to Pedatren counseling features became another factor limiting the optimal utilization of the application.

These findings indicate that the main challenge faced by the institution was not the availability of digital infrastructure but the gap between technological potential and user capacity. The Pedatren application had the potential to support more systematic counseling services; however, effective implementation required strengthening administrators' competencies, adjusting service workflows, and developing digital management practices. Therefore, the results of this identification stage became the foundation for designing training materials and mentoring strategies focused on optimizing Pedatren for student counseling management.

Table 1. Identification of Counseling Management Problems and Program Responses

Existing Conditions	Identified Problems	Program Response
Student records and counseling documentation were managed manually	Limited accessibility and consistency of counseling data	Training on digital student record management using Pedatren
Pedatren utilization was limited to attendance and licensing features	Counseling functions had not been optimized	Introduction and practice of Pedatren counseling features
Coordination between BK and guardianship units was not digitally integrated	Delayed information sharing and follow-up processes	Development of integrated digital counseling workflows
Administrators had limited experience using Pedatren for counseling services	Lack of technical competence in application utilization	Training and continuous mentoring activities

The identification results became an essential foundation for the implementation of the next stage, namely Pedatren-based training and mentoring. Through this approach, the program was directed not only toward improving technical skills but also toward strengthening the counseling management system so that student services could become more structured, integrated, and responsive to student needs.

These findings are compiled in the form of a partner needs identification report, which forms the basis for compiling activity designs and training materials.



Figure 1. Interview Atmosphere with BK Administrators



Figure 2. Interview Atmosphere with Foster Guardian



Figure 3. Documentation of the FGD of the PKM Team and BK Management

2. Development of Pedatren-Based Training Design and Capacity Building Strategy

Based on the results of partner needs identification, the PkM team developed a training and mentoring program using a problem-solving and capacity-building approach. The program design was prepared to address the identified challenges in student counseling management, particularly the limited utilization of Pedatren for documenting student development, managing counseling records, and supporting coordination between BK administrators and guardianship units. Therefore, the training was not designed merely as an introduction to application features but as an effort to strengthen the capacity of administrators in developing more structured and data-based counseling services.

The training design was formulated in a technical document containing the objectives, expected outputs, participant criteria, learning strategies, activity schedules, and mentoring mechanisms. The main objective of the program was to improve the ability of BK and guardianship administrators in utilizing the Pedatren application to support counseling documentation and student monitoring processes. The target

participants were administrators directly involved in student guidance services, ensuring that the knowledge and skills gained during the activity could be directly implemented within the institutional counseling system.

The training activities were designed for two intensive days using a combination of interactive presentations, practical demonstrations, hands-on exercises, case discussions, and simulation activities.

Table 1. Training Activity Planning

Day	Session	Main Activities
Day 1	Introduction to Digital Counseling Services	Interactive presentations, case studies, discussions
	Introduction to the Pedatren Application	Demo of relevant features (BK, student notes, foster parents)
	Data Input Practice	Simulation of counseling recording and case reporting
Day 2	Data-Driven Service Simulation	Case studies and digital reporting using dummy accounts
	Preparation of SOPs and Action Plans	Group discussion, practice of creating standard assignments for BK units

To support the effectiveness of the training process, the PkM team developed learning modules in both digital and printed formats. The modules contained several important topics, including the importance of data-based counseling services in Islamic boarding schools, the utilization of Pedatren features for BK and guardianship activities, technical guidelines for daily documentation, procedures for recording and reporting counseling services, and simulations of student progress reporting to guardians. The materials were developed contextually by integrating real counseling cases and step-by-step application practices to ensure that participants could easily understand and apply the learning outcomes.

The development of this training design demonstrated that successful implementation of digital counseling services requires a combination of technological understanding, administrative procedures, and human resource readiness (Bond et al., 2023). Therefore, the Pedatren-based training program was structured as a capacity-building intervention that not only improved participants' technical skills but also encouraged the development of a more systematic, integrated, and sustainable counseling management system.

3. Preparation of Facilities and Infrastructure for Pedatren Implementation

The preparation of facilities and infrastructure became an important stage in ensuring the effectiveness of the Pedatren-based counseling management training. This stage was carried out through technical coordination between the PkM implementation

team and relevant units at the Islamic boarding school, particularly the dormitory management section, Pedatren system operators, and the BK-guardianship service team. The coordination process aimed to ensure that all technical, administrative, and operational aspects required for training implementation were available and aligned with the characteristics of the counseling service system.

The results of the technical preparation showed that the training location was determined based on accessibility and its ability to support technology-based learning activities. The activity was conducted in the meeting room of the Islamic boarding school, which was considered adequate for accommodating participants and facilitating direct practice using the Pedatren application. The room was equipped with supporting facilities, including laptops, internet access, and an LCD projector for presentation and application demonstrations. The availability of these facilities enabled participants to follow both conceptual explanations and hands-on simulations effectively.

In addition to preparing the main training facilities, the implementation team also provided additional technological support to minimize potential obstacles during the training process. Several backup laptops and portable printing devices were prepared to ensure that participants could still participate in practical sessions if technical problems occurred with personal devices. Furthermore, a special Pedatren simulation account was developed using dummy student data. This preparation was important because it allowed participants to practice recording counseling information, managing student data, and exploring application features without affecting the actual institutional database.

The preparation stage also involved coordination regarding the availability and distribution of training materials. The Pedatren application features relevant to counseling and guardianship services were reviewed together with the institutional data management team to ensure that the training materials matched the operational conditions of the boarding school. The learning materials were prepared in both printed and digital formats, allowing participants to access the guidelines during training sessions and continue reviewing the materials after the program was completed. The modules included application usage guidelines, counseling documentation procedures, and examples of digital student service management workflows.

To support systematic implementation and evaluation, the PkM team also prepared various administrative instruments. These instruments included participant attendance records, pre-test and post-test questionnaires, training certificates, application-based counseling service SOP templates, and presentation materials. The preparation of these documents was intended not only for activity reporting purposes but also as supporting

instruments for measuring changes in participant competencies and encouraging the institutionalization of Pedatren utilization within the counseling service system.

Before the training implementation, the team conducted a final coordination meeting and technical simulation with the Pedatren operator, data management team, and representatives of the participants. The simulation focused on testing network stability, verifying access to the Pedatren system, checking participant login procedures, and ensuring the sequence of training activities could run effectively. This trial process helped identify potential technical problems before implementation and allowed the team to make necessary adjustments to ensure a smoother training process.

Overall, the preparation of facilities and infrastructure demonstrated that successful adoption of digital counseling services requires adequate technological readiness as well as strong coordination between service providers and institutional managers (Aldaaja et al., 2025; Dovbischuk, 2022). The systematic preparation carried out in this activity became an important foundation for implementing Pedatren-based training and mentoring, ensuring that participants could focus on developing their competencies and applying digital counseling management practices effectively.

Implementation Stages

The implementation stage is the core part of the entire PKM program, which aims to increase the capacity of Guidance and Counseling (BK) administrators and guardians. foster careusing the Pedatren application as a data-driven support tool for student counseling services. The program's implementation focuses on providing digital literacy, technical skills, data utilization in decision-making, and internal policy development.

The activity was carried out intensively for two days in the meeting room of the Nurul Jadid Islamic Boarding School, using a combined method of talk shows, direct practice, simulations, and group discussions.

1. Introduction of Digital Counseling Services through Pedatren

The implementation phase began with an introductory workshop aimed at strengthening participants' understanding of the importance of digital transformation in student counseling services. This session became the foundation for changing participants' perspectives regarding the role of technology in improving counseling management within Islamic boarding schools. The facilitator explained that conventional counseling practices often face several limitations, including incomplete documentation of student cases, difficulties in tracking student development, and limited coordination between counseling-related units. Therefore, digitalization was introduced as a strategic approach to improve the effectiveness, accountability, and sustainability of student mentoring services.

During this session, participants were introduced to the role of the Pedatren application as an integrated Islamic boarding school information system that can support the management of student counseling services. The facilitator explained that Pedatren provides several features that are relevant to BK and guardianship activities, including student profile management, attendance monitoring, violation records, coaching documentation, and the recording of students' affective and cognitive development. Through this explanation, participants gained an understanding that the application is not merely an administrative tool but can function as a supporting system for more structured student guidance and monitoring.

The facilitator also emphasized the importance of utilizing structured data as a basis for educational decision-making. Participants were guided to understand that systematically managed student data can assist BK administrators and guardianship teams in identifying student needs, designing appropriate interventions, preparing student progress reports, and providing accurate recommendations to institutional leaders. This perspective encouraged participants to move from reactive counseling practices toward more preventive and data-informed student services.

The workshop was conducted interactively through visual presentations, contextual case studies, and reflection activities. Participants were encouraged to analyze existing counseling practices within their respective units and identify aspects that could be improved through digitalization. The discussion sessions showed that participants began to recognize the importance of integrated digital records in supporting more responsive counseling services.



Figure 4. Introductory Workshop on Digitalization of Counseling Services

The introductory workshop became an important initial step in preparing participants before entering the technical training stage (Daniel et al., 2022). Through this activity, participants not only acquired conceptual knowledge about digital counseling

management but also developed awareness of the need to optimize Pedatren as a tool for strengthening student services in Islamic boarding schools.

2. Technical Training for Optimizing Pedatren-Based Counseling Management

The next stage of the activity focused on technical training for optimizing the use of the Pedatren application in supporting student counseling management. This session was designed as a practice-oriented activity where participants were directly involved in exploring and utilizing application features related to BK and guardianship services. To ensure that the training process ran effectively, participants were divided into small working groups accompanied by facilitators who provided technical guidance throughout the practice sessions. This approach allowed participants to interact directly with the system, discuss difficulties, and understand how each feature could be integrated into their daily counseling responsibilities.

The first practical activity focused on the input and analysis of new student questionnaire data. Participants were trained to manage initial student information obtained during the admission process, including students' religious abilities, educational background, interests and talents, guardianship information, previous Islamic boarding school experience, and personality characteristics. Through this practice, participants learned that comprehensive initial student data can become an important foundation for understanding student profiles before providing further guidance services. The availability of structured student profiles allows BK administrators and guardianship teams to identify potential needs, strengths, and challenges faced by individual students.

The training continued with the practice of recording student development progress through affective and cognitive monitoring features. Participants were guided to document student development systematically, including behavioral changes, learning progress, discipline, participation in activities, and other relevant observations. Previously, such information was often recorded separately and depended on individual administrators' documentation habits (Rezazade Mehrizi et al., 2022). Through Pedatren, participants understood that digital recording can improve the consistency, accessibility, and continuity of student development monitoring, allowing different service units to access relevant information when needed.

Furthermore, participants practiced utilizing the violation and attendance recording features to support more accurate case management. In this session, participants were not only trained to input violation data but also encouraged to record follow-up actions and solutions provided for each case. This process introduced a more comprehensive counseling approach, where student problems are not merely recorded as violations but

become part of a continuous guidance process. The integration between attendance records, violation data, and counseling notes helps administrators analyze patterns of student behavior and design more appropriate interventions.

The final part of the technical training focused on analyzing student data through available reports and visualization features. Facilitators demonstrated how accumulated student data could be transformed into meaningful information through tables and graphical representations. Participants were introduced to the use of data trends to identify behavioral patterns, monitor student development, and support decision-making processes at the institutional level. This activity strengthened participants' understanding that digital counseling systems are not only useful for storing information but also for producing data-based insights to improve student services.

The practical training activities were supported by application demonstrations and direct simulations, as illustrated in Figure 5 and Figure 6.

Angket BKWA

KEAGAMAAN

1. Apakah Anda mampu membaca Al-Qur'an?

- ☐ Saya lancar membaca Al-Qur'an dengan baik
- ☐ Saya membaca Al-Qur'an dengan lancar
- ☐ Saya belum lancar membaca Al-Qur'an
- ☐ Saya tidak bisa membaca Al-Qur'an

2. Apakah Anda mampu menulis Al-Qur'an?

- ☐ Saya bisa menulis Al-Qur'an dengan baik
- ☐ Saya bisa menulis Al-Qur'an
- ☐ Saya tidak bisa menulis Al-Qur'an
- ☐ Saya tidak pernah belajar menulis Al-Qur'an

3. Apakah Anda mampu menghafal Al-Qur'an?

- ☐ Saya hafal lebih dari 10 Juz
- ☐ Saya hafal kurang dari 10 Juz
- ☐ Saya belum hafal Al-Qur'an
- ☐ Saya tidak hafal Al-Qur'an

Figure 6. Display of the New Student Questionnaire Application Feature

PEDATREN

Catatan

Aktif	Tambah	Kognitif	Kepedulian	Pencatat
31 Jul 2024 13:40:14	Score : B	Catatan : Alhamdulillah anak ini baik dan peduli terhadap sesama maupun lingkungan	Imam Mahdi Aminoto	
31 Jul 2024 13:19:57	Score : B	Catatan : Sudah baik untuk kebersihan pribadi maupun lingkungan	Imam Mahdi Aminoto	
25 Jul 2024 11:50:08	Score : B	Catatan : Baik sesama teman, sopan ke pengurus	Imam Mahdi Aminoto	
	Score : B		Sulton Arifin	

Figure 7. Display of the Student Progress Record Application Feature

Overall, the technical training demonstrated that the optimization of Pedatren contributed to improving participants' understanding of digital-based counseling management. Participants gradually shifted from viewing digital applications as administrative tools toward recognizing their potential as integrated systems for

monitoring, documenting, and improving student counseling services. This capacity-building process became an essential foundation for implementing more structured and data-driven counseling practices within the Islamic boarding school environment.

3. Data-Based Counseling Case Handling Simulation

The next stage of the activity focused on implementing a data-based counseling case handling simulation to measure participants' ability to utilize Pedatren data in analyzing student problems and designing appropriate intervention strategies. This simulation was designed to bridge the gap between technical application skills and practical counseling decision-making. Through this activity, participants were not only trained to operate the system but also encouraged to understand how digital information can be transformed into meaningful data to support student guidance services.

During the simulation process, participants were provided with several contextual case scenarios commonly encountered in Islamic boarding school environments. The cases included students with low attendance levels accompanied by repeated violations, students who showed reduced involvement in collective activities, and students experiencing complex family-related problems that influenced their behavior and development. These cases were selected because they represented various dimensions of student issues, including discipline, social interaction, emotional conditions, and personal development challenges.

Participants worked in small groups to analyze each case using information available in the Pedatren system. They were guided to examine student profiles, attendance records, behavioral notes, violation histories, and previous guidance records to identify the characteristics and development patterns of each case. Based on the available data, participants were then asked to formulate appropriate counseling strategies, including possible intervention steps, follow-up actions, and coordination mechanisms involving BK administrators, guardianship teams, and other relevant stakeholders.

The simulation encouraged participants to move beyond conventional counseling practices that often rely on individual observations and subjective assessments. By utilizing integrated student data, participants began to understand the importance of evidence-based decision-making in handling counseling cases (Schemmer et al., 2022). The availability of structured information through Pedatren helped participants identify problems more accurately, determine appropriate responses, and monitor the effectiveness of interventions provided to students.

After completing the group analysis, each team presented its simulation results and discussed the proposed intervention strategies with facilitators and other participants.

The discussion process became a reflective space where participants exchanged experiences, compared different approaches to case management, and received feedback regarding the suitability of the proposed solutions. Through this activity, participants developed a stronger analytical mindset and recognized the role of digital systems in improving the quality of counseling services.



Figure 7. Student Case Handling Simulation by the Guidance and Counseling Team

Overall, the case handling simulation demonstrated that Pedatren utilization can support a shift from reactive counseling practices toward more preventive and data-informed services. The activity strengthened participants' ability to interpret student data, design targeted interventions, and improve coordination in managing student cases (Munawwaroh & Adeoye, 2024). Thus, the simulation became an important component in developing digital counseling competencies among BK and guardianship administrators.

4. Assistance in the Preparation of Internal SOPs for Digital Counseling Services

The final session of the activity focused on mentoring participants in developing internal Standard Operating Procedures (SOPs) for counseling services integrated with the Pedatren application. This stage was conducted to ensure that the utilization of digital technology could be supported by clear institutional procedures. The preparation of SOPs was considered important because the implementation of a digital counseling system requires not only technical competence but also standardized workflows that regulate how student information is recorded, managed, coordinated, and reported among related units.

The mentoring process began with mapping the existing counseling service flow within the Islamic boarding school environment. Participants were guided to identify the stages involved in handling student cases, starting from the initial identification of problems, data recording through Pedatren, coordination between relevant

administrators, implementation of follow-up actions, and reporting to institutional leaders. Through this activity, participants analyzed their current practices and adjusted them with a more structured digital-based workflow. The mapping process helped clarify the responsibilities of each unit involved in student counseling services.

The next activity focused on establishing standards for counseling documentation and reporting mechanisms. Participants discussed and determined the minimum frequency of data recording, including weekly and monthly documentation requirements, as well as the format of reports that would be used during evaluation meetings. The standardization process aimed to ensure that student development data and counseling records could be consistently maintained and used as a reference for monitoring and decision-making. Through this process, participants began to recognize that effective digital counseling management requires regular data updating and systematic reporting procedures.

Furthermore, the mentoring session emphasized strengthening coordination mechanisms between different units involved in student supervision. Participants developed communication schemes involving foster parents, BK administrators, regional administrators, and area administrators in handling specific student cases. This coordination framework was designed to minimize information gaps and ensure that student problems could be addressed collaboratively through accurate and timely information sharing.

Each unit involved in the counseling service system was then encouraged to develop an initial SOP draft according to its operational responsibilities. The prepared drafts were presented and reviewed together with the PkM implementation team to identify weaknesses and provide improvement recommendations (Epperson et al., 2022; Wang et al., 2024). The review process focused on ensuring that the SOPs were relevant to institutional conditions and compatible with the utilization of Pedatren as a digital counseling management tool.

Overall, the SOP development mentoring demonstrated that digitalization of counseling services requires institutional readiness beyond the use of applications. The integration of Pedatren with standardized procedures became an important step in strengthening counseling governance, improving coordination efficiency, and supporting sustainable implementation of digital-based student services within the Islamic boarding school environment.

Monitoring and Evaluation Stage

1. Monitoring, Evaluation, and Sustainability of Pedatren-Based Counseling Services

The monitoring and evaluation stage became an important component in assessing the effectiveness of the Pedatren-based counseling service training program. This stage

was conducted to ensure that the training and mentoring processes were implemented according to the planned objectives while identifying achievements, challenges, and opportunities for further development. Monitoring was carried out continuously from the beginning of the activity until the final stage by observing participant involvement, technical implementation, and the readiness of BK and guardianship administrators to adopt Pedatren as part of their counseling management practices.

During the training process, the implementation team conducted direct monitoring of participant participation and engagement. The attendance rate and involvement of participants in discussions, practical sessions, and application simulations became important indicators of their commitment to following the program. The observations showed that participants actively participated in each session, particularly during the hands-on practice of entering student data, recording counseling cases, and exploring reporting features within Pedatren. The active involvement of participants indicated that the training approach based on direct practice was effective in increasing their confidence in utilizing the application.

Monitoring was also conducted to evaluate participants' ability to operate Pedatren features according to their counseling responsibilities. The implementation team observed participants' ability to complete student questionnaires, input student development records, document violations, and interpret available reports. During the practice sessions, several technical challenges were identified, including differences in participants' digital competencies, unstable internet connections on some devices, and errors in data input formats. These challenges were directly addressed through technical assistance provided by the facilitation team. Each obstacle was documented as part of the evaluation notes to improve the effectiveness of future implementation.

In addition to process monitoring, the evaluation stage was conducted to measure changes in participants' knowledge and skills after participating in the training. The evaluation used both quantitative and qualitative approaches through pre-test and post-test assessments, participant satisfaction questionnaires, and group reflection discussions. The competency assessment focused on participants' understanding of digital counseling management, the functions of the Pedatren application, and the principles of student data management. The evaluation results showed an increase in participants' understanding after the training, with average competency improvements ranging from 60–80% between pre-test and post-test results. This finding indicates that the training contributed positively to improving participants' ability to understand and utilize digital counseling systems.

The participant satisfaction evaluation also showed positive responses regarding the relevance of the training materials, facilitator assistance, training facilities, and practical application sessions. Participants considered the Pedatren-based training relevant to their daily responsibilities because it provided solutions for managing counseling documentation more systematically. The intensive technical support provided during the training was also identified as an important factor that helped participants overcome difficulties in adapting to the new digital system.

Furthermore, a group reflection discussion was conducted after the completion of technical training and simulation activities. This session provided an opportunity for participants to evaluate their learning experiences, identify useful Pedatren features, and discuss challenges that might emerge during future implementation. Participants highlighted that digital recording and integrated student data management were among the most beneficial aspects of Pedatren because these features could simplify monitoring processes and support more accurate counseling decisions. At the same time, participants emphasized the need for continued assistance to ensure consistent implementation after the training program ended.

The final reflection between the PkM team and institutional partners resulted in several follow-up commitments to support program sustainability. BK administrators and guardianship teams expressed their readiness to continue utilizing Pedatren for recording and reporting student development (Gardner et al., 2023; Rezai et al., 2022). Participants also recommended continued online mentoring through communication platforms to address technical issues that may arise during implementation (Curran et al., 2022). In addition, the institution agreed on the importance of developing formal SOPs for Pedatren utilization and involving the Islamic boarding school's information technology team to support system integration within the broader institutional management framework.

Overall, the monitoring and evaluation results demonstrate that the Pedatren-based counseling service program not only improved participants' technical competencies but also strengthened institutional readiness to adopt digital counseling management practices. The combination of competency improvement, positive participant responses, and follow-up commitments indicates that the program has contributed to the initial development of a more structured, integrated, and sustainable digital counseling service system in the Islamic boarding school environment.

CONCLUSION

The Community Service (PkM) activity demonstrated that the optimization of the Pedatren application can contribute to strengthening digital-based student counseling

management in Islamic boarding schools. The program successfully addressed the existing challenges in counseling administration, particularly the limitations of manual documentation, fragmented student data management, and less integrated coordination between BK administrators and guardianship teams. Through participatory training and mentoring activities, participants gained improved competencies in utilizing Pedatren features, including student data management, counseling record documentation, progress monitoring, and digital reporting. The implementation of simulations and practical exercises also encouraged participants to understand the importance of data-based approaches in improving the effectiveness of student counseling services.

Beyond improving individual technical skills, this activity also encouraged institutional readiness to develop more structured and sustainable digital counseling practices. The preparation of counseling service workflows, initial SOP development, and follow-up commitments became important indicators that digitalization efforts had begun to be integrated into the institutional management system. However, continuous assistance is still required to ensure consistent application utilization, overcome differences in digital literacy levels, and support further system development according to institutional needs. Therefore, the Pedatren-based counseling management model can serve as a practical approach for other Islamic boarding schools seeking to strengthen student services through digital technology while maintaining the values of guidance, care, and character development.

BIBLIOGRAPHY

- Adio, A. O., & Bolaji, H. O. (2024). Awareness, efficacy, and readiness on the usability of counseling service application software to enhance the academic outcome. *Curricula: Journal of Curriculum Development*, 3(2), 277-288. <https://doi.org/10.17509/curricula.v3i2.69875>
- Aldaaja, Y., Odeh, M., Badrakhan, S. S., Sabri, M., Abdelrahim, Y., Samara, G., & Alsabatin, H. (2025). Quantifying the managerial and practical benefits of cloud computing on information security in higher education institutions. *Appl. Math. Inf. Sci*, 19(1), 15-24.
- Astuti, S. J. W., Dwiningwarni, S. S., & Atmojo, S. (2025). Modeling environmental interactions and collaborative interventions for childhood stunting: A case from Indonesia. *Dialogues in Health*, 6, 100206.
- Bond, R. R., Mulvenna, M. D., Potts, C., O'Neill, S., Ennis, E., & Torous, J. (2023). Digital transformation of mental health services. *Npj mental health research*, 2(1), 13.
- Bowker, L., & Villamizar, C. (2017). Embedding a records manager as a strategy for helping to positively influence an organization's records management culture. *Records Management Journal*, 27(1), 57-68. <https://doi.org/10.1108/RMJ-02-2016-0005>
- Campaz-Landazábal, D., Vargas, I., & Vázquez, M. L. (2024). Impact of coordination mechanisms based on information and communication technologies on cross-level clinical coordination: A scoping review. *Digital Health*, 10, 20552076241271854. <https://doi.org/10.1177/20552076241271854>

- Curran, G. M., Landes, S. J., McBain, S. A., Pyne, J. M., Smith, J. D., Fernandez, M. E., ... & Mittman, B. S. (2022). Reflections on 10 years of effectiveness-implementation hybrid studies. *Frontiers in Health Services*, 2, 1053496.
- Damayanti, F. Y., & Sejati, R. H. P. (2023). Innovative Counseling Solution for Education: Development of an E-Counseling Application. *International Journal of Computer Applications*, 185(45), 37-44.
- Daniel, K. L., McConnell, M., Schuchardt, A., & Pepper, M. E. (2022). Challenges facing interdisciplinary researchers: Findings from a professional development workshop. *Plos one*, 17(4), e0267234.
- Dovbischuk, I. (2022). Innovation-oriented dynamic capabilities of logistics service providers, dynamic resilience and firm performance during the COVID-19 pandemic. *The International Journal of Logistics Management*, 33(2), 499-519. <https://doi.org/10.1108/IJLM-01-2021-0059>
- Epperson, W., Jung-Lin Lee, D., Wang, L., Agarwal, K., Parameswaran, A. G., Moritz, D., & Perer, A. (2022, June). Leveraging analysis history for improved in situ visualization recommendation. In *Computer Graphics Forum* (Vol. 41, No. 3, pp. 145-155).
- Gardner, M. M., Hickmott, J., & Ludvik, M. J. B. (2023). *Demonstrating student success: A practical guide to outcomes-based assessment of learning and development in student affairs*. Taylor & Francis.
- Jones, M. K., & Roberts, M. Y. (2024). Speech, Sign, or Both? Factors Influencing Caregivers' Communication Method Decision Making for Deaf/Hard of Hearing Children. *Journal of Speech, Language, and Hearing Research*, 67(1), 187-195.
- Khan, F., & Mita, T. A. B. (2023). Cybersecure documentation and record-keeping protocols for safeguarding sensitive financial information across business operations. *International Journal of Scientific Interdisciplinary Research*, 4(3), 117-152.
- Khawaja, Z., & Bélisle-Pipon, J. C. (2023). Your robot therapist is not your therapist: understanding the role of AI-powered mental health chatbots. *Frontiers in Digital Health*, 5, 1278186.
- Kumar, S., & Bargavi, S. (2024). Trust's significance in Human-AI communication and Decision-Making. *Interantional Journal of Scientific Research in Engineering and Management*, 8(2), 1-10.
- Krishnan, N. (2025). Advancing multi-agent systems through model context protocol: Architecture, implementation, and applications. *arXiv preprint arXiv:2504.21030*.
- Mayasari, A., Arifudin, O., Herawati, S., Rosanti, A., & Prayogi, R. A. (2024). Optimizing Student Management to Improve Educational Service Quality: A Qualitative Case Study in Integrated Islamic Elementary Schools. *EDUKASIA Jurnal Pendidikan dan Pembelajaran*, 5(2), 799-808. <https://doi.org/10.62775/edukasia.v5i2.1965>
- Munawwaroh, I., & Adeleke Adeoye, M. (2024). AI-Enhanced Learning Experiences: Moving Beyond Traditional Textbook Approaches in Global Education. *Educative: Jurnal Ilmiah Pendidikan*, 2(3), 169–177. <https://doi.org/10.70437/educative.v2i3.825>
- Rezai, A., Namaziandost, E., & Rahimi, S. (2022). Developmental potential of self-assessment reports for high school students' writing skills: A qualitative study. *Teaching English as a Second Language Quarterly*, 41(2), 163-203. <https://doi.org/10.22099/tesl.2022.42670.3082>
- Rezazade Mehrizi, M. H., van den Hooff, B., & Yang, C. (2022). Breaking or keeping the habits: exploring the role of legacy habits in the process of discontinuing organisational information systems. *Information Systems Journal*, 32(1), 192-221.
- Schemmer, M., Hemmer, P., Köhl, N., Benz, C., & Satzger, G. (2022). Should I follow AI-

- based advice? Measuring appropriate reliance in human-AI decision-making. *arXiv preprint arXiv:2204.06916*. <https://doi.org/10.48550/arXiv.2204.06916>
- Tuazon, J. L., & Tacuban, T. N. (2017). Guidance and Counseling Information Support System. *Asia Pacific Journal of Multidisciplinary Research*, 5(1), 9-15.
- Wang, Y., Chu, Z., Ouyang, X., Wang, S., Hao, H., Shen, Y., ... & Li, S. (2024, March). Llmrg: Improving recommendations through large language model reasoning graphs. In *Proceedings of the AAAI conference on artificial intelligence* (Vol. 38, No. 17, pp. 19189-19196).