# Strengthening Student Discipline through Digital Record-Keeping: A School Action Research at SMP IT al-Amanah

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#### **Abstract**

Schools, as educational entities, bear the responsibility for the process of cultivating students' disciplined character. Therefore, the character of discipline is not solely rooted and nurtured within the dimensions of individual humans but also collectively within educational entities or institutions. The primary objective of this research is to evaluate the enhancement of discipline within the school environment using the Attitude Record approach as an analytical tool. The method employed in this study is the School Action Research (SAR) approach. The research findings reveal that implementing the Attitude Record as a tool for recording and analyzing student behavior data yields significant benefits in enhancing discipline within the school. The Attitude Record enables school management to conduct more precise evaluations of disciplinary situations, identify student behavioral patterns, and formulate actions that align with the existing conditions. Schools can take practical and targeted measures to improve discipline comprehensively through this approach. The implications of these findings extend not only to the relevant school environment but also to offer guidance for other educational institutions. The utilization of similar applications to manage student behavioral data holds the potential to elevate discipline across various educational establishments. The case analyzed in this research, specifically at SMP IT Al-Amanah, is a valuable example for other institutions to adopt a similar approach to enhance student discipline.

**Keywords:**. Attitude Record; SMP IT Al-Amanah; Discipline

#### Introduction

As a country with a Muslim majority, Indonesia must persistently strive to enhance discipline, drawing upon values derived from Islamic teachings that foster adherent behavior. One Quranic verse that resonates with the call for disciplined conduct is found in Surah An-Nisa, verse 103. This verse underscores the significance of discipline, particularly in terms of time management. The fixed prayer timings, a vital feature of the five daily prayers, are explicitly defined, and clear repercussions are outlined for those who neglect or disregard them, as elucidated in other Quranic verses. This verse also inspires a method of discipline enforcement whereby rules and sanctions are unequivocal.

Paradoxically, this verse, which should ideally propel Indonesian students to attain global disciplinary excellence, is juxtaposed with the reality that Indonesia ranks 19th according to the Programme for International Student Assessment (PISA) regarding student discipline. Addressing this incongruity necessitates consistent efforts. One such endeavor involves fortifying student management within the school context, particularly in the realm of discipline.

Management is both a science and an art, engaging individuals in collaborative efforts toward shared objectives. This necessitates foundational knowledge, analytical competencies to assess situations and existing human resources, and devising effective strategies for executing interconnected activities to achieve set goals (Windasari, 2012). This definition emphasizes that effective management entails problem-solving approaches of high quality. Thus, character education programs, including discipline, are imperative in educational settings. Discipline education, an integral part of character education, should commence early, serving as the cornerstone for moulding students' character and contributing to communal life.

Character education cultivates discipline, and schools play a pivotal role. As central figures, teachers are responsible for nurturing discipline, particularly self-discipline, among students. This discipline should be founded upon democratic principles, aligning with national educational objectives. Rules of discipline must be student-centred, guided by teachers' exemplification, and grounded in the principle of tut wuri handayani (teacher as a role model). Undisciplined behaviour in schools signifies a pressing concern in character education, specifically discipline. Fostering disciplined conduct surpasses mere knowledge and must tangibly influence students' everyday behavior.

The Ministry of Education and Culture underscores the necessity

of data-driven planning to enhance school quality. An organized management information system proves pivotal in amassing accurate, integrated, and accessible data, thus facilitating informed decision-making. A comprehensive system can adeptly monitor and enforce school regulations, ultimately contributing to cultivating discipline.

The research methodology employed in this study is School Action Research (SAR). The qualitative approach was selected due to identified challenges in formulating student discipline programs, particularly related to manual data collection. The developed application, Attitude Record, accumulates and analyses student behavior data, facilitating informed decision-making for discipline enhancement.

The study attests that effective school discipline management hinges upon methodical processes, ongoing assessment, and introspection. Implementing Attitude Records aids in data collection and supports decision-making, enabling schools to address student discipline concerns aptly. This approach applies to the concerned school environment and offers insights for other educational institutions. Employing similar applications to manage student behavior data holds the potential to enhance discipline across various educational establishments. The case studied at SMP IT Al-Amanah stands as an insightful exemplar for other institutions seeking to apply a comparable approach to improve student discipline.

#### Methods

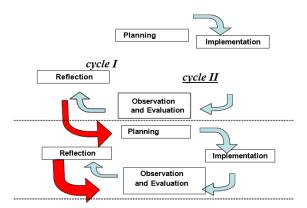
The method employed in this research is the School Action Research (SAR) method. SAR is a research procedure adapted from Classroom Action Research (CAR). School action research is a "(1) participatory research that emphasizes action and reflection based on rational and logical considerations to improve a real condition; (2) deepens understanding of the actions taken; and (3) practically improves the situation and school/learning conditions" (Depdiknas, 2008). In essence, SAR aims to seek solutions to real school problems while scientifically investigating how these problems can be addressed through corrective actions.

The approach used in this action research is qualitative. This research is conducted to identify issues related to difficulties in planning student discipline development programs stemming from manual data management. This issue is addressed by employing Attitude Record, which can provide data analysis for decision-making in student discipline development programs. The activities are observed, analyzed, and

reflected upon. The revised outcomes are then re-implemented in subsequent cycles.

This research follows the action research model of Stephen Kemmis and Mc. Taggart (1998), as adopted by Suranto (2000), further adapted for this study. This model employs a self-reflective spiral system that begins with planning, action, observation, reflection, and replanning, forming the basis for problem-solving. As Mills (2000) described, "Stephen Kemmis has created a well-known representation of the action research spiral...". The researcher chooses this model due to its practicality and relevance.

This school action research consists of several phases: Planning, Implementation, Observation, and Reflection. The steps of the school action research can be depicted as shown in the diagram below.



This school action research was conducted at SMP IT Al-Amanah in August 2022. The purpose of this study is to address the issue of student rule violations by utilizing the Attitude Record Application as a solution.

The subjects of this school action research are the student affairs team operating at SMP IT Al-Amanah. This student affairs team is the focus of the study due to its relevant role in addressing student discipline issues within the school.

The implemented action in this research involves the utilization of the Attitude Record Application to record student violations of school rules at SMP IT Al-Amanah. This application is designed to assist in monitoring student behaviour and recording incidents of violations. Consequently, more appropriate actions are expected to be taken to address these violation issues.

Data collection in this school action research is carried out through

qualitative methods, utilizing observation, examination, and interviews as the primary techniques.

Interviews: Interview techniques are used to obtain data from the informants directly. An open-ended interview guide is used in interviews, allowing informants to express themselves more freely.

Secondary Data Collection: Secondary data collection involves retrieving information from written documents considered integral and relevant to the research. Secondary data sources can be derived from various sources such as collaborative discussions, school databases, and other resources.

Observation: Observation is conducted to complement the data obtained from interviews and secondary data collection. Observation is used to observe the implementation of the Attitude Record Application in planning student discipline development.

The research instruments used include Rating Scales: Used to assess the level of student rule violations; Observation Sheets: Used to record observation results during the action's implementation; Questionnaires: Possibly used to gather opinions and perceptions from various relevant parties.

Data analysis in this research employs a qualitative analysis method that draws from primary and empirical data sources. Through this analysis, the effectiveness of the Attitude Record Application in decision-making related to student discipline development can be evaluated.

#### Results and Discussions

## Aplikasi Sistem Informasi Manejemen (SIM)

According to Rachmad in (Mahardika, 2020), an application is software used for specific purposes, such as processing documents, managing Windows &, games, and so forth.

Management Information System is a system required by an organization to provide essential information in order to achieve organizational goals. Thus, an Application for Management Information System is a tool that can process and provide crucial information for an organization with specific objectives.

The necessary software in application development is closely tied to the programming language and database used. Therefore, the following software tools are required to meet the system design needs. The planned software tools to be used in the development of this application are Javascript and MySQL.

#### lava

In general, the use of Javascript is to create interactivity on web pages for users. The utilization of Java is driven by several reasons (Deni & Deden, 2013);

Most web browsers already support this language, so it can be assumed that most people access web pages using web browsers that have Javascript support.

It is flexible, meaning it is not limited to web browsers but can also be used by the Windows operating system for automating administrative tasks.

Hence, Java applications are portable object code as long as the Java virtual machine is implemented for the target machine. In line with Java's principle of "write once, run anywhere," this is due to its operation using the Java Virtual Machine as an interpreter between the Java program and the computer's machine through the target machine's operating system. Here's a brief overview of the available Java editions:

Java SE (Standard Edition): Java specifically intended for standard application scopes like Java Swing, JavaFX.

Java ME (Micro Edition): Java tailored for devices with limited resources such as mobile devices, smartcards, and PDAs.

Java EE (Enterprise Edition) (now JakartaEE): Java designed for enterprise-level applications encompassing JSP, Spring, and other Java web services.

## MySQL

A database is an application that stores a collection of data. Each database has specific commands for creating, accessing, managing, searching, and retrieving data within it. MySQL is a distributed database that can be configured as a single or shared service, integrated so that data from different users on different sides can be connected in real-time. Moreover, MySQL is capable of transmitting and receiving data rapidly and from multiple users. MySQL has two licensing forms: community (free) and enterprise (paid). MySQL offers several advantages over other databases, including (Hirin & Virgi, 2011):

MySQL databases can be accessed from anywhere on the internet with specific access rights. All clients can access the server simultaneously, without waiting for others to access the database. MySQL maintains high performance while remaining simple. MySQL databases understand the Structured Query Language (SQL).

MySQL can be accessed through the ODBC protocol (Open Database Connectivity).

## Aplikasi Attitude Record

## Perencanaan Program Pembinaan

According to Rusdiana, Planning is the process of contemplating what will be done with the available resources and determining future priorities to ensure alignment with the organisation's fundamental goals (Rusdiana, 2022).

Student guidance, as defined by Mulyasa in Robi, encompasses all activities that include planning, supervision, assessment, and assistance to students as individuals, educational beings, and contributors to development, aiming to help students grow and develop as complete human beings based on the national education goals founded on Pancasila (Robi & Ansor, 2020).

Thus, planning student guidance programs involves considering all forms of activities to foster the growth and development of students into complete human beings. This effort must be carried out continuously, whether daily, monthly, or even yearly. Continuous guidance is essential to adapt to the evolving conditions and challenges of the times, especially in student discipline guidance. This becomes even more crucial after the pandemic, which has changed students' learning methods.

# Kedisiplinan dan tata tertib sekolah

Hadiyanto states that discipline is the action that demonstrates orderly and obedient behavior according to various regulations and rules (Hadiyanto, 2013). Therefore, student discipline involves the orderly behavior and compliance of students with the prevailing rules and regulations within the school where the students are located. The presence of rules and regulations is crucial, not merely as a means to create an organized and controlled school environment, but beyond that, they serve as tools to cultivate student discipline. The degree of compliance with these rules and regulations signifies the school's successful level of disciplinary education. Conversely, more violations against these rules indicate a need for proper disciplinary behaviour among students. Consequently, there is a continuous need to evaluate and improve discipline development programs by managing student guidance programs at the school level (Hadiyanto, 2003).

The establishment of rules and regulations is aimed at instilling discipline in students. Rules and regulations encompass a set of written guidelines that must be adhered to (Nurbaiti, 2020). Violations of these rules require sanctions and guidance. Practising discipline across all students can create a productive learning environment. Through disciplined student attitudes, a conducive learning atmosphere can be

fostered.

Due to time constraints, this School Action Research (PTS) is conducted in two cycles. The author considers two cycles sufficient to understand the process of planning student guidance programs using data analysis obtained from the Attitude Record application at SMP Al Amanah Cileunyi.

The process of the school action research cycles is conducted in the context of utilizing the Attitude Record application for decision-making in student discipline guidance. This article consists of two cycles, each comprising four phases: Planning, Implementation, Observation and Evaluation, and Reflection.

#### Cycle I:

Planning: In this stage, the author plans the actions by formulating the problem, objectives, and success indicators. The problem addressed is the effectiveness of using the Attitude Record application in making disciplinary decisions for students. Clear objectives and success indicators are also formulated.

Implementation: Implementation involves steps such as introducing the application to teachers, holding meetings with the student affairs team, simulating the use of the application, and creating a workflow for using the application up to decision-making.

Observation and Evaluation: Observation is done through observation sheets and data analysis within the Attitude Record application. The evaluation results indicate a decrease in violations in 9th-grade classes and recommend focusing disciplinary efforts on 8th-grade students regarding uniform regulations.

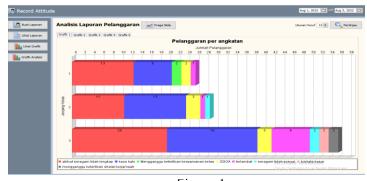


Figure. 1
Analisa data dari aplikasi *Attitude record* mulai tanggal 01 agustus s.d. 05 agustus 2022

Reflection: The first cycle is evaluated and reflected upon together with the student affairs team. The conclusion drawn from the reflection is that the inputted violation data does not yet involve reports of violations from students.

## Cycle II:

Planning: Based on the reflection of the first cycle, the planning for the second cycle is carried out. In this cycle, in addition to data from teachers, data is also obtained from students selected as discipline agents.

Implementation: The implementation of the second cycle involves socializing with teachers and students and utilizing the Attitude Record application. The student affairs staff inputs the data, followed by data analysis and discussions with the school principal.

Observation and Evaluation: Observation includes recording violations by teachers, inputting violation data by the student affairs staff, and data analysis by the vice principal in charge of student affairs.

Reflection: The second cycle is reflected upon, and the conclusion drawn from the observation and data is that the actions taken in the second cycle successfully addressed undisciplined behaviour and made decisions based on the Attitude Record data.

This article shows that this school action research thoroughly understands the necessary steps to address student discipline violation issues. The planning, implementation, observation and evaluation, and reflection cycles ensure that each step receives careful evaluation and reflection for improvement in the subsequent cycles. The Attitude Record application is crucial in gathering data and supporting decision-making for student discipline development.

#### Conclusions

The use of the Attitude Record application provides convenience in analyzing and making decisions to improve student discipline. This application has proven to be a valuable tool in supporting the evaluation and decision-making processes within the school environment.

Through Attitude Records, school management can access information about student behavior more efficiently and accurately. The data collected through this application enables the identification of patterns of student behavior that require special attention. With a deeper understanding of the discipline situation in the school, decision-making can be done with a stronger and more informed foundation.

Another advantage of the Attitude Record application is its ability to detail data comprehensively. This allows the school to track the development of student discipline over time and identify whether the implemented improvement measures yield the expected results.

### References

- Ansori, Yoyo Zakaria. 2020. Penguatan Karakter Disiplin Siswa Melalui Peranan Guru Di Sekolah Dasar. Jurnal Elementaria Edukasia Volume 3 No 1 Tahun 2020.Hal.126.
- Dennis, A., Wixom, B. H., & Roth, R. M. (2012). System Analysis and Design. Retrieved. John Wiley & Sons, Inc: New york
- Hadiyanto, 2003. Manajemen peserta didik bernuansa pendidikan karakter. Jakarta: Alwasath
- Hirin dan Virgi.2011. *Cepat mahir pemrograman Web dengan PHP dan MySQL*, Jakarta: Prestasi Pustaka
- Listyarti, Retno, 2012. Pendidikan karakter. Jakarta: Erlangga
- Mahardika, Bagus Tri. 2020. "Perancangan Sistem Informasi Management Siswa Berprestasi Berbasis Android Pada SMK PGRI Rawalumbu". Jurnal Sains dan Teknologi. Volume X. No. 2. September 2020, Hal. 30
- Mohammad Afif Saputra. 2021. Implementasi Sistem Informasi Manajemen Berbasis Aplikasi Mobile Pada Jenjang SMA. Jurnal Inspirasi Manajemen Pendidikan Volume 09 Nomor 02 Tahun 2021, 361-376
- Muhammad Sobri, dkk. 2019. Pembentukan karakter disiplin siswa melalui kultur sekolah. Jurnal Pendidikan IPS Volume 6, No 1, Maret 2019 (61-71)
- Nirhan, Inten Maharany.2021. Implementasi Manajemen Pendidikan Karakter di Sekolah" (Studi Analisis Kepemimpinan Sekolah di SMP Negeri 8 Palopo). Tesis Pascasarjana Institut Agama Islam Negeri IAIN Palopo
- Nurbaiti. 2020. *Disiplin Pendidikan Dalam Perspektif Islam*. Tangerang: CV Qalbun Salim
- Pressman, Roger.2001. *Soffware Engenering: A practitioner Approach.* Global Publisher. New york
- Rinawati dan Suyono. (2019). Sistem pendukung keputusan (decision support system) penilaian kedisiplinan siswa menggunakan metode topsis (studi kasus: smk ma'arif sukoharjo). Jurnal Manajemen Sistem Informasi dan Teknologi Volume 09, Nomor 01, Juni 2019.
- Rinawati dan Suyono.2019. Sistem Pendukung Keputusan (Decision Support System) Penilaian Kedisiplinan Siswa Menggunakan Metode Topsis (Studi Kasus: Smk Ma'arif Sukoharjo), Expert –

- Jurnal Management Sistem Informasi dan Teknologi, (Volume 09, Nomor 01, Juni 2019)
- Robi dan Ansor. 2021. Manajemen Kesiswaan Full Day School (Studi Pada Pembinaan Siswa Di Smp Negeri 6 Makassar). Jurnal Administrasi, Kebijakan, dan Kepemimpinan Pendidikan Volume [1] no [1] Juni 2020.
- Rusdiana. 2022. *Sistem Informasi Manajemen Pendidikan*. Lembaga Penelitian dan Pengabdian Kepada Masyarakat UIN Sunan Gunung Djati Bandung: Bandung
- Sa'adah, Fifi Nur Himatus dkk. 2021. Sistem Informasi Manajemen Pendidikan (Simp) Kepala Sekolah Dalam Pengambilan Keputusan Di Smk Islam Al-Khoiriyah. Jurnal Al-Miskawaih, Volume 2 Nomor 1 Edisi Mei 2021.
- Sugiyono. 2017. Metodologi Penelitian Manajemen. Bandung: Alfabeta Tim Kemdikbudristek. 2021. Sosialisasi Perenacanaan Berbasisi data. Kemendikbudristek: Jakarta
- Windiyani, Ayunda dkk. 2021. Penanaman Karakter Disiplin Siswa Selama Kebijakan Belajar Dari Rumah (BDR) Pada Masa Pandemi Coronavirus Disease (Covid-19) (Studi Kasus di SD Negeri 5 Besole). Jurnal Pendidikan Tambusai . Volume 5 Nomor 3 Tahun 2021.