

Differentiated Instruction in Indonesian Private Kindergartens: Challenges in Implementing an Independent Curriculum

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ABSTRACT

Differentiated instruction facilitates learning based on students' unique interests, preparedness for learning, and learning profiles. Many teachers lack a comprehensive understanding of differentiated instruction, particularly in kindergarten. Teachers used to employ Student Worksheets to facilitate learning. This study aims to: (1) the implementation of differentiated instruction at an Indonesian private kindergarten, (2) the factors that facilitate the instruction's implementation, and (3) the efforts to deal with any challenges encountered during the implementation of the instruction. This study employed a qualitative case study design to capture a phenomenon comprehensively and contextually by gathering data directly from the subject under investigation. The study was executed at Aisyiyah Kindergarten, Sukorejo, Indonesia. It is the only Indonesian kindergarten in Sukorejo that incorporates an independent curriculum called Sekolah Penggerak. Teachers implement holistic-integrative learning design to differentiate instructional activities. Learning media containing STEAM Loose parts were utilized to determine various factors that may facilitate or impede the instruction. Factors that facilitate instruction include the learning environment, media utilization, teachers' creativity, the student-teacher relationship, the implementation of teaching techniques, students' psychological well-being, and community support beyond the school setting. The inhibitory factors encompass a scarcity of learning resources, students' lack of preparedness for learning, a shortage of teachers, and inadequate infrastructure. This study revealed that the school tried to address the challenges by collaborating with the community inside and outside the school, such as with student guardians, the foundation administrator, and related agencies.

1. INTRODUCTION

Education has undergone numerous advancements and adaptations, as have instructional approaches. Historically, the dissemination of knowledge was facilitated through the utilization of blackboards. However, in contemporary times, the transmission of academic knowledge has evolved to incorporate diverse methodologies that align with technological progress and advancements (Hidayat, 2019). Education aims to "guide a child according to the flow of time and nature that exists in the child," enabling the child to attain holistic well-being as an individual and a contributing community member (Hasanah et al., 2022). The role

of the teacher primarily entails serving as a custodian, facilitating the development of a child's innate abilities, and guiding their journey through life. A teacher is metaphorically compared to a farmer, while children are depicted as seeds to be planted in fertile soil (Kemendikbud Ristek, 2022). During the process of learning, children are granted autonomy. At the same time, the teacher assumes the role of a mentor who consistently and persistently steers them to ensure they do not deviate from their educational path (Bayumi et al., 2021; Handiyani & Muhtar, 2022).

Despite the description above, there needs to be more in teaching and learning methods. Hence, it is imperative to research how to enhance student learning outcomes and teacher pedagogical competence. Numerous studies have investigated implementing various instructional models to facilitate students' attainment of the most favorable learning outcomes. The execution of these instructional models represents the teacher's substantial effort to strategize, execute, and evaluate the learning process to foster creativity and innovation (Kurniawan & Hasanah, 2021).

Besides instructional models, many researchers have also studied the advantages of instructional media in the classroom. For instance, Sari (2015) assessed the benefits of using information and communication-based learning media, commonly called ICT, for classroom instruction. Regrettably, this study solely examined the efficacy of learning media in terms of their functionality without demonstrating their congruence with students' interests and learning styles.

In implementing differentiated instruction, teachers must incorporate content differentiation to address students' varying readiness levels, interests, and learning styles. The concept of process differentiation pertains to the cognitive comprehension of students regarding the subject matter they have engaged with, as well as the various methodologies they have employed in their exploration of said subject matter (Suson et al., 2020). The teacher can achieve this by implementing a hierarchical sequence of activities that involves posing a series of inquiries that direct the identification and resolution of challenges based on student's interests. Process differentiation consists of providing students with an individualized schedule that outlines tasks and the specific timeframe for completing their assignments and engaging in learning activities (Marlina, 2019). Meanwhile, *product differentiation* refers to the various outputs students generate concerning the subject matter they have been studying. These outputs may be essays, recordings, diagrams, speeches, or responses to challenges, showcasing diverse outcomes. Students are given the autonomy to determine the methods by which they attain proficiency in their learning pursuits (Sukendra, 2014). The exposition above suggests that teachers play a significant role in the classroom and that their primary responsibility is to offer students stimuli to realize their maximum potential (Herwina, 2021).

However, the widespread implementation of differentiated instruction in Indonesia has been hindered by constraints related to media and cultural factors (Hasanah E, Maryani I, Suyatno, 2023). Many teachers still need to fulfill their responsibilities as teachers adequately. Many teachers need more instructional approaches and a unidirectional knowledge transfer approach. Besides, they prioritize selecting instructional methods without effectively emphasizing student-centered learning that fosters students' readiness and interest and accommodates diverse learning styles (Sagala, 2017).

The implementation of differentiated instruction still needs to be improved in Indonesian schools (Suyatno, 2021). A considerable number of teachers continue to utilize student worksheets as instructional materials. The expenditure budget for photocopies of student worksheets at Aisyiyah Bustanul Athfal Kindergarten, located in the Sukorejo District, was monitored during the 2019/2020 academic year. The observation findings indicated that the educational institution allocated approximately 30–40% of its financial resources towards procuring student textbooks, particularly in response to the academic challenges posed by the COVID-19 pandemic. In addition, the establishment of effective collaboration between teachers and school members has been lacking, resulting in limited advancements in the development of school programs.

There are notable disparities evident in the execution of the *Merdeka* (Freedom to Learn) curriculum within educational institutions. Based on the findings of the Central Java Education Quality Assurance Agency in 2020, only 265 schools out of the 24,873 educational institutions in Central Java have successfully adopted the prototype (*Merdeka*) curriculum. According to the data, a mere 2% of educational institutions in Central Java have adopted the *Merdeka* Curriculum. Many educational institutions have yet to incorporate differentiated instruction, a vital component of the *Sekolah Penggerak* module, and the *Guru Penggerak* Program (Wibowo, 2022).

The Differentiated Instruction paradigm posits that students possess individual characteristics and qualities that distinguish them from their peers. Differentiated instruction serves as a means to address the diverse needs of students. The variances observed among individual students necessitate the school's attention, as students are raised within various environmental contexts. According to the *Guru Penggerak* Program's LMS Module 2.1, differentiated instruction refers to decisions deemed appropriate and centered around the needs of the students (Faiz, 2022). The *Guru Penggerak* program is a leadership education program for teachers to become learning leaders. This program includes online training, workshops, conferences, and mentoring for six months for prospective teachers. During the program, teachers continue to carry out their teaching duties as teachers (Safrizal et al., 2022). Professional teachers should be able to inspire and motivate students in their pursuit of educational objectives, foster an optimal learning atmosphere, attend to students'

fundamental needs, design instructional plans, and assemble educational materials. In addition to possessing subject matter expertise, teachers must also manage their classrooms effectively by implementing effective classroom management procedures and establishing routines that facilitate adaptability and provide a coherent framework for various learning activities (Dwi S, Rahmad N, 2017; Suwartiningsih, 2021).

Learning is an inherently structured and meticulously organized endeavor. The primary characteristic of a learning process is the establishment of dynamic and efficient communication between students and the teacher (Haerana, 2016). A learning process should not be conflated with teaching, as the latter is one-sided. Instead, learning entails cultivating students' attitudes, knowledge, and skills (Maryani I, 2018). An integrated learning process encompasses various elements, such as environmental factors, lesson characteristics, learning strategies, instructional resources or materials' delivery, management, and organization (Sagala, 2017).

Considering the problems above, the present investigation sought to examine the application of differentiated instruction in support of student learning. This study also aimed to investigate differentiated instruction's planning, implementing, and evaluating processes and the various factors that could influence or impede its implementation. The current study's findings will offer valuable insights to teachers, encouraging them to broaden their focus beyond the lesson objectives and consider the various efforts undertaken to address the obstacles encountered. It is imperative for teachers to possess a comprehensive understanding of students' specific learning preferences and desired subject matter to facilitate their educational experience effectively. Implementing differentiated instruction is anticipated to optimize various dimensions of self-development and self-potential among students, thereby enabling them to generate tangible outcomes that are advantageous for their future. By implementing a differentiated instructional approach, teachers can effectively embody their instructional roles, thereby granting students the autonomy to address their unique learning requirements based on their interests and preferred learning modalities. Differentiated instruction aims to provide students with the necessary content to foster their physical and mental well-being during the learning process.

Differentiated instruction is a learning approach that the Government of Indonesia is advocating. The instructional process is included as part of the curriculum in the *Guru Penggerak* program. The approach is purported to be student-centered. Differentiated instruction refers to the pedagogical approach employed by teachers to address the diverse foundational needs of students. Differentiated instruction, a process or cycle, entails identifying and responding to students' learning needs according to their differences. Hence, implementing differentiated instruction requires teachers to engage in ongoing learning to comprehend their students' diverse characteristics and needs. By doing so, teachers can

attain professional competencies and encourage students to achieve effective and innovative learning outcomes (Bayumi et al., 2021). Differentiated instruction demonstrates a proactive response from the teacher in assessing student needs by considering three key factors: student learning readiness, student interest, and student learning style (Ningsi, 2021). This research contributes to discoveries of differential learning patterns and factors that influence them.

2. METHODS

This study employed a qualitative research method, a case study approach, to contextualize a particular phenomenon. Data were collected from the subjects under examination to understand the phenomenon comprehensively. The data were acquired through interviews, observation, and documentation. The critical informants of this study included the principal, teachers, students, guardians, and foundation administrators of Aisyah Kindergarten. The validity and reliability of the data were confirmed through source and method triangulation facilitated by the Atlas Ti 8 software.

The current study applied pedagogical, sociological, managerial, and theological data collection approaches. A *pedagogical* approach was employed due to its connection to implementing differentiated instruction at Aisyah Kindergarten. A *sociological* approach was used to examine the cooperative relationship between the educational institution administrators and students, which could contribute positively to the student's overall well-being. A *managerial* approach was utilized to assess the utilization of differentiated instruction in kindergarten, the facilitating factors for instructional implementation, and strategies for addressing challenges in its application. We also investigated the educational institution's engagement or cooperation with parents to pursue the shared objective of developing a Pancasila Student Profile. The teacher's role was examined using a normative theological approach, which sought to understand it based on the human relationship with the Creator.

We conducted this study at Aisyiyah Bustanul Athfal (ABA) X kindergarten in Sukorejo. We selected the school because it has been appointed to run the *Sekolah Penggerak* program in Sukorejo Regency. Because of its status as a *Sekolah Penggerak*, the kindergarten (TK ABA X) has been implementing the *Merdeka* (Freedom to Learn) Curriculum. The research procedures included conducting a preliminary study, writing a proposal, conducting a theoretical analysis and a pilot test of the research instruments, and analyzing the research data.

The data collected in this study was associated with implementing differentiated instruction at Aisyah Kindergarten in Sukorejo Regency, Kendal. There were two kinds of data: primary and secondary. The primary data contained statements, words, and verbal data collected from the research informants regarding implementing differentiated instruction at the kindergarten. Meanwhile, the secondary data were gathered from documents,

photographs, and recordings relevant to implementing differentiated instruction at Aisyah Kindergarten, Sukorejo.

Lofland in Moleong (2017) asserts that this study's primary data sources encompass verbal and non-verbal expressions, supported by supplementary sources such as written records and other relevant materials. Two distinct categories of data sources exist, namely primary and secondary. Primary data sources refer to sources directly supplying data to individuals or entities responsible for collecting data. Secondary data sources refer to data sources that do not directly supply information to data collectors, such as individuals other than the informants or documents (Sugiyono, 2019).

This study's primary data sources included the Aisyah kindergarten's foundation administrator, principal, teachers, committee members, and students. Table 1 presents the sources, forms, and research data collection techniques.

Table 1. Types and Sources of the Research Data

No	Type of Data	Source of Data	Form of Data	Technique for Collecting the Data
1	Primary	Direct	Verbal (words/testimonies)	Observation Interviews
2	Secondary	Indirect (written)	1.1 Official document(s) 1.2 Personal document (s) 1.3 Photographs, images. 1.4 Statistical Data	Field Observation 1.4.1 Document Analysis

Data collection was conducted in various settings, encompassing a range of sources and employing various methods. When considering data collection, it is possible to obtain information from various natural settings, including but not limited to laboratories, homes, schools, seminars, and roadways. Data can be collected through four distinct methods: observation, interviews, documentation, and audiovisual recordings (Sugiyono, 2019). In a qualitative study, data can be gathered using various methods, including in-depth interviews, questionnaires, observation, documentation, and Focus Group Discussion (FGD) (Manzilati, 2017). Based on the experts' perspectives, we categorized the data collection methods into participatory observation and in-depth interviews based on the experts' perspectives. In this study, we executed comprehensive interviews with some participants who fulfilled the roles of actors and observers of differentiated instruction. The participants were selected using the purposive (intentional) and snowball sampling approaches. Table 2 presents the mapping of the interview participants.

Table 2. Research Participants and Techniques for Selecting the Participants as the Data

No	Participants	Sources			
		Participant's Role		Technique for Determining the Participant	
		Observer	Actor	Purposive	Snowballing
1	Foundation Administrator		✓	✓	
2	the principal		✓	✓	
3	Committee Members		✓	✓	
4	Teacher		✓	✓	✓
5	Student	✓	✓	✓	✓

3. RESULTS AND DISCUSSION

The Implementation Of Differentiated Instruction In Aisyiyah Bustanul Athfal Kindergarten

3.1. Planning Of Differentiated Instruction

Education must facilitate students' differences as students grow up in different environmental conditions (Bayumi, 2021). Differentiated instruction essentially caters to students' various needs. Therefore, differentiated instruction planning should involve identifying and aligning instructional strategies to address students' diverse learning needs, considering their interests, levels of preparedness, and preferred learning modalities. The integration of differentiated instruction within Aisyiyah Bustanul Athfal Kindergarten was fundamentally intertwined with the school principal's leadership. The principal had to ensure that the policies and programs implemented in the school were conducive to enhancing the overall quality of education. Principals are responsible for implementing constructive initiatives prioritizing students' well-being, crafting robust educational frameworks, and formulating effective strategies to encourage teachers to cultivate their creativity and optimize learning outcomes. This objective can be accomplished, among other strategies, by engaging experts to enhance teachers' creative and innovative skills within the educational institution. The interview findings with the principal of Aisyiyah Kindergarten substantiate this claim:

" The policy that I have implemented in this school is differentiated instruction. I am optimistic that this educational experience can enhance quality and yield optimal outcomes. Students achieve optimal well-being and learning outcomes through engaging in educational experiences that effectively align with their interests, talents, and learning styles."

The interview excerpt above suggests that the Aisyah kindergarten's principal assumed a significant role in the planning and execution of differentiated instruction. The policy of the program's design primarily aimed to foster student advancement, specifically by enabling students to develop based on their competencies. Students in kindergarten were expected to

generate projects as tangible manifestations of their learning outcomes (Chen & Lo, 2019; Strawhacker & Bers, 2015). These projects were expected to yield substantial student advantages in the forthcoming period. Both the school's internal and external communities facilitated the implementation of the policy. The kindergarten's principal was also responsible for communicating and promoting their programs to the student's guardians, school committees, and administrators. The strategies implemented by the school principal garnered endorsements and favorable reactions from the neighboring community.

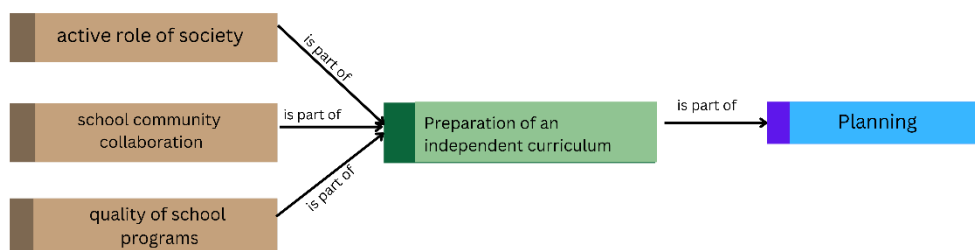


Figure 1. Differentiated Learning Planning Concept Map

The statement delivered by the kindergarten principal was consistent with what was conveyed by both the chairperson and a deputy member of the school committee. According to them, the educational programs implemented by the kindergarten thus far have been characterized as highly engaging and innovative. They felt that these programs could improve student competencies in alignment with their interests and talents, readiness for learning, and preferred learning styles. The committee has not received any negative responses or complaints from parents of students regarding learning activities. This finding suggests that all school community members could accept the curriculum formulated in this educational institution. The findings from interviews conducted with school committee representatives and the head of Aisyiyah Bustanul Athfal X (ABA X) kindergarten in Sukorejo are depicted in Figure 1.

Implementation Of Differentiated Instruction

The study results related to the implementation of differentiated instruction at *Aisyiyah* Kindergarten are summarized in Figure 2.

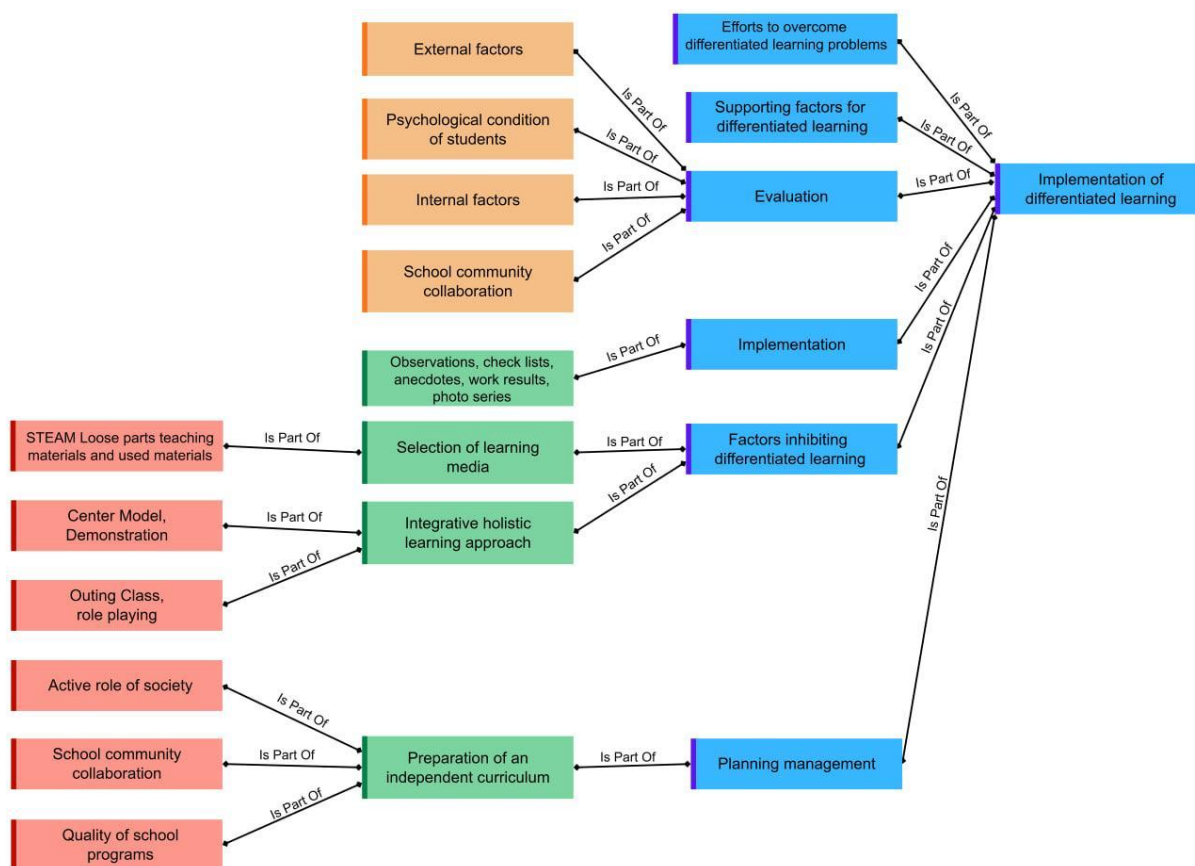


Figure 2. Differentiated Learning Implementation Concept Map

Teachers at Aisiyah Bustanul Athfal were actively involved as learning agents who could map their students' interests, preparedness for learning, and learning styles. They developed the awareness always to be committed to learning what is in the best interests of their students. These educators were attempting to comprehend and obtain information regarding differentiated instruction. They tried to enhance their pedagogical skills by learning how to implement differentiated instruction via the Merdeka Mengajar platform. In addition, they collaborated with coworkers and participated in many learning workshops. These educators understood the principles of differentiation instruction and continued to improve their learning activities (Bondie et al., 2019; Valiandes & Neophytou, 2018). They were dedicated to implementing learning that could meet the needs of the time. According to these educators, teachers serve students. Therefore, they must provide students with optimal learning opportunities for optimal learning development.

Implementing differentiated instruction at Aisiyah Kindergarten enables teachers to offer students various engaging and diverse activities to provide stimulation. These teachers offered opportunities for students to engage in active learning activities and employed instructional strategies that could enhance comprehension among younger learners (Prast et al., 2018). The kindergarten teachers created a conducive learning environment by promoting student collaboration, facilitating active engagement in educational endeavors,

and fostering mutual motivation through peer tutoring. The teachers also employed certain instructional materials that could cultivate students' learning skills, interests, preparedness, and preferences (Ismajli, 2018). Teachers at Aisyiah Kindergarten could inspire and encourage students through motivational remarks. They demonstrated a proactive approach to facilitating assessments during educational endeavors and consistently improved the quality of learning activities. The following excerpt from the teacher interview corroborated the veracity of the findings.

" Initially, the students also experienced difficulties adapting to differentiated instruction, but in the end, they got used to it and enjoyed the learning experience. The experience of *Haqul Yakin* (the knowledge of certainty) can be obtained through differentiated learning activities."

Differentiated instruction implemented at Aisyiyah Kindergarten has included the primary components of differentiated instruction, such as creating a positive learning environment that effectively fosters students' engagement and motivation in learning. A collaborative learning environment has the potential to enhance students' intrinsic motivation to acquire knowledge, thereby facilitating their holistic personal growth and development (Namaziandost et al., 2019; Tran, 2019). A conducive learning environment ensures students' holistic well-being and contentment to foster academic success and personal growth. Aisyiah Kindergarten has successfully incorporated engaging and intellectually stimulating learning activities, as depicted in Figures 3 and 4. Based on empirical evidence, it was observed that the students enrolled at Aisyiah Kindergarten actively engaged in extracurricular activities that extended beyond the confines of the classroom. These activities entailed familiarizing themselves with indigenous flora and cultivating medicinal plants, including ginger, *kencur* (aromatic ginger), and *lempuyang*.

Teachers at Aisyiyah Kindergarten have incorporated differentiated instructional activities by analyzing students' interests, readiness levels, and preferred learning styles. Aisyiyah Bustanul Athfal (ABA) kindergarten applied differentiated instruction using the center learning model, demonstration methods, outing classes, and role-playing activities. The kindergarten teachers established an instructional setting that was conducive to fostering student comfort and engagement. The implementation of differentiated instruction was further enhanced by incorporating holistic, integrative learning, which provided the students with hands-on learning experiences to foster "the knowledge of certainty" (*Haqul Yaqiqin*).

Factors That Facilitate Or Impede The Implementation Of Differentiated Instruction

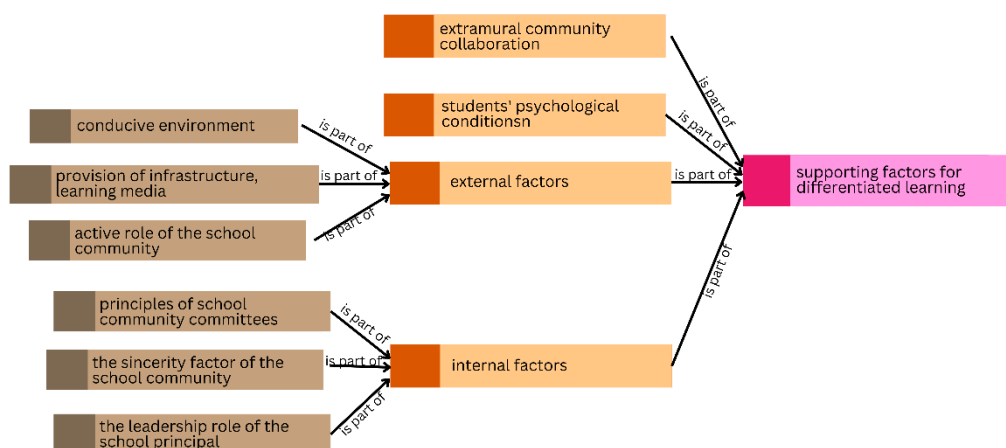


Figure 5. Data on Teacher Interviews

One of the factors that contributed to the successful implementation of differentiated instruction in Aisyiyah Kindergarten was the provision of a conducive learning environment that fosters a sense of security and comfort among students. Furthermore, the educational institution offered sufficient educational resources. Aisyiyah Kindergarten possessed the capacity to cultivate students' psychological well-being and foster community engagement both within and beyond the school premises. The school community's involvement was of significant importance in the successful implementation of differentiated instruction. The quality of learning in the school was heavily influenced by the community's favorable reception of the learning activity programs.

Several factors can impede the successful implementation of differentiated instruction. These include a scarcity of learning resources, insufficient infrastructure, a shortage of qualified teaching personnel, and unfavorable psychological conditions experienced by students during the learning process (Hasanah et al., 2022) (Lavania & Nor, 2020; Suprayogi et al., 2017). Aisyiyah Kindergarten has diligently incorporated various forms of media in the students' surrounding environment, including loose-part media and natural materials, to facilitate their learning process.

Efforts To Deal With Issues In Differentiated Instruction

When implementing differentiated instruction, teachers at Aisyiyah Kindergarten also faced some challenges, including poor assessment, poor psychological health of students, and low student motivation to learn. However, teachers at Aisyiyah Kindergarten have made numerous efforts to address these issues. For instance, the teachers deleted some previously used files and made assessment notes in small notebooks to overcome obstacles in evaluating the learning process. Teachers attempted to provide emotional support and motivation to students with poor psychological conditions, such as being fussy, sick, fatigued,

and irritable. The teachers also tried to create a stable, conducive learning environment to conduct learning evaluations efficiently.

Teachers' initiatives to promote effective communication and collaboration with various stakeholders, including school personnel and other educational communities, further bolstered efforts to address the difficulties associated with the implementation of differentiated instruction on a larger scale (McMahon et al., 2020; Ofei-Manu & Didham, 2018). Additionally, the school ensured that an evaluation of the implemented programs was conducted.

4. CONCLUSION

The implementation of differentiated instruction at Aisyiyah Kindergarten was further enhanced by incorporating holistic, integrative learning, thereby providing children with a comprehensive and immersive educational experience. This approach ensures that students actively engage in hands-on activities, fostering a deeper understanding and knowledge acquisition. The Aisyiyah Bustanul Athfal (ABA) school employed many differentiated learning activities, including center learning, demonstration methods, outing classes, and role plays. One of the factors that contributed to the successful implementation of differentiated instruction at Aisyiyah Kindergarten was the provision of a supportive learning environment that fosters a sense of security and comfort among students. The school also prioritized the psychological well-being and preparedness for learning of their students while also actively engaging community members both within and outside the school setting. A positive community response and activity programs enrich the learning experience in implementing differentiated instruction. However, some factors could impede the implementation of differentiated instruction at Aisyiyah Kindergarten. These issues included limited learning materials, inadequate infrastructure, a small teaching staff, and students with poor psychological conditions. To address the problems, the school utilized loose-part media and natural materials in the classroom, fostered communication among school constituents, and engaged them in the planning, implementing, and evaluating of the differentiated instruction programs. In addition to facilitating communication, Aisyiyah Kindergarten enhanced collaboration with stakeholders and other school communities to help solve the issues.

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