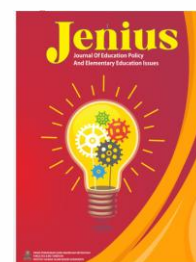




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Implementation of Islamic Education Learning with CTL (Contextual Teaching and Learning) approach for Autism Spectrum Disorder (ASD) Children at SLB Mitra Ananda

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ABSTRACT

This research is motivated by the limitations of conventional, teacher-centered Islamic Education (PAI) models, which often fail to meet the complex needs of students with special needs, particularly those with Autism Spectrum Disorder. Such methods frequently result in ineffective information processing and low engagement. Consequently, this study analyzes the implementation of the Contextual Teaching and Learning (CTL) model at SLB Mitra Ananda, identifying both supporting and inhibiting factors. Employing a qualitative descriptive approach, data were gathered from PAI teachers and students through observation, interviews, and documentation. The findings demonstrate that the CTL model was effectively implemented by integrating its seven core components: constructivism, inquiry, questioning, learning community, modeling, reflection, and authentic assessment. This approach was applied to subjects including ethics (*akhlak*), prayer and wudu instruction, Quranic recitation, and Islamic art. Success was supported by strong teacher-parent collaboration, effective role-modeling, and conducive school facilities. However, challenges such as limited teacher preparedness and restricted instructional time were identified. Ultimately, this study highlights the necessity of reinforcing strategic, contextual learning frameworks to enhance the educational development and functional understanding of PAI for students on the autism spectrum.

INTRODUCTION

Islamic Education is a foundational subject that provides knowledge and shapes students' attitudes, character, and skills for practicing Islamic teachings, to foster faith and devotion to Allah (Hakim et al., 2020). However, Islamic Education has so far tended to focus merely on delivering factual knowledge and has paid little attention to the internalization of Islamic values in students. This is reflected in the use of conventional methods, such as lectures, commonly

employed by PAI teachers ([Widodo et al., 2024](#)). Islamic religious education emphasizes that every child, including children with special needs, is an individual in a phase of growth and development ([Bakti et al., 2025](#)).

Teachers' minimal understanding of various learning models often leads to miscommunication between teachers and students. This occurs because teachers might impose a learning system that may not align with the students' learning styles. In this context, the researcher is therefore interested in conducting a more in-depth study using an Islamic education perspective ([Fahrudin et al., 2021](#)). In addition, Islamic Education (PAI) should not only develop individual piety or mystical awareness, but must also cultivate social piety ([Hayati et al., 2019](#)). Therefore, an effective method is needed to provide opportunities for the internalization of Islamic values.

In Islamic Education (PAI) learning, two commonly used instructional design models are the Cooperative Learning Model and the Contextual Learning Model. In its implementation, the cooperative learning model requires more intensive and in-depth planning, may not actively involve all students, and makes it difficult to evaluate individuals. On the other hand, contextual learning emphasizes the relevance of the material to everyday life, which can provide deeper understanding, but it requires more time for preparation and evaluation because it focuses on comprehension and application rather than factual knowledge ([Nurhasanah et al., 2024](#)).

The Contextual Teaching and Learning (CTL) model is a teaching and learning concept that helps students connect subject matter with real-world situations; in other words, students are expected to recognize the link between their learning experiences at school and real life by being motivated to relate knowledge to its application in everyday life ([Riza et al., 2024](#)). It is hoped that these learning experiences aim not only for the mere transfer of knowledge, but more importantly for the development of one's character, enabling individuals to recognize their potential and subsequently develop it as an effort to achieve their life goals ([Arwin et al., 2025](#)).

CTL has been widely applied in Islamic Education, including for students with special needs, who require instructional approaches tailored to their physical, cognitive, or social characteristics ([Anwar, 2018](#)). Previous studies have shown that CTL improves students' understanding, motivation to learn, and ability to relate learning materials to real-life situations. In addition, CTL enhances cognitive, affective, and psychomotor development while increasing student engagement and learning outcomes in Islamic Education ([Mauliddin et al., 2024](#)). These findings demonstrate the potential of CTL to improve the quality of inclusive Islamic Education.

Inclusive education is consistent with Islamic principles of equality, justice, and respect for

human dignity. Islam emphasizes that every individual, regardless of physical or mental limitations, has the right to receive quality education and develop their full potential. These values provide a strong foundation for inclusive educational practices through equitable learning opportunities, teacher preparedness, an adaptive curriculum, and accessible learning environments ([Nazira et al., 2025](#)).

This principle of equality is found in Surah An-Nur, verse 61:

{لَيْسَ عَلَى الْأَعْمَى حَرَجٌ وَلَا عَلَى الْأَعْرَجِ حَرَجٌ وَلَا عَلَى الْمَرِيضِ حَرَجٌ}

“There is no blame upon the blind, nor any blame upon the lame, nor any blame upon the sick.”

(Q.S. an-Nūr [24]: 61)

Surah An-Nur (24:61) affirms the principles of equality and non-discrimination by emphasizing that individuals with disabilities should be treated with dignity and granted equal rights in social life (Sinaga, 2023). This principle is particularly relevant in promoting inclusive education. According to the Indonesian Central Bureau of Statistics (BPS), the number of people with disabilities increased from 22.5 million in 2020 to approximately 22.97 million (8.5% of the population) in 2023 ([Wulandari et al., 2024](#)). These figures highlight the growing need for equitable educational opportunities, particularly for students with special needs, including those with Autism Spectrum Disorder (ASD).

According to the Diagnostic and Statistical Manual of Mental Disorders (DSM-5), Autism Spectrum Disorder (ASD) is a neurodevelopmental condition characterized by persistent difficulties in social communication and interaction, accompanied by restricted and repetitive patterns of behavior, interests, or activities. These characteristics emerge during early childhood and may significantly affect children’s academic and social functioning. Consequently, students with ASD require instructional approaches that accommodate their unique learning needs and promote meaningful learning experiences ([Khanna & Bhola, 2023](#)).

In Islamic Education, learning should foster students’ cognitive, affective, and psychomotor development while connecting religious values to everyday life. The Contextual Teaching and Learning (CTL) model is well suited to this objective because it emphasizes authentic learning experiences and the practical application of knowledge. Despite its potential, limited research has examined the implementation of CTL in Islamic Education for students with ASD. Therefore, this study aims to investigate the implementation of the CTL model in Islamic Education at SLB

Mitra Ananda and to identify the factors that support and hinder its implementation.

METHOD

Research Design

This study employed a qualitative field research design using a phenomenological approach to explore teachers' experiences in implementing the Contextual Teaching and Learning (CTL) model in Islamic Education for students with Autism Spectrum Disorder (ASD). A phenomenological approach was selected because it enables researchers to understand participants' lived experiences and the meanings they attribute to educational practices in their natural setting ([Nasir et al., 2023](#)).

Research Site and Participants

The study was conducted at SLB Mitra Ananda, a special school dedicated to educating students with Autism Spectrum Disorder (ASD). The school serves approximately 60 students across the elementary (SDLB), junior high (SMPLB), and senior high (SMALB) levels during the 2025/2026 academic year. The school provides specialized educational services supported by qualified teachers and therapists from multidisciplinary backgrounds, including special education, Islamic Education, psychology, speech therapy, occupational therapy, and physiotherapy.

Research participants were purposively selected for their direct involvement in implementing Islamic Education using the CTL approach. The participants consisted of the Islamic Education teacher, homeroom teachers, and the Vice Principal for Curriculum.

Data Collection

Data were collected between January and March 2025 using three complementary techniques.

Observation. Five classroom observations were conducted during Islamic Education lessons at the elementary, junior high, and senior high levels. Observations focused on the implementation of CTL components, teacher–student interactions, learning activities, and student participation in both classroom and mosque-based learning.

Semi-structured interviews. Semi-structured interviews were conducted with the Islamic Education teacher, homeroom teachers, and the Vice Principal for Curriculum. The interviews explored the implementation of CTL, teachers' roles as facilitators, perceived effectiveness of the learning model, and challenges encountered during instruction.

Documentation. Documentary data included lesson plans, teaching modules, photographs of learning activities, and other institutional documents relevant to the implementation of CTL in Islamic Education.

Trustworthiness

To ensure the credibility of the findings, source triangulation and methodological triangulation were employed. Source triangulation involved comparing information obtained from the Islamic Education teacher, homeroom teachers, and the Vice Principal for Curriculum. Methodological triangulation was conducted by comparing findings derived from observations, interviews, and documentary evidence. The consistency of information across multiple data sources enhanced the trustworthiness of the research findings.

Data Analysis

Data were analyzed using the interactive model developed by Miles and Huberman, consisting of three stages: data reduction, data display, and conclusion drawing (Huberman & Miles, 2002). During data reduction, interview transcripts, observation notes, and documents were repeatedly reviewed to identify meaningful units related to the implementation of CTL, teachers' instructional practices, supporting factors and challenges, and students' learning experiences. The reduced data were then organized into thematic matrices and narrative descriptions to facilitate interpretation. Finally, conclusions were drawn through continuous comparison of evidence across different data sources and were verified to ensure consistency with the collected data and the underlying conceptual framework.

RESULTS AND DISCUSSION

The findings demonstrate that implementing Contextual Teaching and Learning (CTL) in Islamic Religious Education (PAI) at SLB Mitra Ananda entails more than selecting appropriate instructional media or teaching methods. Instead, CTL is operationalized through an integrated pedagogical process that enables students with Autism Spectrum Disorder (ASD) to construct religious understanding from authentic learning experiences—across the four instructional domains explored in this study—*akhlak* (moral education), *salat* practice, Quranic memorization, and Islamic art—the triangulated findings consistently revealed that teachers contextualized Islamic concepts through direct practice, multimodal instructional media, individualized

learning, and continuous collaboration with parents. These contextual learning experiences not only facilitated students' comprehension of Islamic teachings but also fostered practical religious behaviors applicable in everyday life.

These findings correspond with the primary objective of Islamic Religious Education, which is to strengthen students' faith, improve worship practices, and cultivate noble character through the practical application of Islamic values in daily life (Komariah & Nihayah, 2023). Moreover, the findings indicate that the effectiveness of CTL does not depend solely on contextual activities themselves but on how teachers integrate the core principles of CTL into instructional practice while accommodating the diverse cognitive, sensory, communication, and behavioral characteristics of students with ASD. The following discussion therefore analyzes how each CTL component, as proposed by Lie (2022), was manifested in Islamic Education learning based on the triangulation of interviews, classroom observations, and school documentation.

The interview with the Islamic Religious Education (PAI) teacher, identified by the initials NB, revealed that the implementation of Contextual Teaching and Learning (CTL) is not carried out by applying its seven components separately but through an integrated instructional process adapted to the characteristics of students with Autism Spectrum Disorder (ASD). According to NB, meaningful learning occurs when students directly experience Islamic practices rather than merely receiving verbal explanations.

"Children with autism understand religious concepts better when they experience them directly. Therefore, I do not simply explain prayer or ablution, but I invite them to practice repeatedly in real situations so that they understand the meaning through experience." (NB)

NB explained that constructivist learning is achieved by allowing students to build their own understanding through authentic religious experiences. Teachers guide students gradually, adapting learning activities to each student's sensory, cognitive, and communication abilities.

"Every student has different abilities. Some students need demonstrations, some need pictures, and others learn better through repeated practice. Therefore, the learning activities must always be adjusted to their individual needs." (NB)

Regarding inquiry and questioning, NB stated that students with ASD often experience difficulties expressing questions verbally. Consequently, teachers modify their questioning

techniques by using picture cards, gestures, and simple language to encourage students to explore the meaning of Islamic practices.

"Students do not always ask questions verbally. Sometimes I ask simple questions using pictures, such as 'What do we do before prayer?' or 'How do you feel after wudhu?' so they can express their understanding in their own way." (NB)

NB further emphasized that teacher modelling is the most important strategy in Islamic Education because students with ASD learn more effectively through observation than verbal explanation.

"I always demonstrate first before asking students to practice. They usually imitate what they see much better than what they only hear." (NB)

Finally, NB explained that reflection is conducted through simple conversations, visual media, and daily communication with parents to reinforce learning outside school.

"After the lesson, students are invited to recall what they have done. I also write their progress in the communication book so parents can continue the same learning activities at home." (NB)

Implementation of Contextual Teaching and Learning (CTL) in Islamic Education Learning for Autistic Students: Case Study at Mitra Ananda Special School.

Subject Matter concerning Moral Principles in Islam

The interview with the Islamic Religious Education (PAI) teacher, identified by the initials NB, indicated that Contextual Teaching and Learning (CTL) in Islamic Education for students with Autism Spectrum Disorder (ASD) emphasizes concrete learning experiences supported by multimodal instructional media. According to NB, visual media are the primary instructional tools because they facilitate students' understanding and maintain their attention throughout the learning process. To strengthen learning, visual materials are complemented by educational films, Islamic songs, instructional videos, and contextual learning experiences such as visits to places of worship.

"Students with ASD understand the lesson better when they can see concrete examples. Therefore, I use pictures, videos, Islamic songs, and educational films so they can stay focused and understand the material more easily." (NB)

Regarding moral education (*akhlak*), NB explained that values are not merely introduced theoretically but are continuously practiced through daily habituation and real-life experiences.

“Good character cannot be taught only through explanations. Students must repeatedly practice it in their daily activities, both in the classroom and during religious activities at the mosque, so that these behaviors become habits.” (NB)

NB further explained that learning materials are simplified according to students' cognitive abilities and introduced progressively from simple to more complex concepts. Continuous collaboration with classroom teachers and parents is considered essential to reinforce students' understanding through repetition.

“The material is simplified first and then gradually developed according to each student's ability. I also coordinate with classroom teachers and parents because students with autism need continuous reinforcement both at school and at home.” (NB)

To support this collaboration, NB uses a communication book (*buku penghubung*) that documents students' daily progress in behavior and emotional regulation, language and communication, academic achievement, independence, and sensory-motor development. In addition, daily verbal communication with parents is used to encourage the continuation of *akhlak* practices at home.

“Every day I write students' progress in the communication book and explain to parents what has been learned. I encourage them to continue practicing the same character values at home so that students receive consistent guidance.” (NB)

Data triangulation was conducted by comparing the interview findings with direct classroom observations and observations of learning activities at the school mosque. The observational data confirmed that Islamic Education learning was implemented through a multimodal instructional approach. Teachers consistently employed visual media, educational videos, Islamic songs, and other concrete learning resources to facilitate students' engagement and comprehension.

Observations further demonstrated that *akhlak* education was implemented through contextual learning experiences rather than solely through verbal instruction. During activities at the school mosque, students were observed practicing Islamic values directly through repeated routines, guided worship, and teacher modeling. Similarly, classroom instruction

presented learning materials progressively, beginning with simple concepts and advancing to more complex moral principles in line with students' developmental readiness.

The triangulation process also verified the collaborative learning system described by NB. Teachers routinely communicated students' daily progress in the communication book and provided direct verbal feedback to parents after school. Parents were consistently encouraged to reinforce the same moral values and learning activities at home, ensuring continuity between school-based instruction and the home environment. The convergence of interview and observational evidence indicates that the successful implementation of CTL in Islamic Education for students with ASD depends on three interconnected components: multimodal instructional media, experiential learning through habituation, and sustained collaboration between teachers and families.

Topic focusing on the Method of Performing Salat

The interview with the Islamic Religious Education (PAI) teacher, identified by the initials NB, revealed that the implementation of Contextual Teaching and Learning (CTL) in teaching *salat* is designed to connect religious instruction with students' everyday experiences. Rather than learning prayer movements solely in the classroom, students practice them directly in authentic settings, particularly in the school mosque, where they perform *wudhu* sequentially and participate in congregational prayer.

"Prayer is not only explained theoretically. Students learn by practicing it directly, starting with ablution in the correct sequence and then performing congregational prayer at the school mosque. This makes the learning more meaningful because they experience it themselves." (NB)

NB explained that teaching *salat* to students with ASD requires flexibility because each student demonstrates different cognitive abilities, sensory responses, motor skills, and attention spans. Consequently, instructional strategies and learning environments must be adapted to individual needs.

"Every child with autism is different. Some are sensitive to the sound of running water during ablution, while others need repeated demonstrations before they understand the prayer movements. Therefore, I have to adjust the teaching method to each student's condition." (NB)

To facilitate understanding, NB employs multimodal learning media, including visual cards

illustrating prayer movements, instructional videos, verbal explanations, and direct demonstrations. The selection of media depends on students' academic abilities and learning characteristics.

"Students who can already read use visual materials with written instructions, while those who cannot read learn better through pictures, demonstrations, and instructional videos. The learning media must always match each student's abilities." (NB)

NB further emphasized that repeated practice, positive reinforcement, and appreciation are fundamental components of CTL implementation. Every improvement, regardless of its magnitude, is acknowledged to encourage students' confidence and motivation.

"Prayer learning must be repeated continuously. Whenever students show progress, I always give praise and encouragement because positive reinforcement motivates them to keep practicing." (NB)

Teaching prayer with the CTL approach for children with special needs requires patience, creativity, and a deep understanding of each child's individual needs. Because some children have sensory sensitivities when hearing the sound of trickling water, teachers need to identify each child's motor skills, level of understanding, and attention span. Additionally, a comfortable, safe, and enjoyable atmosphere is necessary.



Figure 1. Congregational prayer activity.

Prayer activities for children with ASD are carried out consistently, regularly, and in a structured manner. This experience-based learning is crucial for demonstrating prayer movements slowly and clearly and for involving children in congregational prayers with guidance. Furthermore, these congregational prayers can provide a shared learning experience

with peers, fostering mutual assistance and support.

PAI teachers offer praise and appreciation for every bit of progress the children make, using positive, motivating words. However, these prayer activities often face challenges such as varying children's conditions, which lead to different learning needs requiring adjustments, and sudden emotional outbursts (tantrums), for which teachers need to devise solutions.

Essentially, developing contextual teaching and learning (CTL) for children with ASD requires recognizing the need for repetitive, continuous activities. Additionally, Islamic Education teachers utilize visual, auditory, and tactile learning media.



Figure 2. Visual media of prayer movements used by the teacher.

The use of appropriate learning media is essential for optimizing learning outcomes in Islamic Education. Teachers adapted instructional media to students' individual characteristics, abilities, and learning needs. Students with adequate literacy skills used visual reading materials, whereas those with limited literacy benefited from audio-visual media, particularly instructional videos.

Triangulation between interview and observation data confirmed that salat instruction was implemented through authentic contextual learning experiences in both the classroom and the Ar-Rahman School Mosque. Students practiced wudhu under teacher guidance before performing congregational prayer, enabling them to apply religious concepts in real-life

contexts.

Observations further revealed the use of multimodal instructional media, including visual illustrations, learning videos, verbal explanations, and direct demonstrations, to accommodate students' diverse cognitive, communication, and sensory needs. Prayer instruction was reinforced through structured repetition, continuous teacher guidance, and positive reinforcement. At the same time, instructional strategies were flexibly adjusted to address individual challenges, such as sensory sensitivities, emotional regulation, and attention span.

Overall, the findings indicate that the successful implementation of CTL in teaching salat to students with ASD is supported by authentic learning experiences, individualized multimodal instruction, systematic practice, and adaptive teacher support tailored to students' developmental needs.

The Practice of Quranic Memorization

The interview with the Islamic Religious Education (PAI) teacher, identified by the initials NB, revealed that the implementation of Contextual Teaching and Learning (CTL) in Quranic memorization aims to make the memorization of short *surahs* and daily prayers meaningful by relating them to students' daily routines and individual learning experiences. According to NB, memorization targets are adapted to each student's developmental level, cognitive abilities, and learning characteristics rather than applying uniform expectations.

"Each student has different abilities, so the memorization targets are also different. Elementary students generally begin with Surah Al-Fatihah and other simple short surahs, while students at higher levels continue with more complex surahs and daily prayers according to their readiness." (NB)

NB explained that Quranic memorization is supported through various multimodal instructional media to maintain students' attention and motivation. Audio-visual *murotal* recitations, singing, repetition, and educational games are combined to create an engaging learning environment.

"Children with autism become more interested when memorization is combined with murotal, songs, and simple games. Repetition alone is often not enough, so the activities need to be enjoyable and varied." (NB)

To strengthen memorization, NB also incorporates Quran recitations into students' daily school

routines by playing *murotal* during breaks between learning activities. This repeated exposure helps students become familiar with the pronunciation and rhythm of the verses.

"We play Quran recitations during break times so the students hear the verses repeatedly. Even when they are not actively memorizing, they become familiar with the sounds, which helps them remember more easily." (NB)

Data triangulation was conducted by comparing interview findings with direct classroom observations at both the elementary and senior high school levels. The observational evidence confirmed that Quranic memorization activities were individualized according to students' developmental abilities and learning characteristics. Elementary students were primarily observed memorizing foundational surahs, particularly *Surah Al-Fatihah*, whereas senior high school students practiced more advanced short *surahs* and daily supplications that matched their academic readiness.

Classroom observations further verified the use of multimodal instructional media described by NB. Teachers consistently utilized audio-visual *murotal* recitations, combined memorization with melodic chanting, and incorporated simple educational games to sustain students' engagement throughout the learning process. These varied instructional strategies enabled students with diverse cognitive and communication abilities to participate in Quranic memorization activities actively.

The researcher also observed that Quran recitations were routinely played during breaks between learning sessions, creating continuous exposure to Quranic verses beyond formal instruction. This daily habituation complemented structured memorization activities by reinforcing students' auditory familiarity with the verses. While some students demonstrated rapid memorization, others required repeated guidance and individualized support, reflecting the diverse learning characteristics commonly found among students with ASD.

The convergence of interview and observational data indicates that the successful implementation of CTL in Quranic memorization relies on individualized learning targets, multimodal instructional strategies, continuous habituation through repeated exposure, and adaptive teaching practices that accommodate the diverse abilities of students with ASD.

Islamic Art

The interview with the Islamic Religious Education (PAI) teacher, identified by the initials NB, revealed that Islamic art activities are an integral component of the Contextual Teaching

and Learning (CTL) approach, as they enable students with Autism Spectrum Disorder (ASD) to connect Islamic values to meaningful creative experiences. Rather than emphasizing artistic perfection, learning activities are designed to encourage students to express Islamic values through hands-on projects such as Islamic calligraphy, painting, collage, and handicrafts.

“Islamic art is not intended to produce perfect artwork. The most important goal is that students enjoy the creative process while learning Islamic values through activities that match their abilities.” (NB)

NB explained that every artistic activity is differentiated according to students’ developmental characteristics, particularly their fine motor skills, cognitive abilities, and sensory needs. Students are therefore not required to complete identical projects.

“Each child has different abilities. Some students are ready to make simple calligraphy, while others begin with coloring, cutting, or making collages. We never force all students to produce the same artwork.” (NB)

According to NB, Islamic art projects also contribute to broader developmental outcomes, including improving fine motor coordination, stimulating creativity and imagination, introducing the concept of beauty in Islam, and fostering cooperation during group activities.

“Besides learning Islamic values, art activities help students improve their motor skills, develop creativity, and learn to work together with their classmates.” (NB)

Data triangulation was conducted by comparing the interview findings with direct classroom observations at both the elementary and senior high school levels. The observations confirmed that Islamic art activities were implemented using differentiated instruction to accommodate students’ individual abilities and developmental needs.

During classroom observations, students participated in various artistic activities, including Islamic calligraphy, collage projects featuring *Asmaul Husna*, coloring, cutting, and pasting. Teachers consistently adjusted the complexity of each activity according to students’ motor skills and academic readiness. Elementary students generally completed simpler artistic tasks requiring basic fine motor coordination, whereas students at higher grade levels engaged in more detailed Islamic calligraphy and craft projects.

Figure 3 presents examples of students’ collage artwork featuring *Asmaul Husna*. The

artworks demonstrate how Islamic concepts are transformed into tangible learning products through contextual, hands-on activities. Rather than emphasizing artistic perfection, the projects reflect students' participation, creativity, and gradual development of fine motor coordination. The variation in colors, collage patterns, and finishing quality also illustrates the individualized nature of instruction, with each student completing tasks according to their developmental abilities.



Figure 3. Students' collage artwork of *Asmaul Husna* produced during CTL-based Islamic art learning.

The observations further demonstrated that teachers emphasized the creative process rather than the final artistic product. Students were encouraged to complete projects independently, with individualized guidance as needed. This instructional approach enabled students with varying developmental characteristics to participate successfully in meaningful learning experiences that integrated Islamic values with practical creativity.

The convergence of interview and observational data indicates that CTL-based Islamic art instruction supports not only students' understanding of Islamic aesthetics and values but also the development of fine motor skills, creativity, independence, and social interaction through authentic, hands-on learning experiences.

Supporting Factors in the Implementation of CTL

The triangulation of interviews, classroom observations, and school documentation identified several factors that support the successful implementation of CTL in Islamic Religious Education for students with ASD.

First, strong collaboration between teachers and parents was consistently identified as a

key facilitating factor. The communication book (*buku penghubung*), completed daily by teachers, documents students' progress in behavior, emotional regulation, communication, academic performance, independence, and motor development (Rostina, 2019). This documentation enables parents to continue reinforcing learning activities at home, while daily face-to-face communication during student drop-off and pick-up further strengthens home-school collaboration.

Second, teacher modeling emerged as an essential component of CTL implementation. Observations in both the classroom and the Ar-Rahman School Mosque confirmed that teachers consistently demonstrated Islamic practices, particularly during *salat*, before asking students to imitate them. Their role extended beyond instruction to providing continuous guidance, encouragement, and behavioral reinforcement, enabling students to learn through direct observation and repeated practice (Lotulung & Tumurang, 2018).

Third, the availability of supportive school facilities contributed substantially to the effective implementation of CTL. School documentation and observations confirmed that the Ar-Rahman School Mosque provides an authentic environment for practicing Islamic worship. At the same time, air-conditioned classrooms offer a sensory-friendly learning atmosphere that supports students' concentration and emotional regulation. These facilities facilitate experiential learning by allowing students to practice Islamic teachings within meaningful real-life contexts (Lellya et al., 2026).

Challenges in the Implementation of CTL

Despite these strengths, triangulation of interviews with the PAI teacher and the school principal identified several challenges affecting CTL implementation.

One major challenge concerns teachers' preparedness to implement CTL for students with ASD. Both participants acknowledged that students' highly diverse and dynamic characteristics require teachers to possess specialized knowledge and considerable instructional flexibility. Continuous professional development is therefore necessary to strengthen teachers' competencies in adapting contextual learning strategies to individual student needs.

A second challenge relates to limited instructional time. Both participants explained that CTL requires considerably more time than conventional instructional approaches because students with ASD benefit from repeated practice, individualized guidance, and authentic learning experiences. Consequently, the allocated time for Islamic Religious Education is often insufficient to implement all CTL components comprehensively, indicating the need for greater

flexibility in curriculum scheduling to optimize contextual learning.

The findings of this study demonstrate that implementing Contextual Teaching and Learning (CTL) in Islamic Religious Education (PAI) at SLB Mitra Ananda provides meaningful learning experiences for students with Autism Spectrum Disorder (ASD). Rather than emphasizing rote memorization, CTL enables students to connect Islamic concepts with authentic situations encountered in their daily lives. This contextualization was consistently observed across four instructional domains-*akhlak* (moral education), *salat* practice, Quranic memorization, and Islamic arts-where teachers integrated real-life experiences, multimodal learning media, and individualized instruction to accommodate students' diverse developmental characteristics. These findings support the fundamental premise of CTL that knowledge becomes more meaningful when learners actively construct understanding through authentic experiences rather than passive information transfer ([Sakina et al., 2026](#)).

One of the most prominent findings concerns the effectiveness of contextual and experiential learning in teaching religious practices. Unlike conventional teacher-centered approaches, students with ASD practiced *wudhu* and *salat* directly in the Ar-Rahman School Mosque while receiving continuous modeling and guidance from teachers. This authentic environment enabled students to associate religious knowledge with actual worship experiences, thereby strengthening procedural understanding and long-term retention. The findings reinforce ([Salam, 2025](#)), who argues that students with ASD experience greater learning success when abstract concepts are presented through concrete daily activities. Likewise, CTL reduces the cognitive demands of abstract religious instruction by translating theoretical concepts into observable behaviors.

The findings also demonstrate the importance of multimodal instructional media in supporting CTL implementation. Teachers combined visual schedules, picture cards, instructional videos, *murotal* recitations, Islamic songs, demonstrations, and tactile learning materials according to individual learning characteristics. This instructional flexibility reflects the heterogeneous nature of ASD, in which students display varying cognitive, communication, sensory, and motor profiles. The present findings are consistent with [Suharsiwi et al. \(2022\)](#), who reported that audio-visual media substantially improved students' mastery of prayer procedures, and with [Mostafa \(2018\)](#), who emphasized that multisensory learning enhances information processing among learners with autism. Rather than relying on a single instructional strategy, the teachers in this study continuously adapted learning media in response to students' feedback, demonstrating the learner-centered orientation that

characterizes CTL.

Another important finding concerns the role of repetition and habituation in strengthening Islamic learning. Across all learning topics, students repeatedly practiced Islamic behaviors in authentic situations, including performing congregational prayer, memorizing Quranic verses through daily *murotal*, and applying Islamic values during art activities. Such repeated contextual experiences appear particularly beneficial for students with ASD because they reduce cognitive load while facilitating the formation of stable behavioral routines. These findings extend previous research by demonstrating that repetition within authentic contexts contributes not only to cognitive learning but also to the development of religious habits and independent functional behavior.

Home-school collaboration emerged as another critical component supporting CTL implementation. Daily communication through the *buku penghubung* (communication book), complemented by direct discussions between teachers and parents, ensured that learning activities introduced at school were consistently reinforced at home. This continuity enabled students to encounter similar learning experiences across different environments, thereby increasing opportunities for skill generalization. The findings suggest that CTL should be viewed not merely as a classroom instructional model but as a collaborative educational framework involving teachers, parents, and the broader school environment.

The findings further highlight the importance of individualized instruction within CTL. Teachers consistently adjusted learning objectives, instructional media, and activity complexity according to each student's developmental readiness. Individualized Educational Programs (IEPs) served as the basis for determining appropriate learning targets and instructional adaptations. This differentiated approach was particularly evident during Islamic art activities, Quranic memorization, and prayer instruction, where students completed different learning tasks despite sharing the same instructional theme. These findings reinforce the growing consensus that effective instruction for students with ASD requires flexible pedagogy rather than standardized teaching procedures.

Although CTL demonstrated considerable strengths, several implementation challenges were also identified. First, teachers acknowledged that contextual instruction requires extensive preparation because every learning activity must be adapted to students' fluctuating sensory, emotional, and behavioral conditions. Second, the limited instructional time allocated for Islamic Religious Education restricts opportunities to implement all CTL components comprehensively. This finding supports [Sarwari & Kakar \(2023\)](#), who argue that CTL generally

requires more instructional time than conventional teaching because it emphasizes exploration, authentic experiences, and reflection. Furthermore, several abstract Islamic concepts, including heaven, hell, divine reward (*pahala*), and sin, remain difficult for students with ASD to comprehend despite contextual explanations. Consequently, teachers continue to combine CTL with explicit instruction, visual supports, repetition, and concrete demonstrations to facilitate conceptual understanding.

An important contribution of this study lies in extending previous CTL research within the context of Islamic special education. Previous studies have generally examined CTL in inclusive or mainstream educational settings, whereas empirical evidence regarding its implementation in Islamic Religious Education for students with ASD remains limited. This study demonstrates that effective CTL implementation extends beyond the contextual activities themselves and depends on integrating individualized planning, multimodal instruction, authentic religious environments, systematic repetition, and sustained collaboration between teachers and parents. Together, these elements constitute a comprehensive pedagogical framework that supports the cognitive, behavioral, spiritual, and social development of students with ASD.

Despite these contributions, several limitations should be acknowledged. The study was conducted in a single special school, which may limit the transferability of the findings to other educational contexts. Future research could investigate CTL implementation across multiple special schools or inclusive educational settings and evaluate its long-term effects on students' religious competence, adaptive behavior, and independence using mixed-methods or longitudinal research designs.

CONCLUSION

Despite its compulsory nature across all educational levels, Islamic Education (PAI) has often been limited to delivering factual knowledge, neglecting the crucial aspect of internalizing Islamic values in students. Therefore, a learning model that utilizes Contextual Teaching and Learning (CTL) is essential. CTL is a teaching concept that bridges the gap between subject content and real-world application for all students, including those with ASD, using principles like constructivism, inquiry, questioning, learning communities, modeling, and reflection. The research results show that PAI learning activities using the CTL model for students with ASD are implemented in several ways, such as involving the five senses, using enjoyable learning activities, and employing engaging media and methods. The implementation is carried out in non-abstract learning activities that can be directly applied, such as in the chapter/topic of noble

character, the topic of prayer (sholat), the topic of the Quran, and Islamic art. Factors that facilitate the use of CTL include the collaborative efforts of teachers and parents, teachers demonstrating exemplary behavior and effective teaching methods, and the presence of school facilities and infrastructure that are both supportive and conducive to learning. On the other hand, obstacles to CTL implementation include insufficient teacher preparedness and understanding, as well as limited learning time.

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