



# Speech Therapy Practices for Children with Speech Delay: Exploring Techniques, Challenges, and Support Systems in Inclusive Preschool Education

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## Abstract

Delays in speech development in early childhood remain a prevalent developmental issue that impedes children's ability to communicate and socialize effectively. This study investigates the implementation of speech therapy interventions for children with speech delay at the Smart Edu Tuban Inclusive Kindergarten (KB), focusing on the intervention process, supporting and inhibiting factors. Using a descriptive qualitative method with a single case study design, data were obtained through observation, interviews, and documentation involving key informants: the principal, a teacher-therapist, a parent, and a student with speech delay. The study reveals two main forms of intervention: (1) strengthening the speech organs through massage, brushing, and breath exercises, and (2) repetitive verbal training using visual aids. These methods are structured in four stages: initial assessment, planning, implementation, and evaluation. Supporting factors include complete therapeutic facilities, active parental involvement in reinforcing therapy at home, and the therapist's competence. Inhibiting factors include children's difficulty in articulating words and fluctuations in mood during therapy sessions. The findings highlight the importance of combining motoric stimulation and verbal repetition strategies within a structured and individualized therapy program. This case also underscores the critical role of environmental support, particularly from parents and educators, in enhancing therapeutic outcomes. The study contributes to understanding how inclusive early childhood institutions can develop adaptive therapeutic practices. However, as a single-case design, the findings cannot be generalized broadly. Further research with larger participant pools and experimental design is needed to assess the effectiveness of various intervention models and their applicability across diverse settings. Strengthening inter-institutional collaboration and integrating emotional support mechanisms are recommended to optimize therapy outcomes for children with speech delays.

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## Introduction

Speaking is a fundamental component of interaction with others and plays a crucial role in building social bonds. In simple terms, speaking is the process of articulating words using the human speech apparatus. From a different perspective, speech is a systematic production of sounds resulting from a combination of motor and cognitive activities (Ferliana & Agustina, 2015). According to Ferliana, speech is acquired through a learning process, emphasizing that it is not obtained automatically but rather through imitating the sounds of language from the surrounding environment.

However, not all children reach language development milestones on time. One of the most common developmental disorders is speech delay, a condition in which a child experiences a lag in speech and language development compared to peers of the same age. According to data from the American Speech-Language-Hearing Association (ASHA),

approximately 5–10% of preschool-aged children experience speech and language disorders, with speech delay being among the most prevalent forms (Liang et al., 2023). Similarly, data from the Indonesian Pediatric Society (IDAI) in 2024 indicate that 5–8% of preschool-aged children experience speech delay (Rosary, 2024).

Hurlock states that when a child's speech development level is below that of peers—measured by accuracy of word use—it can hinder their social relationships, much like how underdeveloped play skills can impede social integration with age-matched peers. In other words, if a child's language development differs significantly from others of the same age, social interaction may be adversely affected (Hurlock, 1978). According to Jean Piaget's cognitive theory, language development is closely linked to cognitive development, with language serving as a symbolic representation of individual thought (Piaget, 1959). Meanwhile, behaviorist theory emphasizes the significant role of the environment in language acquisition, proposing that children learn language through imitation and reinforcement. If not addressed early, such conditions can negatively impact a child's learning ability, self-confidence, and capacity to form social relationships (Hanfstingl et al., 2019; Yıldız, 2025). Despite the growing number of speech delay cases, public understanding of early signs and the importance of early intervention remains limited. Moreover, not all healthcare and early childhood education services in Indonesia have adequate systems for detection and intervention.

Children with speech delay experience delays in both speech and language development (Aulia Septyani et al., 2021; Istiqlal, 2021). *Speech* refers to the articulation and production of sounds using the mouth, while *language* involves the ability to understand, process, and express communication. *Expressive language* is the ability to convey meaning to others—often through spoken words, but also through gestures, signs, or written language. In contrast, *receptive language* refers to the ability to comprehend others' communication, encompassing both auditory and visual skills (Liang et al., 2023). Understanding these distinctions is essential for identifying appropriate therapeutic interventions for children with language delays.

Speech delay can result from a range of internal and external factors. Internal factors include physical abnormalities, congenital disorders, and premature birth (Rahmah et al., 2023). External factors may involve environmental deprivation, in which children are raised with limited verbal, social, or emotional stimulation (Liang et al., 2023). Additionally, early exposure to electronic devices between the ages of 12 and 24 months, as well as parental—particularly maternal—educational level, has been linked to delayed speech development (Al Hosani et al., 2023). Delayed speech can negatively affect a child's social adjustment, as the ability to speak is fundamental to effective communication. Therefore, it is crucial for parents to understand the stages of language development in early childhood to ensure timely intervention through speech therapy.

Speech therapy is a form of intervention provided to individuals experiencing verbal communication disorders (Lee, 2019). Effective verbal communication requires healthy language centers, including neurological structures, articulatory organs, respiratory function, psychological well-being, and environmental support. Speech therapy for children often involves play-based methods, such as sequencing activities or language-centered board games. This therapy targets various communication challenges, including articulation disorders, cognitive-communication disorders, expressive language disorders, and receptive language disorders (Attwell et al., 2022). Thus, parents must understand how speech therapy interventions work, as they are ongoing processes that can be reinforced at home.

Numerous studies have explored various aspects of speech delay. For instance, research conducted by Siska Perdina et al. focused on treatment implementation for children with special needs, particularly those with speech delay. The interventions utilized in this study included drills, phonetic placement techniques, and auditory-verbal therapy (AVT) (Perdina & Prisuna, 2024). In another study, Eka Nurul Fitrianiingsih et al. examined how teachers support students with speech delay through the use of floor time approaches and tailored learning methods

(Fitrianingsih et al., 2024). Additionally, Taqiyah & Mumpuniarti (2022) investigated early intervention strategies for the speech and language development of children with speech delay.

Building upon these previous studies, the present research aims to examine the types of speech therapy interventions applied by teachers, along with the supporting and inhibiting factors that influence their implementation. Understanding these elements is essential to prevent long-term developmental consequences and ensure that speech delays do not evolve into chronic disorders. This highlights a significant research gap that warrants further investigation, particularly in the context of early childhood education and inclusive classroom practices.

## Methods

This study employed a qualitative research method with a descriptive approach through a single case study design. The method was selected to explore the process of speech therapy intervention for a child with speech delay in a real-world early childhood educational setting. The research site, KB Inklusi Smart Edu Tuban, was chosen because it provides structured therapy services for children with communication delays, has trained educators with a background in psychology, and uses varied and complete therapeutic tools. This context allowed the researcher to observe how speech therapy is applied within inclusive learning practices. Qualitative research is considered suitable for examining complex social phenomena in depth and within their natural environments (Creswell, 2014). A single case study design enabled a focused investigation of a particular case in a bounded, real-life setting (Creswell, 2014).

The study involved four key informants: one teacher, one school principal, one parent, and one student diagnosed with speech delay. The student was six years old, while the teacher was 35 years old and held a bachelor's degree in psychology. Both the teacher and the principal played active roles in organizing and supporting the therapy sessions and collaborating with the parent in reinforcement activities at home. Data from the child were obtained through direct observation, while interviews with the teacher and parent provided further context regarding the child's progress and challenges. Documentation, including daily therapy notes, photographs, and development records, was also collected to support the findings. In qualitative research, the researcher serves as the primary instrument, allowing flexible adaptation to evolving field conditions (Merriam & Tisdell, 2016).

Data collection was conducted using three techniques: (1) in-depth observation of the therapy process, focusing on motor, cognitive, and social behavior of the child; (2) semi-structured interviews to gather perspectives from the teacher and parent on the effectiveness and obstacles of speech therapy; and (3) documentation review, including therapy reports and visual records, to triangulate findings. Data analysis followed Miles et al., (2018) three-stage framework: data reduction, which focused on identifying key intervention steps such as oral massage and repetitive articulation exercises; data display, which organized observed behaviors and responses into narrative summaries and tables; and conclusion drawing and verification, which involved identifying patterns and confirming the two main intervention types used in the case. These analytic stages provided a comprehensive understanding of the speech therapy process and its outcomes.

To ensure the credibility of the findings, the study employed triangulation in three forms: source triangulation (cross-checking information from the teacher, principal, and parent), technique triangulation (comparing observation, interview, and documentation data), and time triangulation (data collected during consistent morning therapy hours to reflect normal school conditions). Ethical considerations were prioritized throughout the study by obtaining informed consent from all participants and ensuring confidentiality, especially for the child participant. All personal data were securely stored and used only for research purposes. The combination of triangulated methods and ethical rigor allowed the study to produce reliable, context-sensitive

insights into the implementation of speech therapy for children with speech delay (Merriam & Tisdell, 2016).

## Result

The purpose of this study was to examine the forms of speech therapy intervention implemented by teachers at KB Inklusi Smart Edu Tuban. Based on data analysis, several key findings were identified that illustrate the types of speech therapy interventions as well as the supporting and inhibiting factors involved in their implementation. These findings include:

### Speech Therapy Interventions for Children with Speech Delay at KB Inklusi Smart Edu Tuban

Speech therapy interventions for children with speech delays at KB Inklusi Smart Edu Tuban are carried out in two main forms, as revealed through interviews, observations, and documentation conducted by the researcher with the accompanying teacher. The forms of intervention identified are as follows:

#### *Performing Massage Movements to Strengthen Speech Organs*

Based on the initial observation conducted by the researcher, the teaching and learning process begins at 10:00 AM and ends at 11:30 AM, covering the entire session from opening to closing activities.

The researcher observed that the accompanying teacher had prepared instructional aids for speech therapy, including an oral brush, baby oil, and candles. The first step performed by the teacher was massaging certain points on the child's face. Following the massage, the teacher prepared the oral brush, which resembles a regular children's toothbrush. However, the difference lies in the bristles: while standard brushes use synthetic fibers, the surface of the oral brush is coated with silicone. The teacher used the brush to make specific movements inside the child's mouth.

During the process, there was a challenge: the child refused to open her mouth and began crying when the teacher attempted to use the brush. The teacher allowed the child time to cry. A few minutes later, once the child had calmed down, the teacher gently encouraged her by initiating a play activity. After playing for a while, the teacher once again persuaded the child to proceed with the brushing activity, and the child eventually agreed.



Figure 1. Massage Therapy Process at KB Inklusi Smart Edu Tuban

According to the accompanying teacher, this technique requires specialized skills that need to be learned by the teachers. The purpose of these movements is to strengthen the child's oral muscles. These speech therapy interventions, particularly massage techniques, focus on key areas of the child's face, especially the jaw. This activity is considered essential in the application of speech therapy. Massage serves to improve the child's articulation—transforming unclear

speech into correct pronunciation. For example, lumah" becomes rumah" (house), matan" becomes makan" (eat), and lali" becomes lari" (run).

In addition to massage, strengthening the speech organs can also be done using tools such as the oral brush and candle-blowing activities. According to interview findings, these practices are highly effective in improving articulation and the child's respiratory system. Their primary function is to train the strength of the child's abdominal muscles.



Figure 2. Teacher's Movements Followed by the Student

### ***Practicing Word Pronunciation Repeatedly***

Based on the second observation conducted by the researcher from 10:00 AM to 11:30 AM, the teacher prepared learning materials using visual aids. At the initial stage, the accompanying teacher used a single flashcard placed on the table and gradually added more cards. The speech therapy intervention began with letter cards. The process involved the teacher sitting on a chair facing the child, showing a letter card while saying, "What letter is this...?" The teacher then guided the child in pronouncing the letter. This activity was carried out slowly and repeatedly.

Once the student had become familiar with the alphabet, the teacher proceeded to word cards. During this activity, the student was able to pronounce some words with increasing clarity, although the teacher still needed to repeat the process several times. After using word cards, the teacher moved on to color cards, which featured basic colors. When the teacher showed the red color and asked the child to name it, the student pronounced merah" as melah"—an unclear articulation. The teacher repeated the activity multiple times to improve accuracy.

At the end of the session, the teacher provided psychological encouragement to the child, saying things like, Great job today, Khayla!" and offering supportive gestures such as a thumbs-up, a hug, and words of motivation like Keep it up, sweetheart!" (Observation, 2024).

Based on an interview with the accompanying teacher, Ms. Mayarisa, she explained that the repeated pronunciation of words is highly effective in improving children's articulation. The use of flashcards usually begins with letter cards; once the child has mastered the alphabet, they move on to word, picture, and color cards.

A similar point was conveyed by another accompanying teacher:

"The visual aids used in this therapy process must be updated regularly to prevent boredom and maintain the child's interest. Additionally, new cards help expand the child's knowledge. These aspects are essential to ensure the quality of learning and the effectiveness of the therapy process."

One student, named Khayla, had become independent and was able to recognize and name surrounding objects. Khayla was also capable of engaging in appropriate social interaction. Both the teacher and the student's parents reported an improved understanding of the child's needs (Observation, 2024).





Figure 3. Repetition-based Word Pronunciation Therapy

Based on the observations and interviews described above, the researcher found that the child enjoyed the repeated pronunciation activities. This was largely due to the use of visually appealing flashcards with bright colors, which attracted the child's attention and made it easier for the teacher to conduct the therapy. The teacher helped the child pronounce specific letters, repeating the activity consistently. Over time, the teacher gradually reduced assistance, encouraging the child to respond independently (Observation, 2024).

During the therapy process, the teacher also taught the child appropriate behaviors such as sitting properly, disposing of trash in the designated place, and showing respect to elders. Furthermore, the child was encouraged to develop greater self-confidence and independence (Observation, 2024).

In conclusion, two main forms of speech therapy intervention were identified for addressing speech delay in children: first, performing massage movements to strengthen speech organs; and second, practicing word pronunciation repeatedly.

These interventions are implemented through several stages. The following table outlines the steps involved in the speech therapy intervention process at KB Inklusi Smart Edu Tuban:

Table 1. Steps in Implementing Speech Therapy Intervention		
Stage	Objective	Steps
Initial Assessment	To identify the child's condition and needs	Interviewing parents, observing communication behavior, language (receptive and expressive) testing, hearing tests
Therapy Planning	To design an intervention strategy	Setting therapy goals, tailoring techniques to the child's age and level of delay, involving parents in planning
Implementation	To gradually train speech and language skills	Speech exercises, comprehension exercises, articulation training, social interaction practice
Evaluation	To involve parents through a home program	Periodic evaluation of the child's progress

The implementation of speech therapy intervention is carried out in four stages: (1) initial assessment, (2) planning, (3) therapy implementation, and (4) evaluation. These stages support a structured, individualized, and collaborative approach to optimally accelerate children's speech and language development.

## Supporting and Inhibiting Factors in Speech Therapy Intervention for Children with Speech Delay at KB Inklusi Smart Edu Tuban

### *Supporting Factors in Speech Therapy Intervention for Children with Speech Delay*

Supporting and inhibiting factors are always present in the implementation of any program. In identifying the factors that support or hinder the implementation of speech therapy intervention at KB Inklusi Smart Edu Tuban, the researcher conducted interviews with the accompanying teacher, Mayasari Firdaus. Based on the interview, the following supporting factors were identified:

First, the availability of complete teaching aids used in the speech therapy process. The completeness of these tools plays a crucial role in supporting the success of the therapy. With such tools, efforts to improve communication skills in children with speech delays become more practical and effective. Visual aids enable teachers to enhance children's communication abilities more efficiently.

Mistin further stated:

“With the complete set of visual aids available at KB Inklusi Smart Edu Tuban, the therapy process can proceed smoothly, and children remain enthusiastic about learning” (Mistin, 2024).



Figure 4. Visual aids used in speech therapy

This statement is consistent with the researcher's observations regarding the facilities at KB Inklusi Smart Edu Tuban, which are indeed comprehensive and support the effective implementation of therapy. The available facilities include a variety of visual aids, educational toys, and tools to stimulate fine and gross motor skills. Educational toys are designed to enhance children's cognitive abilities, such as building blocks, puzzles, shape boxes, and many others (Observation, 2024).

Second, parental support in providing motivation and dedicating time to accompany their children during external activities.

As stated by the accompanying teacher, Ms. Mistin:

“Another supporting factor in the implementation of speech therapy is the role of parents, who must dedicate various resources—whether financial, time, attention, or understanding. Successful speech therapy requires collaboration between the teacher and the parents. Parents must also apply the same methods used in therapy, such as encouraging independence and repeating words regularly. In addition, parents should continuously motivate their children to keep learning, as leaving speech delays untreated

may negatively affect a child's psychological development. A child with speech delay might later experience low self-esteem or lack confidence in social environments" (Mistin, 2024).

This aligns with the remarks of Ms. Mayarisa Firdaus, another accompanying teacher:

"Parental involvement is crucial. Support from both father and mother is essential, and acceptance is the first and most important step. Acceptance itself is already halfway toward the success of the child's treatment. In addition to the parents, extended family—such as grandparents and siblings—also play a role. Parents must allocate time to repeat or reinforce therapy sessions at home. For instance, if a child requests something, do not give it immediately. If the child only points, pulls your hand, or cries, do not comply. Instead, encourage the child to say what they want. This teaches the child to express their needs verbally. There must be a balance between school and home treatment, and both must work in synergy. Along with emotional support, material support is also vital, as children with special needs often require additional financial resources for their treatment" (Mayarisa Firdaus, 2024).

Based on these statements, it can be concluded that parental involvement in motivating and accompanying the child during therapy is crucial to the development of children with speech delays. Families should also allocate time to implement therapy techniques at home.

Effective speech therapy implementation requires parental support across various aspects—material/financial, time, attention, and understanding—so that therapy can be carried out optimally through cooperation between teachers and parents. Dedicating time to support the child at home in applying therapy methods is essential.

Third, patient, experienced, and knowledgeable therapists are key to success in implementing therapy and handling children.

According to an interview with Ms. Mistin:

"Another equally important supporting factor in speech therapy implementation is patience, experience, and broad knowledge in conducting therapy and managing children. Patience is the main key in the therapy process, especially when working with children with special needs who require a great deal of understanding and compassion. Treating children with speech delays demands experience and thorough knowledge of speech therapy methods. This helps avoid mistakes during therapy and ensures a more effective process" (Mistin, 2024).

This statement aligns with the researcher's observations. The patience, knowledge, and experience demonstrated by the teacher during therapy were evident. For example, when a child was having a tantrum, the teacher remained calm and did not express frustration. Instead, the teacher employed a specific approach to calm the child. One such approach involved allowing the child to cry for a while, and once the crying began to subside, the teacher gently encouraged the child by offering a toy or initiating a play activity (Observation, 2024).

Patience is indeed the cornerstone of the therapy process, especially when working with children with special needs who demand deep understanding and calm handling. In-depth knowledge and substantial experience in speech therapy are essential to prevent errors—skills that not all teachers may possess

### ***Inhibiting Factors in Speech Therapy Intervention for Children with Speech Delay***

Based on interview findings, several inhibiting factors were identified in the implementation of speech therapy interventions for children with speech delay.

The first inhibiting factor is the child's limited ability to articulate words. Ms. Mistin, an accompanying teacher, stated:

"The primary challenge in the speech therapy process for children with speech delay is the difficulty in building their understanding of words. This requires a great deal of patience and repetition. During the word repetition activities, children often become uninterested or bored, which disrupts the process. As a result, speech therapy does not proceed effectively" (Mistin, 2024).



This statement aligns with the researcher's observations that children with limited vocabulary present a major challenge for accompanying teachers. Since these children often need to begin learning from the most basic levels, the teacher must apply additional techniques and effort to support the therapy process (Observation, 2024).

The second inhibiting factor is the child's fluctuating mood. According to Ms. Mayarisa Firdaus, another accompanying teacher:

"A child's inconsistent mood can make it difficult for them to accept guidance from the therapist" (Mayarisa Firdaus, 2024).

Similarly, Ms. Mistin remarked:

"Therapists cannot always ensure that a child will be in a good condition during therapy sessions. Sometimes, during the therapy process, the child's mood changes suddenly. When the child is in a bad mood, the therapist must find ways to help improve it. This emotional variability can hinder the progress of therapy" (Mistin, 2024).

Based on these interviews and observational data, it is evident that a child's inconsistent mood can obstruct the flow of therapy, ultimately slowing down the child's recovery process (Observation, 2024).

From the above statements, it can be concluded that the accompanying teachers at KB Inklusi Smart Edu Tuban have implemented various strategies to enhance communication abilities in children with speech delay. The use of visual therapy aids has proven effective in improving children's communication skills. Furthermore, collaboration with parents significantly supports the smooth progress of therapy, especially when accompanied by competent and knowledgeable therapists.

## Discussion

This study demonstrates that the speech therapy intervention implemented at KB Inklusi Smart Edu Tuban follows four systematic stages: initial assessment, planning, implementation, and evaluation. This approach enables therapy to be tailored to each child's individual needs, thereby maximizing intervention outcomes. Periodic evaluations are conducted to monitor the overall effectiveness and progress of the therapy. A collaborative strategy involving teachers, parents, and other professionals is developed to address challenges that arise during the therapeutic process. These findings reinforce the importance of a therapeutic approach based on needs assessment and adaptability to each child's developmental dynamics (Nurhabibah et al., 2024).

During the implementation phase, oral motor stimulation techniques such as massage and brushing are employed to strengthen the speech organs. The therapy also incorporates the PROMPT method, which has been proven effective in enhancing articulatory motor control in children with speech delay (Namasivayam et al., 2021). The application of this technique aligns with neuromotor development theory, which posits that speech ability is influenced by the physiological readiness of the speech musculature. Children who undergo tactile-kinesthetic training show significant improvements in articulation. This method is particularly beneficial for children with physical limitations in accurately producing phonemes (Azevedo et al., 2025).

In addition to motor stimulation, the therapy also utilizes drill methods, involving repetitive pronunciation exercises to form consistent speech patterns. This approach is effective in improving articulatory clarity when applied systematically and adapted to the child's age and learning profile (Strand et al., 2006). However, without a humanistic approach, children may become disengaged or fatigued. To address this, therapists incorporate positive reinforcement techniques and engaging learning media. At KB Inklusi Smart Edu, teachers use picture cards and games as forms of positive reinforcement. Thus, the drill method can be implemented adaptively and enjoyably without compromising its therapeutic effectiveness (Dangol et al., 2025).

This study also identifies two major challenges in the therapy process: limited vocabulary and emotional fluctuations in children. Children with language delays often struggle to express

their desires, leading to miscommunication and frustration (Heryanti et al., 2024). Unstable moods also influence a child's ability to participate consistently in therapy sessions. Therefore, therapy must take into account the psychological readiness of the child and apply empathetic and flexible strategies. Successful therapy depends not only on the method used but also on creating a supportive emotional atmosphere (Ohtaras et al., 2022).

One of the supporting factors for therapeutic success is the availability of developmentally appropriate visual aids. Visual tools such as letter cards, picture cards, and puppets are used to stimulate sensorimotor engagement and verbal participation. Vygotsky's scaffolding principle is applied in the graduated design of materials to match the child's capabilities (Hurlock, 1979; Tabroni et al., 2024; Vygotsky, 1978). This multisensory-based therapy encourages children's active involvement in speech learning. Learning media are not merely supplementary tools but essential instruments in the intervention process (Hopkins et al., 2022).

Parental collaboration also plays a critical role in the success of therapy. Parents not only accompany their children during sessions but also reinforce practice at home, ensuring learning continuity. Marshall et al. (2007) emphasized that discrepancies between therapists' and parents' perceptions can affect intervention effectiveness. Emotional support, linguistic stimulation, and active parental involvement significantly enhance intervention outcomes. Children who receive intensive support from their parents tend to show faster progress in communication skills (Jarzynski & Buac, 2024; Tang et al., 2024).

The inclusion of Tang et al. (2024) strengthens this finding, as their study showed that online parental training significantly improved children's language and social skills. Programs such as the Bethel Family Training emphasize everyday communication strategies—"looking together, playing together, and talking together"—demonstrating the substantial impact of parental involvement on child development. This is further supported by studies from Qi et al. (2023) and Sawyer et al. (2025), which highlight the importance of video-based parent training and home-based stimulation interventions. Hence, therapy interventions must be holistic and continuous, extending beyond institutional settings.

Another key determinant of therapy success is therapist competence. A therapist who is patient, knowledgeable, and responsive to a child's nonverbal cues is more likely to foster positive interaction. In line with Vygotsky's Zone of Proximal Development (ZPD), the therapist acts as a facilitator who adjusts support to the child's current level of ability (Hurlock, 1978). Studies by Ellis et al. (2024) and O'Toole et al. (2024) highlight that telepractice-based parent training and therapist fidelity measures are crucial to ensuring the quality of speech therapy. This study reinforces the notion that the success of speech therapy is the result of synergy between method, media, parental support, and therapist competence.

This research provides empirical insights into school-based inclusive speech therapy practices integrated with parental participation and modern therapeutic techniques. Its findings contribute to the development of community-based, contextual, and sustainable models of intervention. Nevertheless, the study has limitations in terms of its scope, which was confined to a single institution and one child with speech delay. Therefore, the generalizability of these findings should be approached with caution. Future research is recommended to involve a larger and more diverse participant pool and to adopt multiple case study or mixed-method designs to strengthen external validity and general acceptance of the results. Longitudinal studies are also needed to explore the long-term effectiveness of these collaborative interventions across various age groups and socio-cultural contexts.

## Conclusion

Speech therapy interventions for children with speech delays at Smart Edu Tuban Inclusive Kindergarten—combining oral motor strengthening through massage and repetitive pronunciation exercises—have demonstrated effectiveness in improving both oral musculature and speech ability. The success of these interventions is not solely attributed to the techniques employed, but also to the interaction of various supporting factors, including the availability of

adequate therapeutic tools, consistent parental involvement, and the expertise of skilled therapists. These elements collectively contribute to creating an optimal therapeutic environment. Nevertheless, challenges remain, such as children's articulation difficulties and fluctuating emotional states, which may hinder long-term therapeutic outcomes. A deeper understanding of these dynamics can enhance the precision and impact of speech therapy programs, enabling children with speech delays to achieve improved communicative competence and greater confidence in daily interactions.

The practical implications of these findings are particularly relevant for educators, parents, and educational institutions, all of whom must acknowledge the importance of a consistent and coordinated support system in the therapeutic process. Strengthening collaboration among these stakeholders is essential to ensure optimal developmental outcomes for children. Furthermore, this study highlights the need for future research to investigate the social and emotional factors that influence the success of speech therapy, as well as its implications for children's social interactions and psychological development. Subsequent studies could adopt broader, more holistic frameworks to examine the wider familial impacts of therapy and explore how such interventions may be integrated into inclusive educational strategies at a systemic level.

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