

## Addressing communication barriers for autistic students in inclusive education from teachers' perspectives

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### ABSTRACT

**Background:** In inclusive education, communication between teachers and students with autism spectrum disorder (ASD) is framed as an individual deficit, obscuring the relational, emotional, and contextual conditions through which understanding is produced or disrupted. **Purpose:** This study reframes communication barriers as relational and situational challenges, which teachers negotiate in their lived experiences. **Methods:** A qualitative phenomenological–interpretive approach was used to gather data through reflective written accounts from 18 teachers of ASD-inclusive classrooms, which were thematically analyzed. **Results:** The results suggest that communication barriers are dynamic, interactional, and emotionally mediated. Teachers reported breakdowns in the domains of emotional dysregulation and sensory and environmental overload, as well as mismatches between classroom expectations and students' pragmatic repertoires. They relied on real-time adaptation, emotional attunement, visual scaffolds, and augmentative and alternative communications (AAC) in response. These practices correlated with greater trust, less spiral-down dynamics, better regulation, and more student-initiated engagement, while making visible teachers' agency despite limited training and institutional support. Thus, the success of communication in ASD-inclusive education can be understood as a dialogic, ethical, embodied, and culturally situated practice that cultivates trust, emotional safety, mutual understanding, and teachers' professional transformation. **Implications:** The study calls for education policies and professional development to address relational competence, reflective practice, and the provision of sustained structural support in communication.

**Keywords:** Autism spectrum disorder; ASD-inclusive classroom, communication barriers, inclusive education; teacher-student communication

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## INTRODUCTION

Today's educational discourse reiterates the significance of inclusive education by acknowledging that all students, including those with autism spectrum disorder (ASD), have the right to engage in all advantageous aspects of the mainstream educational experience. Communication is more widely understood to be at the key of inclusive practices in mainstream education given that many autistic students experience differences in pragmatic language, social communication and interaction, interpretation of social cues and emotional regulation which can limit their participation in classroom learning and peer relationships (Esqueda et al., 2024; Lewis & Stojanovik, 2024; Martin et al., 2023; White et al., 2023). Concurrently, research in inclusive classroom and special-needs contexts showed that effective instructional communication hinges on careful verbal explanations and supportive nonverbal cues (Nuryani et al., 2016), while empathetic and warm communication encourages more social interaction between teachers and students with special needs (Nurhadi et al., 2021). In summary, these studies suggest that realized inclusion for learners with ASD requires not only formal provision of access to mainstream schooling, but also responsive and relational teacher communication.

The tendency to describe communication difficulties primarily through student-centered deficits raises the risk of obscuring the fact that communication in classrooms is inherently

interactional as what constitutes accessible or inaccessible communication depends not just on a student's language profile but how particular responses are framed by teachers, the speed and layering of talk in the classroom, emotional registers of teacher-student interactions and social climate constructed between peers (Lewis & Stojanovik, 2024; Underhill et al., 2019).

Previous studies have noted that communication barriers were exacerbated by school contexts that did not adopt strategies considered autism friendly and that require more ecological than individualistic understandings of such breakdowns (Jordan, 2005). In resource-poor settings, these barriers can be intensified by reduced access to specialists, limited communication resources, and low readiness of institutions for inclusion (Njoroge & Nyakundi, 2023). In Indonesia, the barriers are exacerbated by structural obstacles, such as limited competence among teachers and educational staff, inadequate infrastructure and support facilities, social stigma towards children with special needs, institutional unpreparedness for inclusion, socioeconomic inequity, and uneven distribution of inclusive schools (Isnawati et al., 2025). These findings indicate that the communication difficulties that arise within ASD-inclusive classrooms are rooted in broader policy, institutional, and resource contexts, pointing to a relational-ecological framing as being highly relevant.

Recognizing these barriers, an emerging line of research has focused on teacher communication practices and instructional

supports in ASD-inclusive classrooms. Recent research established a broad variety of practices related to enhanced participation, understanding, and on-task behavior; these included visual supports, visual schedules and work systems, prompting, structured routines, explicit instructional scaffolds, transition supports, and intentional classroom organization (Liang et al., 2024; Macdonald et al., 2018; Petersson-Bloom & Holmqvist, 2022; Sparapani et al., 2022). Similarly, other reports emphasize simplified language, repetition, visual supports, and routines as aids to facilitate understanding and minimize communicative ambiguity in autistic learners (Al-Shammari & Hornby, 2020). Intervention-oriented scholarship has promoted structured teaching, peer-mediated supports, and social narratives, including in Asian educational settings (Chow, 2022).

Despite the increasing importance of augmentative and alternative communication (AAC) for autistic students with severe expressive or receptive language problems over the last 50 years, it is rarely implemented in practice due to limited opportunities to train teachers on AAC use, insufficient time to program individualization, reduced access through purchase/rent programs, or lack of coordination among schools, families and specialists (Alhuzimi, 2026). In the Indonesian context, recent studies highlight the need to explore teachers' communication practices. Maharani et al. (2025) reported that the use of AAC often remains informal and limited by teachers' knowledge and skills. Likewise, a Picture

Exchange Communication System (PECS) case study suggested that communication with pictures can help autistic children express their needs only if implemented consistently across home and school settings (Doho & Wulandari, 2024).

Great efforts have finally begun to recognize that relational and affective dimensions of teacher communication are equally important. How students with ASD experience classroom interaction, inclusion, participation, and engagement can be influenced by empathy, emotional attunement, and patience (Aldrup et al., 2022; Esqueda Villegas et al., 2024; Nurhadi et al., 2021). In general, this body of literature offers important insights about the communication supports and pedagogical frameworks that may enhance successful inclusion. And it clarifies that communication support cannot be neatly reduced to language: conversation is the orchestration of verbal explanation, nonverbal signaling, instructional pacing around environmental predictability, and social mediation in the classroom. Autistic students tend not only to struggle with classroom talk content, but also the pace, density, implicitness, and social framing through which classroom meanings are transmitted. Therefore, a student's failure to respond is a mismatch between their demands and the resources available to meet them in many instances.

Nevertheless, the evidence base remains dominated by intervention-led and strategy-based approaches. Most studies are not intended to investigate how teachers in the

context of everyday classroom life experience and negotiate communication barriers but rather focus on what techniques they ought to use or what support is effective under specific conditions. In the real world, communication with students with ASD is seldom static, unidirectional, or entirely predictable. Teachers operate in contexts where communicative meaning is mobile with students' emotional dispositions, sensory sensitivities, attentional patterns, historical relational experiences, and the ambient imperatives of the classroom moment. Thus, adaptive communication may be less a matter of applying pre-selected techniques than of exercising situated judgment through observation, trial-and-error, reflection, and ongoing adjustment. Teachers adopt strategies suggested in the literature, but often need to recalibrate them based on students' shifting temperaments, the successes and failures of previous interactions, and surrounding environmental affordances or constraints. Yet such lived processes of adjustment are relatively unexamined. And while some studies point to systemic impediments as a significant factor including inadequate teacher training, limited consultative support, sparse resources, and inconsistent structures of collaboration a major concern remains that studies too often analyze deficits at the institutional level rather than considering micro-level agency teachers may demonstrate in response (Hersh & Elley, 2019; Latorre-Coscolluela et al., 2025).

Work on mainstream secondary education has produced similar findings, indicating that

teachers often need to “make do” with limited support, such that inclusion can continue to resemble physical integration rather than communicative participation (McGillicuddy & O'Donnell, 2014). What is not yet well understood, however, is the extent to which teachers themselves interpret communicative breakdowns when they occur, how they select whether and when to persist or adapt or simplify or hold up/hold back, and so what shapes those responses both institutional context and relational experience.

Introducing a relational and interactional perspective on communication is a useful framework to fill some of this gap. While a linear model frames communication as the transfer of information from teacher to student, relational theories focus on the ways in which meaning is co-constructed through context, expectations, histories of interaction, and informants' interpretive work (Baxter & Braithwaite, 2021). Bringing this perspective to bear on inclusive education implies that communication barriers are not simply cases of student deficit; they are also instances when communicative expectations do not meet, emotions get disturbed, or interactional meanings go unrecognized or shared. New evidence in the area of inclusive education supports this perspective by demonstrating that high-quality teacher–student interaction relies not only on instructional practices but also on relational qualities characterized by empathy, emotional attunement, and mutual trust (Esqueda et al., 2024). Furthermore, previous work indicates

that empathic and affectively responsive teacher engagement may impact students' willingness to participate, sense of safety, and the relational conditions through which communication becomes meaningful (Aldrup et al., 2022; Esqueda Villegas et al., 2024; Petersson-Bloom & Holmqvist, 2022). Peers are also involved in the relational ecology, which can be supportive or constraining based on peer attitudes and classroom stigma (Underhill et al., 2019). More generally, inclusion is increasingly recognized as relational rather than spatial: a student's sense of belonging is about whether support for communication permeates broader norms and practices in the school culture rather than being treated as separate actions or interventions at the individual level (Ahlers et al., 2023). Interaction during home-school and school-home transitions is also important because continuity of communication between these two settings will inform how effective supports are sustained and whether students experience coherence across expectations and relationships (Josilowski & Morris, 2019). Despite the advances in this area, few empirical studies have explored teachers' everyday talk-in-interaction with students with ASD through the relational lens of these researchers' own experience.

This vacuum is significantly detrimental in contexts where inclusion is called for within the potential of material and institutional limitations. Across nations, autism-specific understanding and formal support emerge as important predictors of teachers' attitudes towards, confidence in teaching to, and

perceived ability to accommodate autistic learners (Aysina et al., 2019; Lewis & Stojanovik, 2024). Meanwhile, teachers may need to rely more heavily on experiential knowledge, contextual improvisation and collaborative problem solving. Researchers have emphasized that training, specialist consultation, resources and collaboration are key factors in enabling communication support for autistic students (Hersh & Elley, 2019; Latorre-Coscolluela et al., 2025), however provision at the school level is insufficient by itself. Whether home-school communication supports families to exercise such widening of agency is also influenced by wider patterns of home-school partnership, parental involvement and whether a school culture actively promotes inclusion beyond simply accepting difference (Josilowski & Morris, 2019; Majadley, 2025). In contexts where specialist infrastructures are sparse, teachers' professional reflexivity and adaptive expertise may be especially valuable in sustaining participation. This has been especially true in many non-Western and Global South settings where inclusive education may be enshrined in law but lacked the resources to fully support this, forcing teachers to find ways around communication barriers without the benefit of systemic assistance (Majadley, 2025; Njoroge & Nyakundi, 2023). Little existing work foregrounds how teachers engage in this kind of adaptive communicative competence to be built over time, through iterative encounters, relational engagement, reflection on what if (failure) and practically

in context experimentation (Chow, 2022). The need for research that takes teachers' experiential perspectives seriously — not as anecdotal supplements to intervention research but as crucial sources of knowledge about how inclusive communication is actually accomplished remains.

The current article takes a stand to fill in this gap by exploring teachers' experiential understandings of managing communication barriers with students with ASD in inclusive education contexts. The study reconceptualizes communication breakdown as relational, contextual, or emotionally mediated, thus requiring continual renegotiation in interaction. This orientation enables examination of how teachers interpret moments of misunderstanding, disengagement, emotional escalation, or communicative silence and how they respond adaptively rather than through the enactment of pre-formulated strategies. Based on a qualitative approach guided by the research question “What are the experiences of teachers in addressing communication barriers during interactions with students diagnosed with ASD in inclusive education?”, we conducted interviews with 18 teachers from an inclusive school. By focusing on the voices of teachers, this study adds to the literature in three inter-related ways. Firstly, it further develops relational accounts of communication in education for students with ASD by taking a look at how barriers to AAC use are interactionally co-constructed in everyday classroom contexts rather than simply ascribed as located purely within the students themselves.

Second, it gives a contextualized account of how adaptive communication emerges as an effect of experience, reflexivity, emotional attunement, and iterative adjustment rather than rote implementation. Third, it recognizes teachers' experiential knowledge and micro-level agency as essential yet underutilized best practices for building inclusive communication. In doing so, the study is intended to build on strategy-based and system-level accounts of inclusion with an empirically grounded approach to communication as experienced, negotiated, and relationally achieved in the lifeworld of everyday classroom life.

## RESEARCH METHODS

Using a qualitative research design with a phenomenological–interpretive orientation, the current study explored teachers' experiences, interpretations, and strategies for overcoming communication barriers in everyday interactions with students with ASD. The phenomenological approach enables the researcher to explore how lived experiences are perceived and meaningfully attributed by informants. In this study, communication barriers are conceptualized not as objective deficits but as relational phenomena that emerge within particular interactional contexts. An interpretive position also allows for the analysis to do justice to teachers' sense-making processes, professional reflexivity, and adaptive responses as they work with students with ASD in inclusive classrooms.

**Table 1 Demographic profiles of the informants**

Characteristic	Description
Gender	15 females; 3 males
Age	23–49 years (M = 36.1)
Teaching tenure in ASD settings	2–21 years (M = 12.4)
Educational background	Bachelor of Special Education (2); Bachelor of Psychology (3); Bachelor of Religious Education (2); Secondary school (3); Bachelor of other fields (6)
Teaching level	Early childhood (3); Elementary (9); Junior high (1); Senior high (2); Post-school (3)

Source: Data processed by authors, 2025

Through purposive sampling, 18 teachers working in inclusive educational settings were recruited as research informants. They had long-term, immersive experience interacting with students with ASD. Table 1 below summarizes the demographic profiles of the informants:

Data were collected through reflective written responses and in-depth narrative accounts of the teachers’ daily interactions with ASD students during regular classroom activities. Informants were prompted to describe specific communicative situations, such as moments of misunderstanding, emotional escalation, successful interactions, and adaptive communication strategies.

Reflective writing was selected as the primary method of data generation as it enables informants to express experiences that may be hard to access through other, more structured forms of questioning. It also permits reflexivity, allowing teachers to reflect on their communicative practices and their emotional reactions with regard to students’ needs. The prompts were thus designed to capture situated

experiences of how communication barriers emerged, were interpreted, and were addressed in practice.

An iterative, inductive thematic analysis was applied to analyse the data. The analysis was initiated through repeated close readings of teachers’ reflections to identify recurring themes and important experiences. Initial coding involved communication breakdowns, responses to the maladaptive, emotional dysregulation/fragmentation, and relational ruptures. Codes were then compared, refined, and grouped to identify higher-order themes that represented similar meanings across informants’ accounts. Thematic analysis was developed to construct higher-order themes on how teachers moved through communication barriers within relational and developmental processes. Descriptive tallies were used conservatively, noting the prominence of visual supports and AAC without overgeneralizing. Systematic interaction with the data, alignment between research question, theoretical framework, and methodological approaches to strengthen

analytical rigor—thematic analysis is about contextual richness.

To maintain ethical principles, informants were notified about the research purpose and data use, and their identifying information was not retained to preserve anonymity and confidentiality. Due to the reflective nature of the dataset, special attention was paid to honoring teachers' professional experiences and avoiding evaluative judgment. Instead, teachers were viewed as knowledgeable practitioners engaging in complex communication spaces, not subjects to be evaluated on the basis of their test scores.

## RESULTS AND DISCUSSION

Based on teachers' reflective narratives, the analysis reconceptualizes communication barriers as dynamic, emotionally mediated, and relationally negotiated. Following the interpretive orientation of this study, findings are structured around three interrelated themes: barriers as dynamic and interactional phenomena; adaptive communication as experiential and affective practice; relational outcomes and teacher agency amid constraint. The thematic structure prioritizes empirical findings, while discussion follows each theme to enable the findings to directly dialogue with previous research on inclusive communication, classroom ecology, and teacher agency.

Limited receptive or expressive language, including non-speaking profiles was the most common communicative barrier ( $n = 12$ ) across

the 18 teacher reflections. Reverse coding occurred equally often ( $n = 7$ ) for rapid changes in emotional or behavioural regulation that interfered with comprehension—e.g., crying, anger, tantrums.

Despite heterogeneity of storytelling in these narratives, teachers' communicative responses followed strong patterns. All informants ( $n = 18$ ) reported support based on visual and AAC strategies; in particular, these were PECS, individualized communication boards, visual schedules, and pictorial step-by-step support. Additional widely used practices included strategies that supported peer interaction ( $n = 8$ ), low language ( $n = 7$ ), and nonverbal or gestural supports ( $n = 7$ ). Fifteen informants specifically mentioned training needs or indicated that they lacked enough institutional structure to support them. Overall, these descriptive patterns suggest that teachers did not view communication in terms of speech alone, but as an interactional process requiring the structuring of the environment, emotional regulation, multimodal mediation, and co-construction of concepts.

The informants were predominantly female (15 of 18), aged between 23 and 49 years, and represented different teaching levels, including kindergarten, primary, junior secondary, senior secondary, and post-school. They had taught children with ASD for 2 – 21 years ( $M = 12.4$ ) but were trained in a heterogeneous array of disciplines, including special education, psychology, religious education, secondary school preparatory courses, and other non-

**Table 2 Themes and subthemes of research findings**

Main theme	Sub-themes
1. Barriers as dynamic, interactional phenomena	1.1 Emotional regulation shapes accessibility of meaning 1.2 Environmental/sensory conditions trigger breakdowns 1.3 Interactional mismatch with classroom demands
2. Adaptive communication as experiential and affective practice	2.1 Real-time adjustment to students' cues 2.2 Trial-and-error and professional reflexivity 2.3 Emotional attunement as communicative mechanism
3. Relational outcomes and teacher agency amid constraints	3.1 Trust and student-initiated engagement 3.2 Reduced escalation and improved regulation 3.3 Micro-level agency under limited support

Source: Data processed by authors, 2025

specialist domains. They emerged at uneven stages of formal preparation that pointed to teachers collaborating towards inclusive communication repertoires through experiences, informal joint endeavors, and available local resources. The discussion thus considers these results as evidence for how communicative competence is argued and produced in practice under suboptimal conditions.

To define the analytical structure of these findings, a summary of the response themes and subthemes based on teachers' written accounts is summarized in Table 2 in accordance with data reporting guidelines for thematic analysis. The table also serves to illustrate the systematic clustering of teachers experiences into analytical categories, making it easier to read the patterns of barriers and negotiated barriers.

Theme 1, barriers as dynamic and interactional phenomena, illustrates how

teachers perceived communication barriers as temporary and always-present characteristics of autistic students. These barriers were articulated as episodic and context-sensitive disturbances that arose at the confluence of students' emotional states, sensory conditions, and communicative requirements of specific classroom events. In that sense, communication breakdown was a relational event; the teacher's intentions, the student's interpretations, and the environmental factors at the moment need to be synchronized to create functional communication.

The first pattern of theme 1 was that emotional regulation shapes accessibility of meaning. The pattern revealed that students became more engaged, attentive, and responsive when their emotions were well-regulated, as emotional stability enabled them to process verbal instructions, visual cues, and classroom routines more effectively. Conversely, when

students experienced emotional dysregulation, such as anxiety, frustration, overstimulation, or sensory discomfort, they often struggled to understand language-based instructions and respond appropriately to teachers' communicative cues.

When the child is calm, communication is really smooth. But when emotions are running high, even simple instructions can be hard to decipher (Informant 3, personal communication, June 20, 2025).

When students come to school angrily, and parents are not communicative or do not explain the causes clearly, we struggle to address it appropriately (Informant 1, personal communication, June 20, 2025).

These accounts indicated that understanding communication barriers is not a stable skill because it is yoked to the temporarily altered states of affect and to the degree of informational continuity between home and school. Teachers thus frame communication as contingent not only on classroom technique but also on students' emotions during the interaction.

The second pattern of theme 1 indicated that environmental/sensory conditions trigger breakdowns. Teachers described crowded, noisy, or unpredictable environments as heightening communicative challenge, with students sometimes withdrawing, shutting down, or escalating behaviorally. The routine changes, unavailable visual symbols, and unstructured transitions might also cause disruptions. Some informants expressed their experiences as follows:

in a requesting task, I showed the usual picture of chocolate he is fond of, yet the

parent brought him bread instead. Because I had no picture yet for bread, the child had a tantrum (Informant 4, personal communication, June 20, 2025).

In a practice of handwashing before eating, the first session was a tough one because kids could not maintain the 'wait-wash-wait' sequence. Therefore, on the next session I posted an image of queuing rules, and I found it was much easier to condition the group (Informant 3, personal communication, June 21, 2025).

Such accounts highlight that behaviours frequently labelled noncompliance or confusion may, in fact, reflect loss of predictability and inadequate multimodal communication support. The third pattern in theme 1 was the interactional mismatch between classroom demands and students' communication about processing. Teachers noted communication barriers when words or language were abstract, the spoken instructions were cut rapidly, turn-taking happened very fast, or the expectations of a task shifted without enough scaffolding. All of these accounts indicated that communication barriers were due not only to the linguistic scaffolding of students but also to the classroom discourse that involved abstraction, processing speed, and inferential language without adequate mediation. Moreover, a teacher noted that communication worsened when a student had double handicaps (autism and hearing impairment).

These contextual and sensory cues were also embedded in larger ecological pressures. Teachers' narratives indicated that breakdowns were more likely to occur in situations

where they had to make on-the-fly decisions about supports, work outside of specialist guidance, or revise routines on short notice all without sufficient time or resources. Thus, communicative difficulty did not seem to simply be an attribute of the learner or of the task, but rather an event cued by the broader classroom ecology and by disjunctive availability of communication scaffolds.

Reading along previous studies, these accounts bolster interactional manifestations of meaning as jointly constructed and responsive to the contextual patterns, whilst broadening ecological conceptualizations of inclusion as requiring meaningful engagement therein (Ahlers et al., 2023; Jordan, 2005). They are also aligning with studies highlighting the effects of overcrowded classrooms, inadequate pedagogical resources, and unclear institutional guidelines on interactional mismatch despite teachers' good intentions to include (Hersh & Elley, 2019; Koster et al., 2009; Latorre-Coscolluela, Rivera-Torres & Liesa-Orús, 2025; McGillicuddy & O'Donnell, 2014). What initially seemed like refusal or mute silence in this dataset was better interpreted as overload and mismatch between context and comprehension. Data from Indonesia provide additional support for this ecological interpretation, as creating the conditions necessary for environments that are not yet designed to give communicative access (e.g., inadequate infrastructure; inconsistent access to assistive devices; limited teacher preparation) predicts sensory overload, unclear transitions, and overreliance on verbal

instruction (Isnawati et al., 2025).

Theme 2, adaptive communication as an experiential and affective practice, relates to how teachers responded to the barriers. Throughout teachers' reflections, adaptive communication was characterized as an experiential and affective practice based on professional judgment. Teachers described themselves as communicatively adapting on the fly, attending to students' cues, analyzing previous miscommunications, and adjusting their language use, pacing of delivery, modality (speaking or writing), and affective stance in response to ongoing interaction.

The first pattern of theme 2 was real-time adjustment to students' cues. Some teachers described the need to adjust rapidly as soon as they realized a student's discomfort, confusion, or heightened emotion. The presence of a visual picture during the tantrum was very helpful as the student had difficulty processing or predicting what would happen next in the sequence. However, the requirement for adjustment did not extend only to instructional material. Another teacher clarified that effective communication also required emotional pacing to help students feel safe enough to share.

I was photographing bread using my phone, and then transforming it into a printed image as I recognized that an anticipated visual prompt wasn't there (Informant 4, personal communication, June 20, 2025).

I stayed calm, tried to help the tantrum child settle using toys they liked, and asked the parent what the child enjoyed, giving time to adjust to a new teacher or environment (Informant 10, personal communication, June 21, 2025).

These findings demonstrate that adaptation is temporal and improvisational. Teachers responded to what became necessary in the unfolding moment. The second pattern of theme 2 was trial-and-error learning and professional reflexivity.

Teachers regarded adaptive communication as a reflective process, developed through trial and error, observation, and asking for advice from others. A teacher explained that she learned what works not by training, but by repeatedly doing things wrong in the classroom (Informant 15, personal communication, June 20, 2025), while another teacher observed and analysed the barrier first, then discussed it with the case manager (Informant 4, personal communication, June 20, 2025). In the reflection process, a teacher added the need to collaborate with teachers, professionals, and parents (Informant 6, personal communication, June 20, 2025). These accounts illustrate that adaptive communication developed through practice-based inference, social consultation, and iterated assessment rather than through the acquisition of a single skill that can be used consistently.

The third pattern of theme 2 was emotional attunement as a communicative mechanism. In this pattern, teachers emphasized the necessity for prioritizing students' feelings since they saw it as a critical requirement for effective communication, as stated by the following informants:

When I delivered only the materials, communication broke down. But when I started with the child's feelings,

communicating is so much simpler (Informant 2, personal communication, June 20, 2025).

When I took an empathetic approach sitting at their level, allowing time, not forcing things — they became more comfortable and opened up to interacting with me and each other (Informant 6, personal communication, June 20th, 2025).

Empathetic and attuned communications can help lower anxiety and boost confidence; children who used to be confused or anxious became calmer and understood what they needed in a given moment using emotion cards and visual concrete steps (informant 17, personal communication, June 21, 2025).

These accounts support the idea that communication followed with emotion is more than a supportive background practice. It is a mechanism by which meaning is made available, and interaction sustains. The wider descriptive picture provides two ways to deepen understanding of Theme 2. First, teachers' diverse educational paths and persistent calls for structured support imply that adaptive communication emerges through situated practice. This finding adds to the evidence that teachers often feel unprepared to meet autistic students' social-communication needs and that autism-specific knowledge is linked with greater confidence and more positive attitudes toward inclusion (Aysina et al., 2019; Lewis & Stojanovik, 2024).

Second, the prominence of visual supports, simplified language, gesture and AAC in the narratives contributes to (but also adds nuance

to) research that is oriented around strategies. Previous research focuses on which kinds of supports are effective, such as structured routines, visual mediation, or simplified language (Al-Shammari & Hornby, 2020). Our findings reveal how these supports only became useful to students through ongoing selection, adaptation, and pacing by their teachers in response to the unfolding interaction. In this respect, the results fit with intervention literature demonstrating that structured teaching, peer-mediated support and social-communication instruction are contingent on contextual factors and teachers' capabilities (Chow, 2022), and echo work on AAC uptake which promotes training, materials availability and coordination across settings (Alhuzimi, 2026). Emphasis on adaptive communication thus emerged here as an experiential expertise.

These results are consistent with the Indonesian AAC studies for visual schedules, customized communication boards, and improvised pictures (Maharani et al., 2025). Teachers relied primarily on pictures, photographs, and videos for AAC media. It can thus be construed that the teachers in this study did not completely implement methods for constructing pragmatic AAC practices through observation, improvisation, and reflection against a backdrop where formalized support has yet to fully materialize.

The PECS intervention reported by Doho and Wulandari (2024) as being conducted with children with Autism is another explanation why picture cards were prominent in the

present data: these created a visual medium for expressing requests which adults could rely upon to interpret child intent while also helping to lessen whining or rigid/crying episodes that occurred when wants went misunderstood. This not only supports the finding that visual scaffolding stabilizes meanings and reduces escalation through concrete and common communication.

Theme 3 was relational outcomes and teacher agency amid constraints. This theme pertains to what teachers perceived as the results of ongoing adaptive communication and what those outcomes indicated about teacher agency despite constraints. Teachers described communication as cumulative, revealing how patterns of responsiveness, predictability, and emotional attunement evolved teacher–student relationships while suggesting teachers' agency in creating positive communicative contexts for learning even amid limited guidance, inconsistent preparation, and inadequate resources

However, one important result was the gradual building of trust and student-led engagement. The turning point came when students repeatedly experienced communication as safe and intelligible to them: The relational dynamics began to change. Having some visual support and gestures allowed a student to talk briefly to others (Informant 7, personal communication, June 20, 2025). Moreover, individual cards and visual sequences made students more confident in expressing wishes and accepting invitations from peers (Informant

17, personal communication, June 21, 2025). These examples demonstrate that successful communication was not measured simply by whether people accomplished the task at hand; it was also evidenced in students' growing willingness to reach out, take initiative, and engage socially.

The second relational outcome was decreased escalation and increased regulation in a perceived safe relationship. Teachers consistently stated that successful communication was a long-term reduction of avoidance, anxiety, and emotional overload rather than simply or even primarily short-term compliance, as stated by several teachers below:

The outbursts lessened once the child understood that I was a safe person, they could talk to me (Informant 14, personal communication, June 21, 2025).

Tantrums decreased a little bit with the communication board — very rarely did we have tantrums in my class — because when the child wanted something, they could communicate what they wanted and everybody understood (Informant 2, personal communication, June 20, 2025).

Students are not as easily triggered into tantrums when they can communicate their wants using visual supports (Informant 14, personal communication, June 21, 2025).

These accounts suggest that communication supports were not only expressive functions, but also regulatory. They helped stabilize interaction, enhance predictability, and reduce uncertainty that often drove emotional escalation. Descriptive patterns within the dataset also provide an important interpretive

layer, revealing that visual and AAC supports were among practices shown to be most salient (or recurrently associated with lower escalation and greater student initiation). These accounts characterize AAC not only as a replacement for speech but also as an interactional stabilizer that eliminates ambiguity and increases predictability. This aligns with work on facilitators and barriers to AAC use that focuses directly on teachers (Alhuzimi, 2026) as well as research on intervention-oriented supports that find communication supports are most effective in the context of broader classroom structures (Chow, 2022).

Teachers' talk of trust, lower escalation, and student initiation also resonates with research showing that empathy, emotional support, and relational safety count for autistic students to be engaged inclusively in the classroom; and that collaboration between home and school can enrich inclusive adjustment by aligning communicative expectations across settings (Josilowski & Morris, 2019). Teachers were also clear that these relational outcomes were produced in the context of constraint. They frequently used language that described limited institutional guidance, scarce formal training and the need to improvise materials or depend on colleagues.

This pattern is important because it shows that teacher agency was manifest not in heroic individualism but in situated collaboration. They carefully observe students, talk to colleagues, negotiate with coordinators, and stay on the same page with families when possible. Instead

of framing communication barriers simply as the outcome of institutional failures, the data demonstrate teachers deploying observation, peer learning, and reflective collaboration to maintain participation where training and resources are lacking. This chimes with literature from resource-scarce, non-Western contexts where communication support is patchy, and teachers are left to cobble together solutions in systems that barely hold (Majadley, 2025; Njoroge & Nyakundi, 2023)E. Kija, & M. K. Karia (Eds..

The findings and discussion taken together shift the analytic frame from deficit about students to consideration of the conditions under which classroom communication succeeds or fails. Emotion, environment, interactional demand, and institutional support intersected in ASD-inclusive classrooms to reveal the communication barriers between students. The key, based on the teachers' accounts, is that what sustains inclusion is not mere presence in mainstream settings, or even particular isolated techniques, but rather the relentless quotidian labor of rendering classroom interaction interpretable, emotionally safe and socially sustainable. In this respect, inclusive communication is better conceived as a fluid process of relational negotiation, determined by context and realized through teachers' adaptive expertise. The broader contribution of this analysis, then, is to situate teachers lived communicative labor in direct conversation with previous work on interaction, ecology, structured support, or the scaffolding of

human endeavor and inclusive participation to demonstrate how those dimensions converge in everyday classroom life. It also illustrates how successful realization of inclusion relies on teachers skillfully coordinating language, emotion, visual mediation, peer relationships and environmental predictability in moment-to-moment interaction where the levels of specialist support, training and institutional clarity are frequently lower than those implicitly expected by a formal framework for inclusion policy. Enacted collectively, the themes indicate that inclusive communication is sustained through constant modulation of affective reading, environmental structuring, multimodal support and relational trust, all of which rely on teachers' ability to improvise at the edges of the institution while retaining students' access to meaning, participation, dignity and emotionally safe interaction in everyday classroom life for autistic learners across inclusive settings.

## CONCLUSION

This study finds that communication barriers in inclusive classrooms, where students with ASD are educated together with their neurotypical peers, may be more appropriately conceptualized as dynamic, relational, and contextually bound. Contextual and sensory factors in the classroom manifest as communication breakdowns along students' trajectories of emotional regulation, or as teachers' narrative. Barriers primarily included limited receptive or expressive language skills

(non-speaking profiles) and variations in emotional/regulatory functioning that disrupted comprehension.

Meaning in classroom communication is co-constructed and contingent on local fit, reinforcing ecological claims that the difficulty with communication escalates in chaotic, sensory-hostile, and uninformative classrooms. Teachers address these difficulties by employing adaptive, multimodal, affectively attuned interactional practices. Visual supports, AAC-based tools, simplified language, nonverbal cues, peer-interaction supports, and real-time adjustments in pacing and phrasing were used not as fixed techniques, but as forms of situated professional judgment developed through observation, trial and error, collaboration, and reflection. Accordingly, teachers' communicative competence develops through repeated practice, observation, and adjustment, rather than through fixed techniques alone. Teachers often build this competence while working with limited training, inconsistent institutional support, and minimal access to specialist assistance.

Further, effective communication produced aggregate relational outcomes. Teachers self-reported that prolonged use of responsive interaction-built trust and reduced de-escalation through improved regulation (initiated by both clinician and student). These results indicate that the success of communication in ASD-inclusive classrooms should not only be defined by immediate compliance or task accomplishment, but also by the degree to which interaction

becomes emotionally safe, socially sustainable, and more student-led. The provision of adequate levels following the use of individual visual media, a home-school continuity of use, and regular assessment of effects on frustration and engagement as a functional outcome is critical for schools to develop AAC-related and PECS-like visual communication systems feasibly and effectively in practice and central to national policy-level provisions such as systemic allies, communication boards, visual schedules, accessible materials, and mentoring teachers.

Lastly, the study conceptualizes teacher agency as an important yet overlooked resource for inclusive communication practice. Fellow teachers creatively and tenaciously learned from each other, adapted however they could as reflect in their practices over time, and stayed engaged even when there was little or no structural support for participation. Nonetheless, such agency cannot be considered an alternative to institutional responsibility. To achieve sustainable inclusion, autism-specific professional learning, enhanced school-based support systems, and concordant communication practices with teachers, peers, and families are vital in both resource-poor and non-Western contexts. More broadly, this paper situates student deficit analyses by analysing the emotional, interactional and structural conditions which shape everyday classroom communication. This indicates that classroom communication is not only an individual student adjusting to learn, but also a product of teachers adapting what they do in their classrooms, of the

supportive cultures created around them, and institutional settings providing pathways for (some) autistic students to engage meaningfully.

This research suggests that ASD-inclusive education policy and teacher professional development should promote relational competence, critical reflection, and sustained structural support for communication. While the commitment of an individual teacher can be crucial, inclusionary communication should also be supported by accessible communication tools, shared support structures, mentoring and continuity in home/school practices.

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## REFERENCES

- Ahlers, K., Hugh, M. L., Tagavi, D., Eayrs, C., Hernandez, A. M., Ho, T., & Locke, J. (2023). "On an island by myself": Implications for the inclusion of autistic students in self-contained classrooms in public elementary schools. *Frontiers in Psychiatry, 14*(September), 1–15. <https://doi.org/10.3389/fpsy.2023.1241892>
- Al-Shammari, Z., & Hornby, G. (2020). Special education teachers' knowledge and experience of iep's in the education of students with special educational needs. *International Journal of Disability, Development and Education, 67*(2), 167–181. <https://doi.org/10.1080/1034912X.2019.1620182>
- Aldrup, K., Carstensen, B., & Klusmann, U. (2022). Is empathy the key to effective teaching? a systematic review of its association with teacher-student interactions and student outcomes. In *Educational Psychology Review* (Vol. 34, Number 3). Springer US. <https://doi.org/10.1007/s10648-021-09649-y>
- Alhuzimi, T. E. (2026). Facilitators and barriers to augmentative and alternative communication (AAC) adoption for children with autism spectrum disorder (ASD): Teachers' perspectives. *Research in Developmental Disabilities, 169*(105227). <https://doi.org/10.1016/j.ridd.2026.105227>
- Aysina, R. M., Nesterova, A. A., Suslova, T. F., & Khitryuk, V. V. (2019). Teachers' attitudes towards inclusive education of children with ASD: A review of Russian and foreign research. *Obrazovanie i Nauka (The Education and Science Journal), 21*(10),

- 189–210. <https://doi.org/10.17853/1994-5639-2019-10-189-210>
- Baxter, L. A., & Braithwaite, D. O. (2021). *Engaging theories in interpersonal communication: Multiple perspectives* (3rd ed.). Sage Publications.
- Chow, E. W. S. (2022). Interventions for students with autism spectrum disorder. In *In M.-T. Hue & S. Karim (Eds.), Supporting diverse students in Asian inclusive classrooms: From policies and theories to practice* (pp. 145–160). Routledge. <https://doi.org/10.4324/9781032021775-12>
- Doho, S. S., & Wulandari, P. Y. (2024). *Picture Exchange Communication System (PECS) untuk meningkatkan komunikasi pada anak autisme*. <https://doi.org/10.22219/procedia.v12i3.28981>
- Esqueda, V. F., Van der Steen, S., & Minnaert, A. (2024). Interactions between teachers and students with autism spectrum disorder in mainstream secondary education: Fundamental, yet under-researched. *Review Journal of Autism and Developmental Disorders*, *11*(2), 442–457. <https://doi.org/10.1007/s40489-022-00346-2>
- Hersh, M., & Elley, S. (2019). Barriers and enablers of inclusion for young autistic learners: Lessons from the Polish experiences of teachers and related professionals. *Advances in Autism*, *5*(2), 117–130. <https://doi.org/10.1108/AIA-06-2018-0021>
- Isnawati, D., Zakaria, R. A., & Pratomo, L. C. (2025). Barriers to Inclusion : Exploring the Root Causes of Inclusive Education Challenges in Indonesia. *Jurnal Unik: Pendidikan Luar Biasa*, *10*(1), 57–66. <http://dx.doi.org/10.30870/unik.v10i1.32033>
- Jordan, R. (2005). Managing autism and Asperger's syndrome in current educational provision. *Pediatric Rehabilitation*, *8*(2), 104–112. <https://doi.org/10.1080/13638490500054891>
- Josilowski, C. S., & Morris, W. A. (2019). A qualitative exploration of teachers' experiences with students with autism spectrum disorder transitioning and adjusting to inclusion: Impacts of the home and school collaboration. *Qualitative Report*, *24*(6), 1275–1286. <https://doi.org/10.46743/2160-3715/2019.3757>
- Koster, M., Nakken, H., Pijl, S. J., van Houten, E., & Van Houten-van den Bosch, E. J. (2009). Being part of the peer group: A literature study focusing on the social dimension of inclusion in education. *International Journal of Inclusive Education*, *13*(2), 117–140. <https://doi.org/10.1080/13603110701284680>
- Latorre-Cosculluela, C., Rivera-Torres, P., & Liesa-Orús, M. (2025). Perceived barriers and needs of teachers in inclusive schools and their relationship with transformation processes. *International Journal of Inclusive Education*, *29*(13), 2292–2307. <https://doi.org/10.1080/13603116.2024.2343061>

- Lewis, P., & Stojanovik, V. (2024). 'Are we qualified enough for this?': a mixed-methods study of teachers' attitudes to social communication and interaction differences in autistic students. *International Journal of Inclusive Education*, 30(2), 270–290. <https://doi.org/10.1080/13603116.2024.2422085>
- Liang, Z., Lee, D., Zuo, J., & Liang, S. (2024). The use of visual schedules to increase academic-related on-task behaviors of individuals with autism: a literature review. *International Journal of Developmental Disabilities*, 0(0), 1–14. <https://doi.org/10.1080/20473869.2024.2402124>
- Macdonald, L., Trembath, D., Ashburner, J., Costley, D., & Keen, D. (2018). The use of visual schedules and work systems to increase the on-task behaviour of students on the autism spectrum in mainstream classrooms. *Journal of Research in Special Educational Needs*, 18(4), 254–266. <https://doi.org/10.1111/1471-3802.12409>
- Maharani, R. Z., Wardany, O. F., & Sani, Y. (2025). Penggunaan Strategi Komunikasi Augmentatif dan Alternatif pada Anak dengan Gangguan Spektrum Autis. *JPK (Jurnal Pendidikan Khusus)*, 21(1), 19-31. Retrieved from <https://journal.uny.ac.id/index.php/jpk/article/view/78880>
- Majadley, E. (2025). Improving the inclusion of students with autism spectrum disorder as perceived by inclusive education teachers in mainstream schools. *Educational Process: International Journal*, 19. <https://doi.org/10.22521/edupij.2025.19.542>
- Martin, G. E., Lee, M., Bicknell, K., Goodkind, A., Maltman, N., & Losh, M. (2023). A longitudinal investigation of pragmatic language across contexts in autism and related neurodevelopmental conditions. *Frontiers in Neurology*, 14(July), 1–14. <https://doi.org/10.3389/fneur.2023.1155691>
- McGillicuddy, S., & O'Donnell, G. M. (2014). Teaching students with autism spectrum disorder in mainstream post-primary schools in the Republic of Ireland. *International Journal of Inclusive Education*, 18(4), 323–344. <https://doi.org/10.1080/13603116.2013.764934>
- Njoroge, M. C., & Nyakundi, A. (2023). Navigating communication difficulties faced by children with autism spectrum disorder: Evidence from Kenya. *Handbook of speech-language therapy in Sub-Saharan Africa*. Springer. [https://doi.org/10.1007/978-3-031-04504-2\\_31](https://doi.org/10.1007/978-3-031-04504-2_31)
- Nurhadi, Z. F., Dewi, R. U., & Nurhalimah, S. (2021). The effect of play therapy as a therapeutic communication on social interactions of Children with Special Needs. *Jurnal Kajian Komunikasi*, 9(2), 176. <https://doi.org/10.24198/jkk.v9i2.26933>
- Nuryani, N., Hadisiwi, P., & Karimah, K. El. (2016). Komunikasi instruksional guru dan siswa anak berkebutuhan khusus di sekolah menengah kejuruan inklusi. *Jurnal*

- Kajian Komunikasi*, 4(2), 154. <https://doi.org/10.24198/jkk.v4i2.6134>
- Petersson-Bloom, L., & Holmqvist, M. (2022). Strategies in supporting inclusive education for autistic students—A systematic review of qualitative research results. *Autism and Developmental Language Impairments*, 7. <https://doi.org/10.1177/23969415221123429>
- Sparapani, N., Reinhardt, V. P., Hooker, J. L., Morgan, L., Schatschneider, C., & Wetherby, A. M. (2022). Evaluating teacher language within general and special education classrooms serving elementary students with autism. *Journal of Autism and Developmental Disorders*, 52(5), 2284–2299. <https://doi.org/10.1007/s10803-021-05115-4>
- Underhill, J. C., Ledford, V., & Adams, H. (2019). Autism stigma in communication classrooms: exploring peer attitudes and motivations toward interacting with atypical students. *Communication Education*, 68(2), 175–192. <https://doi.org/10.1080/03634523.2019.1569247>
- White, J., McGarry, S., Falkmer, M., Scott, M., Williams, P. J., & Black, M. H. (2023). Creating inclusive schools for autistic students: a scoping review on elements contributing to strengths-based approaches. *Education Sciences*, 13(7). <https://doi.org/10.3390/educsci13070709>