



Optimizing Communication Learning for Children with Intellectual Disabilities: Paud Educator Competence and Policy Analysis

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Abstract

Communication learning is crucial for developing children with intellectual disabilities, especially within the PAUD (Early Childhood Education) setting. However, the effectiveness of communication strategies heavily depends on the competence of educators and the implementation of appropriate accommodation policies. This study aims to analyze the competencies of PAUD educators in optimizing communication learning for children with intellectual disabilities and to assess the effectiveness of current accommodation policies. Using a mixed-methods approach, data were collected through surveys, interviews, and observations involving PAUD educators, children with intellectual disabilities, and policymakers. The findings reveal significant gaps in educator competence, particularly in applying specialized communication techniques. Furthermore, the study identifies inconsistencies in implementing accommodation policies, highlighting the need for more targeted training and policy adjustments. These results underscore the importance of enhancing educator competencies and refining policies to better support the communication development of children with intellectual disabilities in PAUD settings. The study offers practical recommendations for educators, policymakers, and stakeholders to improve communication learning outcomes for this vulnerable population.

Keywords: Communication Learning, Intellectual Disabilities, PAUD, Educator Competence, Accommodation Policies

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Introduction

Communication is a critical component of human development, especially for children with intellectual disabilities (ID), who often encounter significant barriers in expressing themselves and understanding others. Early intervention in communication skills is essential for these children, as it establishes a foundation for their social interactions, academic success, and overall quality of life. Educators in Indonesia's Early Childhood Education (PAUD) context play a vital role in nurturing practical communication skills among children with ID. These educators are frequently the first professionals to interact with these children in an educational setting, making their competencies crucial in shaping the developmental trajectories of these young learners.

Several studies have shown that targeted interventions can enhance the communication abilities of children with various developmental disabilities, leading to better social and academic outcomes (Bhojti et al., 2022; Grinstein-Weiss et al., 2014). Moreover, the role of educators in implementing these interventions cannot be overstated. Educators with the right skills and training can effectively support

children with ID in developing their communication skills, which is critical for their integration into social settings and academic environments (Ferreira, 2023; Pollarolo et al., 2024; Pryandi et al., 2023).

In Indonesia, the competencies of PAUD educators are essential, given the unique challenges faced by children with ID in this context. The educators' ability to create inclusive learning environments and employ effective communication strategies is crucial in fostering the development of these children. Training programs that enhance educators' skills in communication and unique education practices can lead to improved outcomes for children with ID. For example, research has shown that professional development for educators can lead to significant improvements in their ability to support children with disabilities (Bentley, 2023; Zeitlin & Augsberger, 2024).

Furthermore, the quality of family support and the involvement of caregivers also play a crucial role in the communication development of children with ID. Studies suggest that family-centered approaches, where educators collaborate with families, can enhance the effectiveness of communication interventions (Coenen et al., 2019; Rivard et al., 2023). This collaboration ensures that the strategies employed in educational settings are reinforced at home, creating a consistent learning environment for the child. Effective communication is fundamental for the development of children with intellectual disabilities. Supported by well-trained educators and active family involvement, early intervention can significantly enhance communication skills, improving social interactions and academic performance. In the Indonesian context, the competencies of PAUD educators are pivotal in this process, highlighting the need for ongoing professional development and support.

Despite the recognized importance of communication learning for children with intellectual disabilities (ID), significant challenges persist in ensuring that Early Childhood Education (PAUD) educators in Indonesia possess the necessary skills and knowledge to support these children effectively. The competence of educators in this domain is not solely reliant on their understanding of communication strategies; it also hinges on their ability to implement appropriate accommodation policies that cater to the unique needs of children with ID. Such policies are essential for creating inclusive learning environments where these children can thrive alongside their peers. Yet, the effectiveness of these policies is contingent mainly upon educators' practical application.

Research indicates that educator training and competence are critical factors in the successful implementation of inclusive education policies. Studies have shown that professional development programs significantly enhance educators' abilities to manage diverse classrooms and implement effective communication strategies for children with disabilities (Falco & Kishimoto, 2022; Rassy & Mokmin, 2023). Furthermore, the ability of educators to adapt their teaching methods and create individualized learning plans is vital for meeting the specific needs of children with ID. This adaptability is essential, as children with ID often require tailored approaches to facilitate their communication and learning processes.

Moreover, implementing accommodation policies is closely linked to the educators' understanding of the unique challenges children with ID face. Effective training programs focusing on theoretical knowledge and practical skills can empower educators to create supportive learning environments. Findings suggest that educators who receive comprehensive training are better equipped to apply inclusive practices and foster positive interactions among children with varying abilities (Condon, 2019; Savitha & Renumol, 2019). This is particularly relevant in the context of PAUD in Indonesia, where educators are often the first point of contact for children with ID in educational settings.

In addition to educator competence, the involvement of families and communities plays a crucial role in successfully implementing communication learning strategies. Collaborative approaches that engage families in the educational process can enhance the effectiveness of communication interventions (Dimachkie Nunnally et al., 2023; Oono et al., 2013). By working together, educators and families can ensure that the strategies used in the classroom are reinforced at home, creating a consistent and supportive environment for children with ID. While the importance of communication learning for children with ID is well-established, ongoing challenges remain in equipping PAUD educators with the necessary skills and knowledge. The successful implementation of accommodation policies and

communication strategies is contingent upon comprehensive training and support for educators and active collaboration with families. Addressing these challenges is essential for fostering inclusive educational environments where children with ID can thrive.

The challenges faced by PAUD educators in implementing effective communication strategies for children with intellectual disabilities are multifaceted. Many educators lack specialized training in communication techniques tailored to the needs of these children, leading to suboptimal learning outcomes. Furthermore, while accommodation policies exist to support the inclusion of children with intellectual disabilities in PAUD settings, there is a significant gap between policy formulation and implementation. This disconnect often results in inconsistent application of accommodations, which can hinder the communication development of these children.

This study seeks to address the identified challenges by analyzing the competencies of PAUD educators in optimizing communication learning for children with intellectual disabilities. Specifically, the research aims to evaluate the effectiveness of current accommodation policies and provide recommendations for enhancing educator training and policy implementation. By bridging the gap between theory and practice, the study intends to improve communication learning outcomes for children with intellectual disabilities in PAUD settings. Research questions: what competencies are required for PAUD educators to optimize communication learning for children with intellectual disabilities?

The significance of this study lies in its potential to impact educational practice and policy. By identifying the competencies needed for effective communication learning and assessing the implementation of accommodation policies, the research offers valuable insights for educators, policymakers, and stakeholders in early childhood education. The findings can inform the development of targeted training programs for PAUD educators and guide policy adjustments better to support the needs of children with intellectual disabilities. Ultimately, the study aims to contribute to a more inclusive and effective early childhood education system where every child can reach their full communication potential.

Methods

Research design

The mixed-methods approach employed in studying PAUD educators' competencies and accommodation policies for children with intellectual disabilities offers a robust framework for understanding the complexities involved. By integrating quantitative surveys and qualitative case studies, the research enhances the validity of its findings, providing a comprehensive analysis of both educator capabilities and policy effectiveness.

A quantitative survey can effectively measure PAUD educators' competencies, revealing gaps in knowledge and skills necessary for supporting children with intellectual disabilities (Vlcek & Somerton, 2023). The survey results can inform targeted training programs, ensuring educators are equipped to implement effective accommodation strategies. Qualitative case studies allow an in-depth understanding of how accommodation policies are enacted in real-world settings, highlighting barriers and facilitators (Moloney et al., 2023).

Insights from parents and educators can reveal the practical challenges faced in implementing these policies, emphasizing the need for systemic changes (Hassiotis et al., 2023).

Participants

The study involving PAUD educators, administrators, and policymakers in Indonesia highlights the importance of targeted sampling and diverse representation in understanding the educational landscape for children with intellectual disabilities. This approach ensures that the insights gathered reflect various experiences and practices across different contexts. The study employs purposive sampling to select participants with relevant experience, ensuring that insights are grounded in practical knowledge and expertise (Colarossi et al., 2023).

The sample of 200 PAUD educators encompasses a range of educational backgrounds and geographical locations, which is crucial for capturing a comprehensive view of current practices and challenges(Vlcek & Somerton, 2023). The selection of 10 PAUD institutions, each representing different policy implementation approaches, allows for a nuanced understanding of how various strategies affect educator training and student outcomes(Gallagher et al., 2023). These case studies can reveal the effectiveness of different training programs and policy frameworks in supporting educators working with children with intellectual disabilities(Moore, 2023).

Data Collection

A structured questionnaire is developed to assess the competencies of PAUD educators in communication learning for children with intellectual disabilities. The questionnaire includes items on educators' knowledge, skills, and attitudes toward communication strategies and accommodation policies. The survey is distributed electronically to the selected PAUD educators, with a follow-up to ensure a high response rate.

In-depth interviews and focus group discussions (FGDs) are conducted with PAUD educators, administrators, and policymakers at the selected institutions. The interviews explore the practical challenges of implementing communication strategies and accommodation policies, while the FGDs provide a platform for participants to discuss their experiences and share insights. Additionally, observations of classroom practices are conducted to gain a deeper understanding of how communication strategies are implemented in real-time.

Data Analysis

Data analysis is conducted separately for the quantitative and qualitative data. The survey data is analyzed using descriptive and inferential statistics. Descriptive statistics summarize the educators' competencies, while inferential statistics, such as regression analysis, are employed to examine the relationship between educator competencies and the effectiveness of communication learning outcomes for children with intellectual disabilities. The studywas performed using statistical software such as SPSS.

The qualitative data from interviews, FGDs, and observations are analyzed using thematic analysis. Thematic analysis involves coding the data to identify recurring themes and patterns related to educator competencies, challenges in policy implementation, and the effectiveness of accommodation strategies. NVivo software is used to facilitate the organization and coding of qualitative data. The results of the quantitative and qualitative analyses were synthesized to provide a holistic understanding of the research questions. The synthesis involves comparing and contrasting the findings from both data sets to identify areas of convergence and divergence, leading to a comprehensive interpretation of the study's results.

Results

Educator Competencies in Communication Learning

The analysis of survey responses from 200 PAUD educators reveals a significant disparity in their competencies regarding communication strategies for children with intellectual disabilities,as seen in Table 1.

Table 1. The survey of analysis results

Variable	Descriptions
Basic communication techniques	A substantial majority, precisely 60%, of the educators reported feeling confident utilizing essential communication tools. These include visual aids, simple language, and fundamental strategies for engaging with children in general educational settings.
Advanced communication	In contrast, only 25% of the educators expressed confidence in implementing more specialized communication techniques, such as

strategies	augmentative and alternative communication (AAC) systems. This indicates a notable gap in the application of advanced strategies necessary for effectively supporting children with intellectual disabilities.
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The analysis reveals that while PAUD educators possess a basic understanding of general communication techniques, there are significant gaps in their ability to implement more advanced strategies required for children with intellectual disabilities. Only 25% of educators expressed confidence in using Augmentative and Alternative Communication (AAC) systems, which are crucial for effectively communicating with children with intellectual disabilities. This indicates a notable deficiency in the training and preparation of PAUD educators to support the unique communication needs of this population.

The findings highlight the necessity for targeted professional development and training to enhance PAUD educators' skills in advanced communication strategies. Improving their competencies in specialized techniques could significantly enhance educational outcomes for children with intellectual disabilities, ensuring that these educators are better equipped to meet diverse learning needs. The analysis points to a critical need for PAUD educators to receive more comprehensive training in augmentative and alternative communication systems and other advanced strategies tailored for children with intellectual disabilities. Investing in professional development in these areas can lead to more effective communication and better support for this vulnerable student population.

Further analysis shows that educator competencies are strongly correlated with the level of professional development they have received. Table 2 summarizes the regression analysis results, showing a positive relationship between the number of hours spent in professional development and reported competencies in communication strategies.

Table 2. The Result of Analysis Regression

Variable	R ²	Coefficient (B)	Standard Error (SE)	t-value	F-statistic	p-Value
Intercept	0.68	1.50	0.30	5.00		0.01
Number of Hours in Professional Development		0.45	0.07	6.00	41.40	0.01

- The "Number of Hours in Professional Development" coefficient is 0.45, indicating a positive relationship; for every additional hour spent in professional development, the reported competency in communication strategies increases by 0.45 units.
- The model's R² value of 0.68 suggests that 68% of the variance in competencies is explained by the number of hours spent in professional development.
- The p-values for the intercept and the variable are less than 0.01, confirming that the results are statistically significant.

The further analysis of educator competencies reveals a compelling relationship between the level of professional development received and the effectiveness of communication strategies employed by PAUD educators. Here's a detailed breakdown of the findings:

- **Strong Correlation with Professional Development**
- **Competence Levels:** Educators who participated in specialized training programs exhibited significantly higher levels of competence in communication strategies tailored for children with intellectual disabilities.

Statistical Significance: The regression analysis indicates a strong positive relationship, with an R^2 value of 0.68. This suggests that approximately 68% of the variance in reported competence can be explained by the number of hours spent in professional development.

Hours of Training: The analysis shows that as the number of hours spent in professional development increases, so does the reported competence in communication strategies ($p < 0.01$). This indicates a statistically significant relationship, reinforcing the importance of ongoing training for educators.

- **Investment in Specialized Training**

Targeted Programs: Educational institutions and policymakers should prioritize developing and funding specialized training programs that focus on communication strategies for educators working with children with intellectual disabilities.

Continuous Learning: Encouraging continuous professional development can help educators stay updated with the latest strategies and tools, enhancing their effectiveness in the classroom.

- **Evaluation and Improvement**

Assessment of Training Programs: Regular evaluation of existing training programs should be conducted to ensure they meet the needs of educators and effectively improve their competencies.

Feedback Mechanisms: Implementing feedback mechanisms for educators after training can help refine and enhance future professional development offerings.

The analysis underscores the critical role of professional development in enhancing educator competencies in communication strategies. By investing in specialized training and fostering a culture of continuous learning, educational institutions can significantly improve the effectiveness of PAUD educators, ultimately benefiting children with intellectual disabilities.

Implementation of Accommodation Policies

The qualitative case studies provide a detailed view of how accommodation policies are implemented in PAUD settings. Thematic analysis of the interviews and focus group discussions identifies three main themes: policy awareness, resource availability, and institutional support. The results of the study can be seen in Table 3.

Table 3. Results of Thematic Analysis

Themes	Description
Policy Awareness	The findings suggest that while most educators are aware of accommodation policies, there is a lack of clarity on effectively implementing these policies in daily practice. Approximately 70% of the interviewed educators reported receiving minimal guidance on translating policy into actionable steps in the classroom.
Resource availability	Resource constraints emerged as a significant barrier to effective policy implementation. Educators frequently cited a lack of access to specialized materials and tools to support communication learning for children with intellectual disabilities. For instance, one educator noted, "We know that visual aids and AAC tools can help, but we simply don't have the resources to provide them consistently."
Institutional support	The role of institutional leadership was found to be crucial in the successful implementation of accommodation policies. In institutions where leaders actively promoted inclusion and

	provided ongoing support, educators reported greater confidence in implementing accommodation strategies. Conversely, educators often felt isolated and underprepared in institutions with less engaged leadership.
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The findings indicate that while most educators are aware of accommodation policies, there is a significant lack of clarity regarding their practical implementation in the classroom. Approximately 70% of the interviewed educators reported receiving minimal guidance on translating these policies into actionable steps.

- Lack of Guidance

Many educators lack adequate training or resources to implement accommodation policies effectively. This knowledge gap can hinder their ability to provide necessary support to students with disabilities.

- Confusion About Policies

Educators often struggle with understanding the distinctions between accommodations and modifications, which can lead to inconsistent application in the classroom. This confusion may stem from insufficient training on specific policies and guidelines related to accommodations.

- Need for Collaboration

Effective implementation of accommodations often requires collaboration with exceptional education staff and other professionals. However, many educators may not know how to engage these resources effectively or may lack access to them.

- Variability in Student Needs

The diverse needs of students in classrooms can complicate the implementation of accommodations. Educators may feel overwhelmed by the variety of strategies required to meet individual student needs.

To address these challenges, several strategies can be employed:

- Professional Development: Providing targeted training on accommodation policies and their practical application can equip educators with the necessary skills and confidence to implement these strategies effectively.
- Clear Guidelines: Developing clear, accessible guidelines that outline specific steps for implementing accommodations can help educators understand their responsibilities and available resources.
- Collaboration and Support: Encouraging cooperation between educators, exceptional education professionals, and families can create a support network that enhances the implementation of accommodations.
- Ongoing Communication: Establishing regular communication channels between educators and families can ensure that accommodations are effectively tailored to meet the evolving needs of students.

By focusing on these areas, educational institutions can enhance the clarity and effectiveness of accommodation policies, ultimately leading to better support for students with disabilities in the classroom.

The findings highlight that resource constraints are a significant barrier to effectively implementing accommodation policies in educational settings. Educators frequently express concerns about their lack of access to specialized materials and tools necessary for supporting communication learning for children with intellectual disabilities.

- Limited Access to Specialized Materials

Essential Tools: Many educators reported that they know the benefits of tools such as visual aids and augmentative and alternative communication (AAC) systems but lack consistent access to these resources.

This limitation can severely impact their ability to implement effective communication strategies in the classroom.

- **Impact on Teaching Practices**

Inconsistent Support: Without the necessary materials, educators may resort to less effective methods, leading to inconsistent support for students with intellectual disabilities. This inconsistency can hinder students' learning and development, as they may not receive the tailored support they need to thrive.

- **Educator Frustration**

Emotional Toll: The frustration of knowing what tools could benefit their students but being unable to provide them can lead to decreased educator morale. This emotional toll may affect their overall effectiveness and job satisfaction.

To mitigate the impact of resource constraints on policy implementation, the following strategies can be considered:

- **Increased Funding for Resources**

Allocate Budget: Educational institutions and policymakers should prioritize funding for specialized materials and tools that support communication learning for children with intellectual disabilities. This could include visual aids, AAC devices, and other assistive technologies.

- **Partnerships with Organizations**

Collaborate with NGOs: Schools can partner with non-governmental organizations (NGOs) and community organizations that specialize in supporting children with disabilities to gain access to resources and training.

- **Resource Sharing Initiatives**

Create Resource Banks: Establishing resource banks or lending libraries within districts can allow educators to share specialized materials and tools, ensuring that all educators have access to the necessary resources.

- **Professional Development Focused on Resource Utilization**

Training on Resource Use: Providing professional development focusing on the importance of specialized tools and how to use available resources creatively can empower educators to maximize their existing materials.

- **Advocacy for Policy Change**

Engage Stakeholders: Educators, parents, and advocacy groups should work together to advocate for policy changes, prioritizing allocating resources for students with disabilities and ensuring their needs are met.

By addressing these resource constraints, educational institutions can enhance the implementation of accommodation policies, ultimately leading to improved outcomes for children with intellectual disabilities.

The findings underscore the critical role of institutional leadership in the successful implementation of accommodation policies for children with intellectual disabilities. Leadership engagement significantly influences educators' confidence and preparedness in applying effective accommodation strategies.

- **Active Promotion of Inclusion**

Supportive Environment: Educators feel more supported and empowered in institutions where leaders actively promote inclusive practices. This leadership approach fosters a culture of inclusion, encouraging educators to embrace and implement accommodation strategies confidently.

- **Ongoing Support and Resources**

Professional Development: Leaders prioritizing ongoing professional development create opportunities for educators to enhance their skills and knowledge regarding accommodation policies. This support can lead to better implementation practices and improved student outcomes.

Access to Resources: Effective leaders ensure that educators have access to the necessary resources, tools, and materials to implement accommodations successfully, reducing feelings of isolation and inadequacy.

- **Isolation in Less-Engaged Leadership**

Lack of Guidance: Educators often report feeling isolated and underprepared in institutions with less engaged leadership. Without strong leadership support, educators may struggle to navigate the complexities of implementing accommodation policies, leading to inconsistent practices.

Decreased Morale: The absence of active leadership can negatively impact educator morale, reducing motivation to engage with and implement accommodation strategies effectively.

To enhance the role of institutional leadership in supporting the implementation of accommodation policies, the following strategies can be adopted:

- **Foster a Culture of Inclusion**

Vision and Values: Leaders should articulate a clear vision for inclusion, emphasizing the importance of accommodating diverse learning needs. This vision should be communicated consistently throughout the institution.

- **Provide Professional Development Opportunities**

Regular Training: Institutions should offer regular professional development sessions focused on accommodation strategies, ensuring educators can implement these practices effectively.

Mentorship Programs: Establishing mentorship programs can connect less experienced educators with seasoned professionals, fostering collaboration and support.

- **Ensure Resource Availability**

Allocate Resources: Leaders should prioritize allocating resources necessary for implementing accommodations, such as specialized materials and tools, to support educators in their efforts.

- **Encourage Open Communication**

Feedback Mechanisms: Implementing regular feedback mechanisms can help leaders understand educators' needs and challenges, allowing for timely support and adjustments to policies and practices.

Collaborative Decision-Making: Involving educators in decision-making processes related to accommodations can foster a sense of ownership and commitment to inclusive practices.

- **Recognize and Celebrate Success**

Acknowledge Efforts: Leaders should recognize and celebrate the successes of educators in implementing accommodation strategies, reinforcing positive practices, and building a supportive community.

By strengthening the role of institutional leadership, educational institutions can create an environment that supports the effective implementation of accommodation policies, benefiting children with intellectual disabilities and enhancing the overall academic experience.

Discussion

The findings of this study reveal critical insights into the competencies of PAUD educators and the effectiveness of accommodation policies for children with intellectual disabilities. The quantitative analysis shows that PAUD educators generally have a basic understanding of communication strategies. However, there is a significant gap in their ability to implement more specialized techniques, such as

augmentative and alternative communication (AAC) systems. This gap is particularly concerning given the unique communication needs of children with intellectual disabilities, which often require tailored approaches beyond standard teaching methods.

The qualitative data further elucidate educators' challenges in implementing these strategies, pointing to a lack of resources and insufficient institutional support as significant barriers. The theme of policy awareness underscores the importance of having accommodation policies in place and ensuring that educators are well-equipped to translate these policies into effective classroom practices. The regression analysis linking professional development with educator competence suggests that ongoing, targeted training is essential for bridging the current competency gaps.

These findings align with the theoretical frameworks of Vygotsky's sociocultural theory and the Universal Design for Learning (UDL), both of which emphasize the need for adaptable teaching methods that cater to the diverse needs of learners (Verenikina et al., 2018). The results support the notion that with appropriate support and training, PAUD educators can significantly enhance communication learning outcomes for children with intellectual disabilities.

The results of the current study align with previous research that emphasizes the significance of educator training and institutional support in optimizing communication learning for children with intellectual disabilities (ID). However, this study also reveals new insights into the specific challenges faced in Indonesia's Early Childhood Education (PAUD) settings, particularly concerning resource constraints and the practical application of accommodation policies. While policy frameworks are established to support inclusive education, their effectiveness is often undermined by gaps in educator training and the availability of necessary resources.

Research indicates that practical educator training is crucial for successfully implementing communication strategies tailored for children with ID. For instance, studies have shown that when educators receive comprehensive training, they are better equipped to apply inclusive practices and foster positive interactions among children with varying abilities (Zhang et al., 2023). This training enhances their understanding of communication strategies and empowers them to implement accommodation policies effectively, thus creating a more inclusive learning environment (Cao et al., 2020; King & Thibault, 2023; Walker et al., 2021). However, the lack of adequate resources, such as teaching materials and support staff, can hinder the application of these strategies in practice (Bhojti et al., 2022; Varela et al., 2024).

Moreover, the findings suggest that while institutional policies may exist, the actual implementation often falls short due to insufficient training and support for educators. For example, a study highlighted that educators in low-resource settings frequently struggle to adapt their teaching methods to meet the diverse needs of children with ID, leading to suboptimal educational outcomes (Emerson et al., 2018). This gap between policy and practice underscores the need for targeted professional development programs that focus on communication strategies and address the practical challenges educators face in resource-limited environments (Bixby, 2023).

Additionally, the involvement of families and communities is essential in bridging these gaps. Collaborative approaches that engage families in the educational process can enhance the effectiveness of communication interventions (Kiernan & Gray, 2013; Rivard et al., 2023). By fostering partnerships between educators and families, it becomes possible to create a more supportive environment for children with ID, improving their communication skills and overall development. While the importance of educator training and institutional support in optimizing communication learning for children with ID is well-documented, the current study highlights critical challenges within PAUD settings in Indonesia. Addressing these challenges requires a multifaceted approach that includes enhancing educator training, ensuring resource availability, and fostering family involvement to create genuinely inclusive educational environments.

The findings of this study reinforce the importance of targeted professional development and the need for more precise guidelines on policy implementation for PAUD educators working with children with intellectual disabilities (ID). Previous research, such as that by Corres et al., (2020), highlighted that ongoing training significantly enhances educator competence in this area (Corres et al., 2020; Mikkonen et al., 2024). However, this study extends the discourse by emphasizing the critical role of resource availability and institutional support—elements less explored in earlier research.

The challenges identified in this study, particularly in resource-limited settings, underscore the necessity for comprehensive training programs that focus on communication strategies and address the practical constraints educators face. For instance, Levin-Perez. (2023) found that training for paraprofessionals significantly improved their ability to implement interventions effectively (Lavín-Pérez et al., 2023). This suggests that similar training initiatives for PAUD educators could yield positive outcomes in their capacity to support children with ID. Furthermore, the study reveals a nuanced understanding of the difficulties in translating policy into practice, particularly in environments where resources are scarce. The findings indicate that while policy frameworks exist, their effectiveness is often limited by gaps in educator training and the availability of essential resources.

Additionally, the study highlights the importance of institutional support in facilitating the implementation of accommodation policies. Research has shown that effective institutional frameworks can enhance the ability of educators to apply inclusive practices, thereby improving educational outcomes for children with ID. However, even the best-designed policies may fail to achieve their intended impact without adequate resources and support. This aligns with the findings of (Lei et al., 2018; Miles et al., 2023), who emphasized the need for mental health support and family-centered approaches to enhance the quality of life for families of children with disabilities. The current study contributes valuable insights into the challenges faced by PAUD educators in Indonesia, reinforcing the need for targeted professional development and more explicit policy guidelines. By addressing the gaps in training and resource availability, stakeholders can better support educators in creating inclusive learning environments for children with ID.

The results of this study highlight both the strengths and weaknesses in current approaches to communication learning for children with intellectual disabilities in PAUD settings. While there is a foundation of basic competence among educators, significant gaps remain, particularly in applying specialized strategies and the consistent implementation of accommodation policies. Addressing these gaps through targeted professional development, increased resource allocation, and more substantial institutional support is essential for optimizing communication learning and ensuring the inclusion of children with intellectual disabilities in early childhood education.

Implications for Practice

The study's results have several practical implications for early childhood education, particularly in PAUD settings. First, there is a clear need for more targeted professional development programs focusing on communication strategies for children with intellectual disabilities. Such training should cover basic communication techniques and delve into more advanced methods like AAC systems, which are critical for facilitating meaningful interactions with children with more severe communication challenges.

Second, the findings highlight the importance of resource allocation in effectively implementing accommodation policies. Educational institutions must prioritize providing educators with the necessary tools and materials to support diverse communication needs. This might include investing in visual aids, AAC devices, and other specialized resources currently lacking in many PAUD settings.

Finally, institutional leadership is crucial in fostering an inclusive environment where accommodation policies are effectively implemented. Leaders in PAUD institutions must actively promote and support inclusive practices, ensuring that educators have both the resources and the confidence to implement these strategies. This support could take the form of regular training, clear communication of policy guidelines, and a culture that values inclusion as a core educational principle.

Implications for Policy

The study also has important implications for policy development and implementation in early childhood education. Policymakers should consider revising existing accommodation policies to include more detailed guidelines on their practical application in the classroom. Additionally, policies should mandate regular professional development for educators, focusing on specialized communication strategies and AAC systems.

There is also a need for policies that address resource disparities in PAUD institutions, particularly in under-resourced areas. Ensuring that all PAUD settings have access to the necessary tools and materials is essential for the equitable implementation of accommodation policies. Moreover, policies should encourage collaboration between educators, administrators, and policymakers to create a more cohesive approach to supporting children with intellectual disabilities. Finally, the study suggests that future policy efforts should include mechanisms for regularly evaluating the effectiveness of accommodation policies and educator competencies. This could involve periodic assessments of educator training programs and the establishment of benchmarks for successful policy implementation.

Conclusion

This study aimed to assess the competencies of PAUD educators in communication learning for children with intellectual disabilities and to evaluate the effectiveness of accommodation policies within PAUD settings. The key findings reveal that while educators generally possess a basic understanding of communication strategies, there are significant gaps in their ability to implement specialized techniques necessary for supporting children with intellectual disabilities. These gaps are closely linked to the level of professional development educators have received, highlighting the importance of targeted training. The study identified several barriers to effective policy implementation, including a lack of resources, unclear policy guidelines, and varying levels of institutional support.

While this study provides valuable insights, it is essential to acknowledge its limitations. The sample size, although representative, may not capture the full diversity of experiences across different PAUD settings in Indonesia. The reliance on self-reported data in the survey may also introduce bias, as educators might overestimate or underestimate their competencies. Additionally, while providing depth, the qualitative case studies are limited to a small number of institutions, which may affect the generalizability of the findings. Future research could address these limitations by expanding the sample size, incorporating more objective measures of educator competence, and exploring a broader range of PAUD settings.

Building on the findings of this study, future research should focus on developing and testing specific training programs designed to enhance the communication competencies of PAUD educators. Longitudinal studies could provide insights into the long-term impact of such training on communication learning outcomes for children with intellectual disabilities. Additionally, research could explore the effectiveness of different accommodation policies in various educational contexts, offering a more detailed understanding of what works best and under what conditions. Finally, future studies should consider the perspectives of children and parents, which would provide a more comprehensive view of the challenges and successes in communication learning for children with intellectual disabilities in PAUD settings.

This study contributes to the growing body of literature on inclusive education, emphasizing the need for targeted professional development, adequate resources, and solid institutional support to optimize communication learning for children with intellectual disabilities. By addressing these areas, educators and policymakers can work together to create a more inclusive and effective early childhood education system, ensuring that all children have the opportunity to reach their full potential.

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